27th International Conference on Health Promoting Hospitals & Health Services

BALANCING HIGH TECH AND HIGH TOUCH IN HEALTH CARE: CHALLENGES AND CHANCES OF DIGITALIZATION FOR DIALOGUE

Abstract Book

Warsaw, Poland
May 29-31, 2019

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Editorial

Dear participants of the 27th International Conference on Health Promoting Hospitals and Health Services, dear readers of Clinical Health Promotion!

This year, the annual International Conference on Health Promoting Hospitals and Health Services in Warsaw, Poland, is kindly hosted by the HPH Network Poland. This network was founded in 1993 and hosted the 1st International Conference of HPH in the same year also in Warsaw. It was re-founded in 2011. Now, it has 18 members and is coordinated by the Department of Public Health, Health Sciences Faculty at Warsaw Medical University. It has provided valuable support to the international HPH network, the coordinator Bozena Waletwkska-Zielecka also served as chair of the HPH Governance Board from 2016-18.

The local host, together with the scientific committee, has decided that the focus of the 27th International HPH Conference will be on “Balancing high tech and high touch in health care: Challenges and chances of digitalization for dialogue”. The conference topic responds to the most important trends of the first decades of the 21st century. What will be the intended and unintended consequences of digitalization and other relevant developments in health services on health promotion and public health in health care? How to ensure maintaining and increasing opportunities for health promotion under the emerging conditions will be one of the guiding questions.

The conference program starts with a look at various trends and their impacts on health care, public health and health promotion in the opening plenary. We will go more into detail in the plenaries investigating how digitalization affects health promotion, empowerment and involvement - the second plenary session will identify and analyze some of the most relevant opportunities and challenges arising from digitalization for health promotion in the context of health care and public health; the third plenary session will discuss challenges and chances of high tech, e.g. for co-production of health, shared decision making, empowerment and involvement of patients and relatives. Finally, we will highlight strategic and policy aspects resulting from the relevant trends - the fourth plenary session will therefore focus on new tasks, roles, co-operations and organizational forms in primary health and public health services and the fifth plenary session, discusses perspectives for necessary investments in health promotion and for universal health (promotion) services coverage.

Altogether, 11 plenary lectures by renowned international experts will address these themes during the two and a half days of the conference. In addition to these five plenaries, the conference will offer a rich parallel program including oral presentations and workshops, mini oral presentations and posters. Overall, the Scientific Committee screened over 900 abstracts, which were submitted from around the world. Out of these, 731 abstracts (80%) were finally accepted for presentation in 32 oral sessions and workshops (132 abstracts), 15 mini oral sessions (73 abstracts), and an electronic poster session (526 abstracts).

Delegates from all over the world will meet at the conference to present, discuss, and network around topics related to HPH. Similar to previous years, the abstract book of the 27th International HPH Conference is published as a supplement to the official journal of the international HPH network, Clinical Health Promotion – Research & Best Practice for patients, staff and community. This will ensure high visibility and recognition for the conference contributions of the delegates. Furthermore, attention will be increased through the publication of the Virtual Proceedings after the event. Presenters should be prepared to upload their presentations and posters as soon as possible after the conference to www.hphconferences.org/warsaw2019.

Now, we would like to thank all those who contributed to the program development and to the production of this abstract book. Our special thanks go to the plenary speakers, all abstract submitters, the members of the Scientific Committee, in particular for the review of numerous abstracts, the chairs of the plenary and parallel sessions, the Editorial Office at the WHO Collaborating Centre for Evidence-based Health Promotion in Copenhagen, and above all the local host of this 27th International HPH Conference in Warsaw.

Jürgen M. Pelikan & Rainer Christ

Competence Centre for Health Promotion in Hospitals and Health Care at Gesundheit Österreich GmbH (Austrian Public Health Institute)

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Editorial Office, WHO-CC, Clinical Health Promotion Centre, Health Sciences, Lund University, Sweden
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Scope & Purpose

High tech and high touch – are these competing or even contradictory issues or reconcilable principles for the future of health care and health promotion? The titles of two scientific articles, “Disruptive Innovation – Low Touch” and “Getting High-Tech to Remain High-Touch”, phrase two extreme perspectives on these issues. However, viewpoints, positions and arguments are continuously challenged by rapid technological and social developments - it is probably not that simple!

There is a lot of discourse on the effects of ongoing digitalization on health care, but to find out which opportunities and challenges result for health promotion in health care, is an even more complex endeavor.

This conference intends to address these questions from a variety of perspectives. Technological development and digitalization are just parts of global megatrends, which affect societies in general, and by that also population health and health care. The first plenary session will start by analyzing which critical trends impact health care and public health, as well as health promotion in health services.

Digitalization has already changed our everyday lives considerably and will continue to do so. These changes affect society as a whole, but also specific areas such as public health and health care, each in its own way. In the light of these developments, the second plenary session will identify and analyze some of the most relevant opportunities and challenges arising from digitalization for health promotion in the context of health care and public health.

Opportunities and challenges arising from technological development for health care and life style interventions are emerging rapidly. But how does this development impact high touch interaction and communication in health care and health promotion? Taking up this question, the third plenary session will discuss challenges and chances of high tech, e.g. for co-production of health, shared decision making, empowerment and involvement of patients and relatives.

The conference will deal not only with the drivers coming from technology, but also with trends and changes in health care systems and public health itself. Strengthening primary health and public health services has been defined by WHO as issues of high priority. The fourth plenary session will therefore focus on new tasks, roles, co-operations and organizational forms in primary health and public health services.

Finally, in the fifth plenary session, perspectives for investments in health promotion and for universal health (promotion) services coverage will be discussed from the viewpoints of different stakeholders - politics, professionals, patients and industry – considering the trends addressed throughout the conference.
Tuesday, May 28, 2019

08:00-14:30
HPH Summer School

15:00-17:30
HPH Newcomers workshop

Wednesday, May 29, 2019

09:00-16:00
GLOBAL NETWORK Tobacco-free conference / GOLD Forum Tobacco-free Health Services deliver quality care – sharing the experience

17:00-17:30
Conference Opening

17:30-19:00
Opening Plenary: Impact of critical trends on public health and health care – the role of health promotion

19:00-21:00
Welcome Reception

Thursday, May 30, 2019

09:00-10:30
Plenary 2: Opportunities and challenges of digitalization for health care and public health

09:00-17:45
Electronic Poster Session

10:30-11:00
Coffee, tea refreshments

11:00-12:30
Oral parallel sessions 1

12:30-13:30
Lunch

13:30-14:15
Mini oral sessions 1

14:15-15:45
Oral parallel sessions 2

15:45-16:00
Coffee, tea, refreshments

16:15-17:45
Plenary 3: Challenges and chances for high touch interaction and communication in health care in an era of high tech

20:00-22:00
Conference dinner

Friday, May 31, 2019

09:00-10:30
Plenary 4: Dialogue and digitalization in health promoting primary health care and public health

10:30-11:00
Coffee, tea, refreshments

11:00-12:30
Oral parallel sessions 3

12:30-13:30
Lunch

13:30-14:15
Mini oral parallel sessions 2

14:15-15:45
Oral parallel sessions 4

15:45-16:00
Coffee, tea, refreshments

16:00-17:30
Plenary 5: Ensuring high tech and high touch for all: Universal health promotion coverage

17:30-17:45
Conference closing

17:45-18:30
Farewell refreshments
Plenary 1: Impact of critical trends on public health and health care – the role of health promotion

Critical trends impacting health care and public health

DE ROODENBEKE Eric

There are many publications on future of health, and they cover same aspects although coming from different perspectives and giving different emphasis to some or the other trend. Rather than going through a shopping list it is better to articulate theses factors in categories to better reflect on them and figure out what changes should be made in health service delivery and public health interventions to enhance health of the population. Demand for health services is changing because of demography, epidemiology, climate but also people expectations and the technology revolution. The ageing population as well as the urbanization are creating new conditions for health services including a different approach of care as well as health support breaking silos from the medical field to a broader social response. The health status is also changing with the recognition of the importance of multimorbidity than cannot be addressed as previously through a combined specialty approach and a stronger need to have a health mediator for navigating in the health system. Climate change is already affecting all continents with more and more violent and unexpected natural disasters, but longer-term impact will have major consequences on health and population. People expectations and technologies play together for more empowerment and a drastic change in the providers/patient relation as well as for the expected responsibilities of individuals and the role of the community. Moving toward coproduction of healthcare is much more than a shift in words. For all the demand factors the key question is around how deep our actual knowledge of these trends is, and what is the variation regarding local conditions. The supply of health services is also fast evolving because of scientific breakthrough, new technologies and change in the scope of work of Health professionals as a result of the two first trends. Among the scientific breakthrough the genomics driving care towards predictive medicine and individualized treatments is opening the door for a paradigm shift that is still at a very early stage. New technologies including nanotechnologies, robotics and of course the multiple variations of e-health applications are offering a very large spectrum of possible responses to the current challenges for improving health of the population. The combination of these two is drastically affecting the role of health professionals putting at stake the education models and the responsibility between professions. The evolution of Electronic Health records with Artificial Intelligence will be changing drastically the intervention of health professionals and the organization of service providers. For all supply factors the major uncertainty is on technology adoption and capacity to drive change for general interest instead of fighting for own entitlement. The market forces make the third component on trends of evolution. The critical factors affecting the market forces will be around the resource allocation mechanisms, the level of globalization of the market and increased uncertainty. Resource allocation is not around public health versus healthcare but on how much societies are ready to spend on health versus other expenses and how will it be possible to spend more effectively on health. Globalization is at early stage but is a game changer as it makes health issue more and more international while the global governance is not yet prepared for this. Globalization has also increasing impact on health with migration and booming travel. New disruptive players may also create unexpected big bang in service delivery. Finally, increased uncertainty is also playing a major role in the way organizations are considering their role and respond to the need of population. For market forces the key element is in the hand of policy makers that have the responsibility to shape up the framework in which health service are evolving.

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Plenary 2: Opportunities and challenges of digitalization for health care and public health

The value of effective clinical data interchange among Healthcare Organizations. 13 years of experience in Catalonia

PASTOR Xavier

Patient centered care requires a close collaboration among different healthcare organizations (HCO). In 2006 a task force group was committed by Public Health authorities of Catalonia for a radical redesign of the healthcare in a broad district of Barcelona with a population on 600,000 inhabitants. The focus was the improvement in the relationship between Primary care (PC) and Specialized Care (SC) for a better integrated process of healthcare for the population. Twenty-three centers were involved. They belong to nine different Healthcare organizations: three hospitals, one SC outpatient clinic and six PC organizations. Initial analysis resulted in a high heterogeneity in the degree of technological investment, development and maturity in the use of EPRs by the professionals. An interchange platform was developed using structured xml files with clinical content based on standard HL7 v2.5 messages. After 12 years of real experience in the use of such project several scores demonstrated the benefits in terms of quality of care of the population. The other big achievement has been the standardization of the clinical processes in this area. Such results stimulated and promoted the expansion of the model. Nowadays, the interoperability platform, named IS3, connects nearly all the Catalonian public HCO and allows new relationships like the connection among community and reference hospitals to improve the quality and efficiency of the tertiary care. The Regional Health Information System (RHIS) is complemented with a central repository of clinical documentation. A good governance model of the different ICT departments involved, based upon professionalism, leadership and transparency, are key points for the achievement of the initial goals. However, new challenges are over the horizon. Some of them are related to the integration of more health services like Emergencies, Mental Health, Home care and Social Services. Others, like the online shared management of the Health Problems list of the patient are or care plans are more challenging because they require institutional agreements and interprofessional collaboration among healthcare stakeholders.

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Digital solutions for mental health promotion and treatment: examples of good practice and brilliant failures

RIPER Heleen

Over the last two decades the digital landscape of mental health care research and service innovation has gained momentum. This period is characterized by many success stories but brilliant failures as well. Today, e-mental health is like a two-headed Janus. One side of his face illustrates the birth of innovative technologies that entered mental health services and research practices. In parallel, the evidence-base for the application of these new technologies, such as internet-based treatments for depression, has been established with effect sizes comparable to those of face-to-face treatments. The other side of his face shows, however, that e-mental health has not yet lived up to its full potential as its actual delivery, evaluation and implementation in routine care has proven to be a much longer and bumpier road than expected. The question addressed in this presentation will be ‘what does the future hold? Acknowledging that futures are difficult to predict Ripper nevertheless provides insights on how we may overcome some of these bumps and how we may create a future that serves our needs. Riper will argue that a new paradigm for mental health care is required in which a research by design approach is adopted that integrates scientific methods for the development of innovative health care innovation (‘co-creation’), with evaluation (‘beyond RCT’s only’) and implementation (‘evidence-based implementation strategies’) of these interventions in routine care settings as well. She will illustrate this new paradigm by virtue of the results of a number of innovative research projects that are indicative for this research by design approach such as the H2020 European Comparative Effectiveness Research on Internet-based Depression Treatment.

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Plenary 3: Challenges and chances for high touch interaction and communication in health care in an era of high tech

High tech digital health solutions enabling high touch relationships

GANN Bob

"At its best, technology supports and improves human life; at its worst, it alienates, distorts and destroys" (John Naisbitt, High Tech, High Touch: Technology and Our Search for Meaning). The futureologist, John Naisbitt, laid down his challenge as long ago as 1999, in the early days of the internet. Even he could not have foreseen the enormous advances in digital health: millions of health websites, hundreds of thousands of health apps, personalised self-management, virtual consultations, wearable technology, big data analytics, genomics, artificial intelligence. There is a common perception that increased use of technology furthers human disconnection. On the contrary, at its best, technology can facilitate communication, reduce isolation, build relationships, and promote lifestyles which are healthy and engaged. The presentation will illustrate how health organisations, particularly in the UK, are working with patients and consumers to ensure digital technologies support, rather than replace, high touch human relationships. Digital technologies are enabling personal interactions with clinicians, freeing us from the constraints of the physical world (including the time, cost and stress of travel) through video consultations. Digital self-management and lifestyle plans are personalised and relevant to individual concerns and preferences, rather than impersonal "one-size-fits-all" approaches. Intergenerational befriending schemes are connecting schoolchildren and older people in care homes, where the children introduce the older people to digital devices and how to use them. Virtual reality headsets are allowing people who would otherwise be withdrawn and isolated to experience a world outside the confines of their care environment. Rather than meaning people become inactive, digital technologies can be a powerful way of motivating people to get mobile. People are using wearable fitness monitors to motivate physical activity, often sharing experiences with others in communities. Loneliness and isolation is a major public health challenge, with a health impact equivalent to living with a long term condition or smoking 15 cigarettes a day. People who would otherwise be lonely and isolated are being supported to get online so that they can keep in touch with friends and family – technology enabling rather than replacing human contact.

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Shared-decision making in the context of new information technologies

ELWYN Glyn

New information technologies are changing the relationship between users and those who deliver services to users. Platforms such as Uber and Lyft change the way we use vehicles, time and space. Airbnb has changed how we travel. Wikipedia changes how we learn and keep up to date. But in healthcare, change seems slower. Yet there are indications that technology will soon transform the relationship between people and healthcare delivery services: it will lead to coproduction as the only feasible way to practice medicine. How? By providing people with easy-to-access trustworthy information enabling healthcare professionals to see useful personal profiles of their clients in real time at any workstationBy making a digital version of the clinical encounter available to people who need to have it - at any timeBy analyzing the content of clinical encounters - for the correct evidence, for communication skills - and making use of this information to improve practiceBy connecting people with illness to the right peer network of others who have more experience and knowledgeBy making sure knowledge gaps are identified, shared and solved by facilitated networks. Some clinicians embrace this vision. Indeed, they are frustrated that current electronic records stand in the way of being able to do this new work. Others worry that this is a vision of hell. For sure, there is no doubt that the interface between the internet, information technology, and healthcare is problematic, and needs solutions.

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Health promoting person-centred care over the whole care chain

EKMAN Inger

Background: The focus of person-centredness in health care is that a patient is a person with capabilities and needs. Person-centred care involves a partnership between the health care professional and the patient (often with relatives) and contain the following interrelated parts: Initiating the partnership – the patient narrative, the patient’s experience, resources and needs can be identified in the narrative, and forms the basis for the continued planning, together with relevant examinations and tests. Working the partnership – the personal health plan is co-created by the patient and the health professionals. Safeguarding the partnership – documenting the agreed goals and the personal health-plan. Based in this operationalizing of person-centred care, Centre for Person-Centred Care at University of Gothenburg (GPCC) has performed more than 20 controlled studies evaluating the effect of PCC, most of them showing positive results. In this presentation examples of randomized controlled studies evaluating person-centred health promotion over the whole care chain and over distance (tele-care) will be presented. The intervention in the respective study will be presented in detail and some of the results were Return to previous activity (e.g work)Increased self-efficacySustainable effects 2 yearsSignificantly better effect in low-educated patients

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Self-organization and new organizations for health promotion and long-term care in the community

DE LEEDE Mirjam

Buurtzorg is a pioneering healthcare organization established 12 years ago with a nurse-led model of holistic care that has revolutionized community care in the Netherlands. Client satisfaction rates are the highest of any healthcare organization. Staff commitment and contentedness is reflected in Buurtzorg’s title of Best Employer (4 out of the last 5 years). And impressive financial savings have been made. Ernst & Young documented savings of around 40 percent to the Dutch health care system. Buurtzorg scaled very quickly across the Netherlands from 1 to 960 teams in 12 years. During this time Buurtzorg grew in other areas of care such as mental health, children and families and also supported other Dutch international care organizations to take on the Buurtzorg model of care. Collaboration is key to Buurtzorg’s model of care and its operating model, resulting in Buurtzorg collaborating to find new ways of working and new areas of care, at home and internationally. As the model develops a global learning network is forming around Buurtzorg to share experience and knowledge.

Buurtzorg’s model of care promotes self-management from both clients and nursing teams. Principles such as continuity, building trusting relationships and building networks in the neighbourhood are all important and logical for the teams. A team of 12 nurses are working together. More about the Buurtzorg model, self-managing clients and self-managing teams will be worked out during the presentation.

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Early childhood interventions – cooperation, networking and dialogue to support families in need

HAAS Sabine

Regional networks to support families in need in early childhood are the core element of the Austrian model for early childhood intervention. The networks build on the available services of a region and reach out to families actively and systematically by sensitizing potential referrers. Over a longer period of time, family supporters assist the families mainly in the form of home visits and organize the necessary support services. Thus, cooperation, networking and dialogue with families as well as network partners are central. Since 2015, regional early childhood intervention networks have been set up or expanded in all Austrian provinces according to the uniform model. At the end of 2018, 63 of the 116 political districts in Austria were covered by regional networks. The implementation is supported by the National Centre for Early Childhood Interventions, which promotes and supports nationwide coordination and networking, quality assurance of implementation as well as knowledge transfer and public relations work. Early Childhood Interventions are already anchored in numerous political strategies. Currently, there is an important focus on work towards sustainable and nationwide establishment. The documentation shows a rapid increase in the number of
of families supported by the regional networks. The intended target groups are reached very well and in many cases pleasingly early: Many families enter the program during pregnancy or in the first months of life of the youngest child. Compared to the total population, (significantly) more single parents, families at risk of poverty and families with a migration background as well as main care-givers with a maximum of compulsory schooling are being reached. According to the evaluation, the establishment of regional networks has already been very successful and the families as well as the family supporters see many positive effects of early childhood interventions. They observe an increase in available resources and a reduction in burdens; as a result, parent-child bonding and interaction improve and the development of the child is promoted. Resource-oriented support for families promotes a good basis of trust, relationship and attachment, which contributes to strengthening the family. Thus, dialogue is a way of empowering families in need.

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Plenary 5: Ensuring high tech and high touch for all: Universal health promotion coverage

Introductory Keynote: Computerisation, Automation, and Artificial Intelligence: Implications for the delivery of care and future of work in healthcare

WILLIS Matt

NHS Primary Care faces numerous challenges: increased workload, greater service use, skill shortages, decreased patient consultation time, budgetary constraints, to name a few. Automation is typically seen as a threat to many industries but provides an opportunity to address these challenges in NHS primary care. This talk presents results from a multi-method project to create a linear scale of automatability, then, applies the scale to primary care tasks gathered through ethnographic observations. The project uses a machine learning framework to create a functional mapping between the skills, knowledge and ability characteristics of work activities and the ground truth of automatability elicited from an expert survey. This project provides insight into tasks that can be automated but for social and organisational reasons, may encounter resistance to automation. The talk concludes with implications for the future of primary care.

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Session O1.1: Digitalization in health care and health promotion I

Enhancing a Blood Transfusion Database Platform to Improve Clinic Blood Component Supply to Assure Blood Transfusion Safety

TU Chi-Chao, WANG Jyn-Yeong, LI Yun-Yi, LEE Pei-Ning, WU Meng-Ting, WU Tung-Huan, LIN Yu-Wen, LIN Ching-Feng

Introduction
Blood transfusion has been a complicated and high-risky clinical procedure. Any error could cause serious injuries to patients. To better provide quality inspection services and assure the procedure safety, we enhanced and built a blood transfusion database platform with antibody identification and develop inventory management strategies to better guarantee the patient transfusion safety.

Purpose/Methods
Based on retrospective study, collecting Jan., 2013 to Oct., 2018 data (Jan., 2013 to Dec., 2015 for outsourcing inspection), and building antibody identification operations from Jan., 2016. Among the individual antibodies (87.8%), Anti-Mia (52.5%) was the most, followed by Rh series (29.4%), Anti-M (3.5%), autoantibodies (15.1%), and cold antibodies (15.2%). The multiple antibodies (12.2%) were mostly in the Rh series and Mia (51.6%). Anti-Mia is a common irregular antibody in Taiwan, so we developed the inventory strategy: weekly inventory by E+c+Mia(-).

Anti-Mia is a common irregular antibody in Taiwan, so we developed the inventory strategy: weekly inventory by E+c+Mia(-).

Results
The new blood transfusion platform integrated the workflow and reduced the time of blood component preparation. Cost saving was about NT$15,500 per year. The barcode correctly identified patients and monitored the entire transfusion process.

Conclusions
After the antibody identification operation in our laboratory and a better design of clinical decision support module with barcode technology, blood transfusion database platform improve the blood supply efficiency and assure blood transfusion safety.

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Virtual Reality - a tool to inform and prepare patients for radiotherapy?

SMITH Frida, BROVALL Maria, AHLBERG Karin, BJÖRK-ERIKSSON Thomas

Introduction
Radiotherapy is one of many treatments a person with cancer might need. Waiting times can be long and experienced as meaningless or even life threatening. For successful radiotherapy, the person often needs to be immobilized. A calm, well informed patient might enhance quality of treatment, both from patient and provider perspective. Waiting times can become meaningful instead of meaningless if used wisely for information and preparation for patients and loved ones.

Purpose/Methods
A digital tool consisting of a virtual visit to the radiotherapy clinic using VR-glasses and a mobile application with additional information required by patients will be tested in a pilot for patients with breast- and prostatic cancer. The tool was developed in a co-creative process together with patients and staff at a radiotherapy clinic. Surveys containing questions about HRQoL, preparedness and satisfaction with care will be used at four time points. A limited number of patients will be interviewed about their experience of using the tool. Results from the pilot will help improving the tool and evaluation leading to a RCT including more diagnosis and hospitals where patients have to travel far for radiotherapy.

Results
The results from the survey of the pilot will be presented together with experiences and results from the co-creative development process of the digital tool.

Conclusions
This is a new way to inform and prepare patients and loved ones about radiotherapy and possible side-effects. By involving patients and staff in the co-creative development process of this digital tool, needs and demand for information in this form was given attention. If successful, the tool can easily be transformed for other diagnosis, cancer or other, to help patients prepare for examinations and treatments.

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Electronic Health Records Implementation in Hospitals and Professional Identity Threats: A Cross-Cultural Case Study

MAKOWOECKI Matteo

Introduction
The introduction of new software in hospitals such as Electronic Health Records (EHR) allow patients and physicians to better
monitor and cure diseases. This software faces however continuous resistance from the side of physicians, that was still not extensively explored by researchers. Existing literature recognizes threats to professional identity as a cause of resistance behaviour, but doesn’t explore in detail those threats or take into account cultural factors.

Purpose/Methods
This study follows a multiple case study method and is based on interviews with 11 physicians from two hospitals in Italy and Germany. It explores the process that leads a physician to resist a newly introduced EHR system. Threats to the relationship with patients were explored, then the general opinion about the system was asked. The data collected from the interviews was compared among physicians as well as between hospitals.

Results
While physicians from both countries recognized an equal importance of instrumental components of the communication, Italian physicians gave a bigger importance to affective components and showed resistance behaviour in case they felt those components were threatened. Another cause of resistance behaviour was the risk that the information included in the EHR could be wrong or incomplete.

Conclusions
The introduction of EHR would generally improve instrumental components of the communication but reduce the affective ones. This would be felt especially by physicians that are in high context cultures and perceive a low level of control on the system. Those physicians would be more likely to show resistance behaviour in the form of negative opinions.

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Balancing Hi-Tech with Hi-Touch Digital Patient Engagement Strategies

FRAMPTON Susan B.

Introduction
Rapid development and expansion of digital and virtual approaches to patient engagement are transforming how, where and when primary and preventive care services are provided to patients and healthcare consumers. Healthcare professionals must become familiar with emerging technologies and build them into work flows, in order to stay relevant.

Purpose/Methods
This session will review the latest emerging technologies for patient engagement, and explore the impact on the future of primary and preventive care services delivery.

Results
Virtual options are proliferating, and new disruptive providers are entering the healthcare environment, including influential retail outlets like Wal-Mart, Amazon and Starbucks. Growth in this sector will continue to challenge traditional modes of care delivery.

Conclusions
Primary and preventive care services are rapidly moving towards a level of autonomy on the part of patients that we have not experienced previously. Re-envisioning the role of the formal healthcare system in this new reality will be critical to delivery of safe, high quality, patient-centered care.

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Session O1.2: Governance and leadership for HPH I

Perfect discharge planning service screening assessment

WU Meng-Ping, WOUNG Lin-Chung, HUANG Sheng-Jean, FENG Rung-Chuang

Introduction
The purpose of this study is to investigate nursing personnel’s consistency on needs assessment through home-based palliative hospice home care model for patients with terminal chronic diseases, and further understand the impact from nursing personnel’s job seniority on their assessment consistency. Moreover, this study is also hoped to provide physicians, patients and their families an opportunity to make medical decision as earlier as possible, to discuss about patients’ needs to improve the quality of life for patients with terminal chronic diseases.

Purpose/Methods
At the beginning of the implementation of the pain, end-of-life hospice and palliative care evaluation for clinical care was the lack of evaluation standard. Because there were no hospice or palliative care related trainings, so it would be hard for the physicians to learn the proper ways to identify when the patients’ life ending point will be. As a result, the physicians might not be able to deliver a complete shared palliative care service or home-based palliative care on time.

Results
The chart for palliative care assessment and the guideline were completed, and paper works has begun to process. The NIS information system has been complete. Inpatients who have condition changes will be through the palliative care evaluation, with the threshold larger or equals to 95%. In 2015, a total of 3,898 cases should be evaluated from May to September; as a result, 3,702 cases were completed, 196 cases were not completed, and the completion rate is as high as 95%.

Conclusions
The result of this study indicates the ability of end-of-life evaluation for physicians and the consideration for inpatients’ end-of-life palliative care assessment. Therefore, it will provide a decision-making example for terminal chronic disease patients and their family, and help them to maintain and improve the quality of lives. and the screening score is equaled to or higher 6 to 4. Even though the nurses have different seniority, they still have a high level consistency rate for end-of-life care evaluation.
Innovation in health care: Südspidol

WIMMER Albert, REIMER Hansjörg

Introduction
The concept for the design of the new hospital Südspidol in Esch-Alzette in Luxembourg adopts a campus typology and combines the rational organization of functions with a human scale to improve way-finding and optimise efficiency. The main goal of the design is a highly efficient, process oriented hospital with a focus on the patients’ needs. By focusing on the needs of the patient, the concept develops the architecture to create an atmosphere of well-being.

Purpose/Methods
A study called “Das patientInnenzentrierte Krankenhaus” was written by the health expert Ilona Kickbusch on the key demands on a patient-centered hospital. Based on this study as well as on international best-practice models and evidence-based studies the innovative concept für Südspidol was developed: Südspidol is maintaining the highest quality of health care with simultaneous economic operation. The concept meets all requirements of a life-cycle hospital.

Results
Südspidol implements the following strategic goals: Patient-friendly environment • Easy orientation and guidance through entire hospital. • Separation of patients routes and supply routes • Transparent and legible organisation of the functional areas. • Separate access to dialysis areas and obstetrics areas. • Single/One bed-room’s connection with nature. • Family zones within the patient areas. Functional and employee-friendly environment • Centre-focused arrangement of the hospital buildings. • Short distances. • Appealing working spaces with a high proportion of natural daylight.

Conclusions
In the interests of a forward-looking, cutting-edge concept for the new Centre Hospitalier Emile Mayrisch it is essential to pursue a strategy that consciously exceeds the state of the art. Therefore, the proposed design has to anticipate all possible future developments and to provide adequate solutions. The concept combines the rational organisation of functions with a human scale to improve way-finding and optimise efficiency.

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Analysing Health Literate Organization levels in Catalonia-Spain HPH Network

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Introduction
The Health Literacy Group of the Catalan HPH Network (HPH Catalunya) has analysed the level of Health Literate in our 21 organizations. We were inspired by the self-assessment tool of Working Group on “HPH and Health Literate Health Care Organizations (HPH & HLO)“, born in April 2017 during Vienna International Conference of HPH.

Purpose/Methods
We have designed an online survey of 16 qualitative and quantitative questions that brings practical information about our organizations. 14 of 21 organizations participated in the survey (66%), between October and November 2018. We analysed aspects such as: lines of work on health literacy or way finding, readability of documents, participation of patients in documents, teaching on communication tools for practitioners and other professionals, webs adapted to different disabilities.

Results
The best items in organizations are: 92.9% of them have an expert in signalling and way finding, 71.4% have an expert in health literacy, mostly in Departments such as Communication or Quality, 42.9% have objectives on health literacy in their strategies and, 35.7% have lines of work on health literacy. The worst items are: 85.7% do not have website adapted for visual impaired-people or with mobility problems, 71.4% do not evaluate legibility of documents with patients, 42.9% do not analyse patient’s experiences regarding communication between healthcare professional – patient.

Conclusions
Our organization is young (10 years), that is why we still have not developed good policies on health literacy. These results will help us to develop guides, materials and good practices to our organizations.

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Iranian Version of Self-Assessment Tool for Health Promoting Hospitals

VAZIRI Mohammad-Hossein, KESHAVARZ MOHAMMADI Nastaran, Rramezankhani Ali, Kavousi Amir, Olyaee Manesh Alireza

Introduction
Health promoting hospital is a concept for the development of a hospital. It is based on Ottawa Charter for Health Promotion (1986) to effectively implement Ottawa’s second and fifth strategy, the creation of environments that support health and reorientation of health services. The purpose of this study was to design Iranian version of self-assessment tool for health promoting hospitals.

Purpose/Methods
The present study was carried out in a sequential in three stages. In the first, the data were collected through with semi-structured interviews with 25 key stakeholders using the interview guides including the translated questionnaire. Sampling was done purposefully and analysis of data was done by analyzing qualitative content. The second phase was a quantitative methodological study aimed at designing and validating a tool for evaluating health promotion hospitals based on WHO tool and the findings of the first phase. To determine the validity of the questionnaire, content validity index and content validity were measured. The internal consistency and test-retest tests were used to determine the reliability of tool.

Results
At the end of the qualitative section, the draft of the new tool was drafted which was significantly different with the WHO tool. The new tool was reduced to 4 standards and 67 questions. A large number of sub-standards were changed and the evaluation score system changed to 1 to 10. Which was indicative of favorability and acceptable stability. The results of the internal evaluation of the scale with the Cronbach’s alpha index in four standards were between 78.1-95.9. The results of the test-retest showed the stability of the questionnaire.

Conclusions
Based on the findings of the studies, Iranian hospitals already implement part of the standards of health promoting hospitals. But given the different readiness of hospitals to become a health promoting hospital, it is advisable to gradually establish this approach in Iran. Iranian version of self-assessment tool for health promoting hospitals can help to institutionalize this concept.

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Reform and Modernisation of Acute Hospital Services

MURPHY Sean, POTTS Louise, MCCRORY Bernie

Introduction
This Project concerns itself with the populations living in Ireland and Scotland. The majority of these areas (outside the cities) suffer from rural isolation and poor infrastructure and to increase acute episodes of care to patients, through improved/reformed service delivery on a cross border basis.

Purpose/Methods
The project will deliver services in a more innovative way to they deliver better quality care to patients with more effective clinical outcomes.

Results
This project will transform the lives of at least 13,000 patients within the eligible area. New ways of working must be developed and put in place urgently if the health services are to deliver the level and quality of services into 2020 and beyond.

Conclusions
Patients will be assessed/treated more effectively at the point of contact, with alternative care pathways established during the pre-hospital/outpatient/inpatient stage.

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Session O1.3: Community work

12 week health promotion project and its influence on active aging

LU Hsin-I, Hsieh Hung-Yu, Weng Chung-Feng, Lin Yi-Hui, Hsiao Tong-Yun, Chen Hsin-Chun, LIN Yu-Xuan

Introduction
In 2018, Taiwan officially entered an era of aged society. The psychological and social issues related to the aged people received much attention. To improve overall health of the aged people, our institute created a 12-week program for aged people. The program emphasized on affective education to encourage aged people with active behaviors and participate in four areas – improving physical and mental health, independence, social participation, and application of social security resources.

Purpose/Methods
The project targeted on people over 65 years old and took place in Yong-ping-li community in Xindian District. Participants spent two hours per week for three months. The group leader introduced “active-aging” related topics for discussion. The meeting was conducted with watching film, group discussions, experience activities, homework etc. to improve their life style with “active-aging.”

Results
There are totally 20 participants in the project (17 valid questionnaires from 68.8 years old in average). Before and after the course, a questionnaire was conducted for four areas—improving physical and mental health, independence, social participation, and application of social security resources. The five-point rating scale was used to calculate the statistical analysis of the
paired samples. The results showed significant differences for health improvement, independence, and application of social security resources. (p <0.05)

Conclusions
In order to slow down aging process, the curriculum, in addition to enhancing healthy awareness and behavior, emphasized self-motivated participation. Through a process of exploring their own experience and continuous discussion, the aged people could improve their physical and mental health and self-independence and live with positive view on old age.

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The Effect of Multisensory Health Promotion Activities on Welfare of Elderly People in an Indigenous Community

LU Hwei-Chin, HSIEH Hung-Yu, WENG Chung-Feng, LIN Yi-Hui, CHEN Hsin-Chun, HSIAO Tong-Yun, LIN Yu-Xuan, LU Hsun-I

Introduction
With the advent of aging society, the number of people with dementia increases gradually. In 2017, Alzheimer’s Disease International (ADI) reported that the number of people who suffered from dementia developed every 3 seconds. Dementia not only affects the patient’s interpersonal relationship and daily functions, but also brings physical and mental stress to caregivers. Therefore, multiple sensory health promotion activities were introduced to improve the welfare of the elderly in the community.

Purpose/Methods
Twenty-one elders from indigenous communities were enrolled in this study. They were screened with the Ascertain Dementia 8 (AD8) questionnaire for early dementia, and 11 of them scored ≥2, which implied impaired cognition. Through the multi-sensory stimulation (visual, auditory, olfactory, taste and tactile) interactive courses, designed by professional lecturers, the welfare and health of the elderly are expected to be promoted. The course is 1 hour a week for 8 weeks. Curriculum: 1. Exercise: increase muscle strength, agility and coordination. 2. Music: provide positive stimuli to help stabilize emotions and promote emotional expression. 3. Fragrance: personalized fragrance oil to create a soothing environment to relieve pressure and relax. 4. Massage: use essential oil with massage courses to activate the sense of touch, promote the cognitive response and delay the deterioration of limb functions. 5. Cognition: design cognitive-oriented and visual activities to activate brain and improve communication. 6. Diet: spices are used with food to stimulate sense of touch, smell and taste.

Results
16 out of 21 participants, with the average age of 72, completed the course. Cognition, agility, emotion and social skills were tested with a 10-question questionnaire pre- and post-course. Statistical analysis showed significant improvement in cognition, agility, emotion and 1 of 4 social skills (P<0.05).

Conclusions
Cognition, coordination, emotions and social skills are significantly improved using multi-sensory stimulation. As social participation and nervous system function improve, functional declines are delayed.

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Competitive Reward Points Game- A New Strategy of Exercise Promotion in Community

HUNG Ta-Chuan, HUANG Tsu-Hsueh, TIEN Jung-Chen, LAIO Lee-Hua

Introduction
In order to build up a healthy sport community and encourage people to establish a habit of regular exercise, we have developed a “Health Physical Fitness Program” contest in cooperation with forty-seven health service stations with volunteers service in five districts of New Taipei City in Taiwan. The volunteers at health service stations will promote this contest and encourage people to participate in this contest with the aim of achieving a regular exercise habit.

Purpose/Methods
By participating in contest, people can earn reward points through three activities: fitness sports (walking, bicycling and dancing), vitality show contest (aerobics, Taiko, and sign language), and Health Day Program (lecture and mission games). The more you participate in, the more rewards points you earn. Besides, the extra reward points can be earned if you bring your friends to participate in the activities or win the top three places of vitality show. Maximum reward points team can win the prize.

Results
We hold a 6 months duration reward game. There are 11 teams comprised of 154 participants participating in the walking contest which is the most popular activity, achieving the individual average walking time of 2.6 hours per week. There are 17 teams comprised of 249 seniors participating in vitality show contest. And a total of seven “Health Day” programs were held, with 196 people participating. We can increase the rate of regular exercise from 76.8% to 90.9% in participants.

Conclusions
By implementing this innovative “Health Physical Fitness Program” contest with reward points, we have successfully encouraged volunteers to lead residents in the community to participate in the contest. Because they can choose the activity which interests him/her from various activities and earn reward points. We believe that this strategy in cooperation with the community organizations is an effective way to promote regular exercise habit and encourage people to maintain healthy lifestyle.

Comments
To build up a healthy sport community and encourage people to establish a habit of regular exercise, we have developed a “Health Physical Fitness Program” contest.
FANG Chun-Kai, LIN Chia-Hua

Introduction
Alcohol use disorders had become severe global public health issues and social safe problems, but the clinical enroll pathways for alcohol prevention were still difficult. Taiwan Ministry of Health and Welfare entrusted 8 health care centers to construct the national alcohol prevention network to actively find and enroll alcoholics to reduce or quit alcohol. The report presents the effects of the project.

Purpose/Methods
There were 8 health care centers authorized by Taiwanese government to attend the project, including MacKay Memorial Hospital, Taipei Tzu Chi Hospital, Taipei Veterans General Hospital Yuli Branch, Tsao-tun Psychiatric Center, Jia-nan Psychiatric Center, China Medical University Hospital, Tung’s Taichung Metro Harbor Hospital, and Kaohsiung Municipal K’ai-Syuan Psychiatric Hospital. MacKay Memorial Hospital was the core center to integrate and construct the network. All 8 centers attended the network meeting every three months. The data were collected in 2018.

Results
There were 10 transferring alcoholic pathways constructed, including (1) courts of low, (2) community health centers, (3) help lines, (4) general medical care systems, (5) psychiatric care systems, (6) health bureau, (7) domestic violence prevention centers, (8) social administrations, (9) district prosecutor’s offices, and (10) motor vehicles offices. Totally 607 alcoholics were transferred to the 8 centers. Top 4 resources were psychiatric systems (n=288, 47.4%), motor vehicles offices (n=71, 11.7%), general medical care systems (n=70, 11.5%), and help lines (n=60, 9.9%).

Conclusions
The national alcohol prevention network has been constructed through the cooperation with 8 centers and the Ministry of Health and Welfare. It is effective to enroll alcoholics to health care systems. However, there were still some enrolled alcoholics rejected to attend. The next step we have to do is to increase the ability of staff to promote the motivation of alcoholics for quit or reduce.

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FILIPAZ Martina, HMEJAK Martina, BARCA Anna

Introduction
Medical literature shows that a regular physical activity program contributes to a healthy life style and has several benefits on the general health of the people. Lack of exercise is increasingly common in many countries, with a considerable impact on the health of the population. Rehabilitation health service, in collaboration with the Diabetes Center, Micro-Areas and Volunteering Associations, have promoted the “Pathways to Health: walking together against diabetes, overweight and obesity” with the aim of promoting physical exercise as recommended by the WHO.

Purpose/Methods
Individual physical assessment have been carried out at the start and at the end of the project by measuring clinical parameters, as well as by a static postural evaluation, a dynamics postural evaluation and the participants’ level of engagement when taking care of their health condition. Moreover, group activities integrated with a self-monitoring program have been introduced in order to promote engagement and empower people. Augmentative and Alternative Communication tools have been used in order to support interpersonal communication.

Results
The project has been tested by means of a retrospective feasibility study. Since the start of the project in 2016, no definite improvements in clinical parameters (blood pressure, heart rate, blood sugar levels, oxygen saturation) have been registered. However, during physical exercise, in most participants of the study a decrease in the perception of fatigue, of dyspnoea and an increase in the walking distance have been observed.

Conclusions
The main aim of this study is to provide people with the necessary instruments to handle physical activity while taking into consideration their medical condition, to try slowing down comorbidity and death due to existing health conditions while at the same time increasing the benefits of physical exercise. All of these goals have been achieved.

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Session O1.4: Health at the workplace I

Aim to improve safety and empowerment in surgery: what to do to get ready for the best!

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Introduction
Healthcare Associated Infections (HAI) are the most frequent post-surgical complication. In Ferrara University Hospital, about 16,000 surgical procedures are performed every year. We aimed at decreasing rate of HAIs in the Surgical Departments using Lean Management techniques to promote health and safety among surgical patients.

Purpose/Methods
A Multidisciplinary Group made by surgeons and nurses of General Surgery and Orthopedics, Hospital Hygiene staff and external advisors went through the following phases of the Project: education, data collection, mapping and classification of risks, definition of a strategy. After discussions and field visits, we categorized infection risks according to severity, frequency and controllability. We used Lean tools such as visual management, rules for cleanliness and order, standardisation of procedures and check-lists.

Results
Actions: colour codes for bed management, admission check-list for patients fragile and colonized by “alert” microorganisms. We implemented the role of Nutrition Tutor and evaluation score of oral hygiene. We promoted training and surveillance for hygiene of workforce. Visual instructions, digital timers and check-lists were introduced to manage devices and drugs. We focused on the pre-surgical period as the most sensitive area of intervention and produced a leaflet for patients “Surgery: what to do to get ready for the best!”

Conclusions
The leaflet contains a checklist of the correct pre-surgery preparation and the space for all the drugs the patient uses. The leaflet should be given to the staff upon admittance, to confirm what was done and how to best manage any transition in drug administration. HAI rate observed during first quarter of 2018 was 3.7%. A new measurement will be made in 2019 to verify the effectiveness of our improvement actions.

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Effects of MBSR on stress, stress adaption and heart rate variability among mental health professionals - A randomized controlled trial

LIN Shu-Ling, SHIU Shau-Ping

Introduction
Mental health professionals called upon to maintain a positive attitude in the face of multiple accreditation inspections and heavy workloads. The work-related stress directly affects the physical and mental health of mental health professionals, and indirectly the organization and the patients they care for. This study was to examine the effects of MBSR practice on work-related stress and stress adaptation among mental health professionals.

Purpose/Methods
This is a parallel-arm randomized controlled trial comparing the outcome of participants who were randomly assigned to the experimental group (with 30 participants) with the outcome of those assigned to a control group for 3 months. The participants in the MBSR group attended a regular 1 hour practice once a week. We measured work-related stress relief, stress adaptation and autonomic nerve activity improvements after classes.

Results
Results showed that participants in 3 month MBSR classes experienced a significant reduction in work-related stress (t=6.225, p<0.001) and a significant increase in autonomic nerve activity (t=2.799, p=0.007). The change in stress adaption was insignificant.

Conclusions
This study demonstrated that after participating in 3 months of MBSR classes, mental health professionals experienced a reduction in work-related stress and an increase in autonomic nerve activity. They were able to relax and feel calm which was consistent with the measured responses from the structured questionnaire. These results can help other related health professionals to reduce their work-related stress and balance of sympathetic and parasympathetic nerve activity.

Comments
Based on research findings MBSR is an effective activity to decrease stress and improve health status. Medical institutions may consider offering regular MBSR classes for staff to learning spiritual relaxation skills. Mental health professionals may use MBSR as a therapeutic intervention with improved quality of care to patients in future.

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Personalising health promotion advice: a pilot study

LEFLEY-BURNS Danielle, DGNALL Neil, POWELL Susan, KELLY Benjamin, CLOUGH Peter

Introduction
Health assessments (HA) can initiate and maintain healthy behaviours for the workforce. Nuffield Health, the largest not-for-profit healthcare provider in the UK, supplies HAs to corporate clients which profile the health of employees through tests and self-report questions. Physiologists deliver health promotion advice (HPA) in a bid to change behaviours based upon an employee’s risk profile. Currently, HPA is given in a one-size-fits-all format that may not impact on behaviours.

Purpose/Methods
The aims of this pilot were to: 1. Explore whether psychological groups would emerge from a sample of workers. 2. Adapt HPA accordingly. 3. Explore experiences of the personalised service. The Mental Toughness Questionnaire 48 & Rational-Experiential Inventory 40 were completed by workers eligible for Nuffield Health services and latent class modelling completed. A second sample completed a HA with personalised HPA. Semi-structured interviews (n= 17) were completed with participants and physiologists. Thematic analysis was completed to identify key themes.

Results
203 workers completed both measures and two groups emerged: Class A and Class B individuals. Class A individuals tend to have higher levels of mental toughness and a preference for rational thought. Class B individuals tend to have moderate levels of mental toughness and no preference for thought style. Participants appreciated the delivery of advice, but some noted a scripted element. Physiologists felt better prepared for the HA, believing participants were more receptive but commented flexibility is still vital.

Conclusions
Distinct psychological groups exist within a representative sample of workers. Adapting health promotion advice to psychological attributes has potential to improve client receptivity, especially in time-constrained scenarios. Physiologists also feel better prepared and more empowered to deliver HPA during the HA. Refinements to training and resources would streamline the approach and reduce the scripted element some participants reported whilst still allowing physiologist flexibility.

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Analysis of physical activity among employees of a medical center in Northern Taiwan

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Introduction
Physical inactivity is a global concern and rare study focus on hospital employees. We conducted a physical activity survey to investigate the exercise habits and requirements of employees for setting the health promotion plan at a medical center in northern Taiwan.

Purpose/Methods
This is a cross-sectional study using self-administered International Physical Activity Questionnaire (IPAQ) – Short Forms for analysis of physical activity within recent one week. The employees should receive on-line course educations before filling a questionnaire. The study began in Feb. 2018 and ended in March 2018.

Results
We included 1226 employees from a medical center in northern Taiwan. 322 unavailable questionnaires were excluded due to too many missing values. There were 674 (74.55%) clinical members and 230 (25.44%) administrative members included in the survey. The results showed that 23.2% of employees were low physical activity, 51.1% of employees were moderate physical activity and 25.7% of employees were high physical activity. Further analysis showed that caregiver had highest physical activity than any other job titles and administrative members had lowest physical activity.

Conclusions
76.8% of employees was moderate to high physical activity in our survey, especially in clinical members. The clinical members had to walk frequently due to their responsibility for patient care. Further different type of health promotion plan, like muscle strength or softness exercise, should be taken into consideration.

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Beyond Knowledge: Promoting Health Literacy of Certified Nursing Aide on Dementia Care.

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Introduction
In Taiwan, continued aging of the population is expecting the increase of people living with dementia and the demand of healthcare personnel required to care for them. Challenges including the lack of care skills in dealing with problematic behaviours, disease management, disability and stress. Studies highlighted growing literacy about dementia among health care personnel is important to improve the quality of care to this vulnerable population — this project aimed to develop a dementia engagement program in a district teaching hospital.

Purpose/Methods
The program was designed based on the empowerment model focus on stakeholders engagement in building supporting network along the decision-making process. The course provides
useful information and needed resources with mixed-methods of lectures and training simulations: priority topics including updated information on dementia diagnosis and care, social resources for people living with dementia, stress management, dementia old home rehabilitation techniques, techniques of swallowing and home-based nutrition care.

Results
Total of 58 certified nursing aide from 11 healthcare institutes enrolled in the training program. The majority are female, gender ratio of (M1: F15), with a mean age of 48.3 years, 16 of them reported having experience taking care of dementia patient, an average of 54.9 months. The result showed participants obtained more knowledge of symptoms and the utilisation of long-term care resources. Thus, the opportunity for participants to share among each other helped find suitable solution for their problem.

Conclusions
The program engaged cross-disciplinary professionals effectively shift from disease-focused to care-oriented services. Apart from knowledge learning about dementia, participants have the opportunities to share their lived experience and successfully build a strong peer network among each other. The post-evaluation showed high satisfaction rate and this program would enhance the betterment for their work, also develop their ability to provide a better quality of health services.

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Promoting health in the workplace: an integrated approach on lifestyles, starting with professional risk associated with a high incidence of skin tumours

GOBBA Fabrizio Maria, GROSSI Mauro, CHIARENZA Antonio, BOSI Sandra, CRISTOFOLINI Mario, SCHITTULLI Francesco

Introduction
National experience gained by the Italian Cancer Prevention League (LILT) has enabled the development of a programme for preventing professional risk that derives from individual lifestyle. A multi-year study by the Trento branch of the LILT and ongoing experience by the AUSL of Reggio Emilia/ LILT of Reggio Emilia, which is pursuing the goals contained in an internationally important research project by the University of Modena and Reggio Emilia, has identified skin tumours as a method for tackling the challenge of promoting health in the workplace. Why skin tumours? The incidence of these tumours, which can be correlated with strong ultraviolet (UV) solar radiation and is still increasing in Italy (epithelioma; 210 cases for every 100,000 inhabitants; melanoma; 14,000 cases in 2017), is the most widespread occupational carcinogenic risk in Italy. It is thus an element of great impact, which can be employed by our health care system to convey the theme of promoting health in the workplace.

Purpose/Methods
Participating organisations: University of Modena and Reggio, Department of Occupational Medicine, Reggio Emilia AUSL, Reggio Emilia LILT (Luoghi di Prevenzione); the national Italian Cancer Prevention League (LILT), with branches belonging to the HPH network Phase 1 (completed): 1) Training of operators in this sector: approx. 350; 2) production of specific informative material on professional risks; 3) a motivational approach/briefing, given by a qualified physician to workers exposed to health risks and extended to all at-risk behaviours associated with lifestyles; 4) Reggio Emilia AUSL as a workplace in which workers are given a motivational briefing on all lifestyles by a qualified physician. Phase 2: analysis and use of data for bringing the programme to the national level, as carried out by the Central Office of the Italian Cancer Prevention League through an HPH network currently being set up; scientific supervision by the Occupational Medicine Department of UNIMORE University in cooperation with the Places of Prevention (Reggio Emilia AUSL/Reggio Emilia LILT).

Results
Raising awareness about the specific risks associated with professional exposure led to a change in habits (for example, the use of protection and safety devices) in 50% of the workers treated; 30% of the workers treated in health care settings accepted, in 30% of cases, the opportunity to modify a lifestyle that is considered to be at-risk and took advantage of services offered for disengaging from smoking and alcohol, and for adopting a healthy diet and engaging in physical exercise.

Conclusions
The results obtained in Phase 1 increased the awareness of risks associated with skin tumours through a motivational approach that was directed at the health worker and which regarded cancer prevention in general. Also, these results led to the use of the same methodology for conveying the theme of changing at-risk lifestyles in occupational settings.

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Session O1.5: Child, adolescent and maternal health

Project to advocate the correctness of infant ABD alert events treatment protocol in the Newborn Center

CHIU Chia-Chieh, WEI Tzu-Yi, CHEN Kuan-Ying, LEE Hsin-Yu

Introduction
Infants Apnea, bradycardia, and desaturation events (ABD events) was defined as apnea >10 seconds, heart rate <100 beats/min, and/or blood oxygen concentration <80%. The purpose of this project was advocating the treatment protocol of ABD events in the NICU. The clinical investigation about the correct rate of the protocol was 85.9% lower for: 1. the EKG monitor
alarm setting was inconsistent (Nurses might ignore the important warnings), 2. the division record list and the division care guideline were incomplete.

Purpose/Methods
We did four strategies for change: 1. holding the infants nursing training education and doctor-nurse discussion sessions, 2. the early “Paediatric Early Warning System scores- Neonates” was included in the clinical routine, and provided dates to the medical team to discuss the adjustment medical treatment plan and avoid the occurrence of medical condition change, and 3. consistent the EKG alarm set threshold number (HR, RR, and Saturatio).

Results
After the implementation of the project, the correctness of the alert limited setting was improved from 63.3% to 89.0%. The correct rate of ABD events treatment protocol was increased from 85.9% to 95.8%. The results had achieved the goal. The period can provide a reference for the maintenance of patient safety and clinical care quality.

Conclusions
The implementation measures involve three types medical staffs, so that were time-consuming, difficult to reach the consensus standardization of the medical staff behavior because of many doctors, respiratory therapists in Newborn Center every month. The infant ABD events treatment protocol must be continuously educated to maintain the quality of care. In the future, this care guideline will be constructed on the infants webpage for infants medical care members to perform at any time.

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Transient and Persistent Postpartum Depression among Patients in a Mother-Child Friendly Hospital in Taiwan

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Introduction
Postpartum depression characterized by increased vulnerability to subsequent morbidity and mortality. The aim of this study was to explore the incidence and predictors of transient and persistent postpartum depression in a Mother-Child Friendly Hospital in Taiwan.

Purpose/Methods
A cohort study design was adopted to investigate postpartum depression. Postpartum women were recruited in the postnatal wards. Hospital records were examined and the Edinburgh Postnatal Depression Scale (EPDS) questionnaires were completed at recruitment, at 1 month and 6 months postpartum. A score of 10 or more is test positive for depression screening. Transient postpartum depression was defined as depression only at 1 month, while persistent depression at both 1 and 6 months.

Results
The final cohort comprised 201 women. The mean maternal age at delivery was 33 years. Of the participants, 15.4% developed transient postpartum depression and 23.4% had persistent depression. The results revealed participants who were younger, lower BMIs and lower husband support scores were at higher risk for transit depression. And participants who were primipara, with lower family support scores and cared at home in the maternity confinement month were at higher risk for persistent postpartum depression. Family support influenced the risks. Odd ratios for persistent postpartum depression were significantly lower among higher family support score groups [OR: 0.88 (CI: 0.81-0.95)].

Conclusions
Our findings indicate that family supports from husband, parents and parents in law were major determinates of persistent postpartum depression among Taiwanese postpartum women.

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A healthy tale with 5A: Environment (Ambiente), Agriculture (Agricoltura), Nutrition (Alimentazione, Physical Activities (Attività fisica, Art (Arte

SBROGIO Luca Gino, DE PIERI Martina, MICHELETTI Federica, ZANON Silvana, PESCE Emanuela, MASOBELLO Giovanna, RUSSO Francesca

Introduction
"A healthy tale with 5A: Environment (Ambiente), Agriculture, Nutrition (Alimentazione), Physical Activity, Art" is a partnership of the Veneto Region (Italy), the Local Health Authority (LHA 3 Serenissima, Venice) and Educational Farms with their EU programme “Fruits, vegetables, milk and dairy products in schools” for Primary schools. Various Regional Departments like Health, Tourism, Agriculture, Heritage, Cultural Activities and Sport Sectors agreed to work together in collaboration with LHAs to promote health with support from the nationally known company “Gruppo Alcuni” producer of MiniCubs cartoons.

Purpose/Methods
5A permits to address health issues among children in a fun and interactive way while respecting school curricula. Children are stimulated to think about environment conservation, learn about agriculture, how to eat in a balanced way, to be physically active and to discover how artists view these topics. The students create story boards, which are then converted into cartoons under professional guidance. Best stories and cartoons are awarded a prize in an important public ceremony at “Goldoni Theatre” in Venice.

Results
In 3 editions, from 2015 to 2017, about 4,000 children aged 6-10 years belonging to 213 classes from 110 primary schools in Venice were involved. Until now, cartoons have exceeded 1,200,000 views on YouTube. More than 100 classes are now enrolled in the ongoing 2018 edition.
Conclusions
Re elaborating information received at school while making cartoons allowed students to learn about healthy lifestyle in a creative way. In the same time they can eat free healthy food at school and see how food is produced in the Educational Farms of Veneto Region. YouTube permits a huge number of young people to see the cartoons and share the healthy messages in a peer educational way.

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Gaining health in pregnancy: communicate healthy lifestyle to pregnant women

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Introduction
Promoting a behavioral change needs to implement an "ex-changing policy": rewarding or punishing, conscious or unconscious (ECDC, 2014). An unconscious-rewarding exchanging policy, called "Nudge" (Thaler, 2008) is proved to be effective. "Mammepiù. Gaining health in pregnancy" educational programme of Veneto Region, aims to involve future mothers in an experiential paths (sensorial lab "Mitosi", local activities, etc) on healthy lifestyles, improving mother’s and child’s health with a "gentle push", without forcing them. To inform and enroll future mothers, a comprehensive communication plan was developed.

Purpose/Methods
Recruiting women on the educational paths during early pregnancy needs midwives supported in communication methods as: lean approach (act, control, change); integrated and targeted communication; developing of stakeholder’s network. Tools pro-vided: 1. Website www.mitosi.eu: it offers advices on pregnancy and a direct contact with the local midwife. 2. Facebook Page: it provides storytelling about the experiences taken at Mitosi, in formation on events and facilitates interaction among future mothers; 3. Paper materials: posters and brochure are dis tributed in health facilities and in other strategic places.

Results
Mammepiù programme started in June 2017. 70 trained midwives of Veneto Region provide local counselling, give information on and find out eligible women for the sensorial laboratory Mitosi located in Venice. Once a week 12 pregnant women attend to the laboratory on healthy diet, physical activity, smoke-ing and alcohol issues, accompanied by two midwives. The social media communication strategy started in December 2018 with website and paper materials. Its implementation is developing.

Conclusions
Mammepiù has developed a comprehensive communication strategy to specific targets (women and midwives) and provides an help to professionals. The action is integrated and engaging in order to empower women.

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Mitosi: a sensorial laboratory for pregnant women

SPROGIO Luca Gino, ZANON Silvana, MOINO Giuliana, TOLOMIO Silvia, ELIA Marianna, MICHELETTI Federica, RUSSO Francesca

Introduction
Global protection of health is the way to control epidemic of chronic diseases that can be treated but not cured. Preventing chronic-degenerative diseases does not require advanced technologies, but an organized, tireless and capillary educational intervention on lifestyles. A comprehensive longlife approach is a key point in gaining health. In this perspective, pregnancy represents, according to WHO, a formidable moment to help women, a "window of opportunities" that makes them particularly sensitive to adopt or improve healthy lifestyles for themselves and their babies.

Purpose/Methods
Trained midwives working in all regional LHUs of Veneto Region (Italy) counsel women during the first 3 months of pregnancy about healthy lifestyle and enroll eligible women to a one day sensorial experience at laboratory “MITOSI” located in Venice. There, through sensorial experiences in multimedia rooms, the risks related to smoking, alcohol, inactivity and poor diet are explained and healthy alternatives taught.

Results
Between September 2017 and April 2018 70 midwives from all over Veneto were trained to counselling pregnant women. In 5 months, 145 mothers coming from 2/3 of the Region participated in the activity. Questionnaires, given to women at the end of the day, have shown high satisfaction of the participating women. The outcome questionnaire, to assess the effectiveness of MITOSI’s impact on lifestyles, will be administered after 12 months from the access.

Conclusions
MITOSI represents an opportunity to offer an experience of healthy lifestyles to women when they are particularly inclined to change and make the change last for good. Local facilities existing in the LHUs to help pregnant women (tobacco treatment clinics, healthy gyms, nutritional clinics) are presented and women addressed to.

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Women asilum seekers: to listen - understand - communicate

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Introduction
Emilia Romagna Region welcomes people seeking. Women have a particularly situation: they are more exposed to exploitation and violence during the migration process and can easily continue after arrival in Italy. In agreement with the cooperatives managing hospitality, the operators of AUSL - local healthcare agency- work for facilitate behaviors that protect health, the prevention of sexually transmitted diseases, the prevention of unwanted pregnancies. Moreover they also favor adherence to the birth path and and gather information on FGM

Purpose/Methods
During the first reception which includes the general medical examination, an interview with the midwife is also offered for the more specific issues related to women's health. Organization of small group meetings on prevention and contraception with language mediator, midwife and gynecologist. Organization of series of group meetings to provide information on the pregnancy and birth path, to facilitate the paths and use of health services in the area for pregnant women, to gather information on the most important needs

Results
Since 2016 we have held 16 prevention meetings. In 2018 we also experimented with a cycle of 5 small group meetings - max 10 people - aimed at young refugee women in pregnancy and / or with children aged <12 months, with the presence of a midwife, language mediator and psychologist.

Conclusions
The meetings allow to deal with fairly reserved topics with adequate time; they are inserted in a context of educational continuity, in fact the operators met are the same ones that are present for visits to the clinic. We believe that these moments help to create a relationship of trust that becomes the basis for improving understanding and adherence to health proposals, even for critical issues such as FGM

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Session O1.6: Tobacco prevention and coping

Impact on Smoking Cessation Rates of Taxi Drivers by Contest Prizes and National Smoking Cessation Service at a Medical Center in Taiwan

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Introduction
Taiwan has implemented National Smoking Cessation Service(NSCS) since 2002. Smokers enjoy subsidies for smoking cessation medication. In addition, “Quit&Win” smoking cessation contest has been organized in synchronized with international campaigns since 2002. The contest is held biennially and offers 10000 USD prize. We assessed the impact on smoking cessation rates of taxi drivers by the contest in conjugation with medical services.

Purpose/Methods
The smoking rate of professional drivers was 56.2%, which was higher than male adult(32.5%) and adult smokers(18%) according to Taiwan National Health Survey. Taxi drivers who smoked were encouraged to participate in the contest. In conjugation with NSCS, medications and medical services were provided by Mackay Memorial Hospital. A total of 40 taxi drivers were recruited, followed at 3-month and 6-month for smoking cessation point-success rates.

Results
The mean nicotinic dependence score was 5.6. And the mean CO level was 17.8ppm. The 3-month and 6-month point-success rates of smoking cessation were 40%, and 32.5%. Both the 3-month and 6-month point-success rates were higher than the hospital group, which is a group of general smokers coming to the hospital for smoking cessation (40% vs 27.2%; 32.5% vs 22.5%).

Conclusions
Contest prizes in conjugation with medical services with subsidized cost offered great chances for smokers to take the first step to quitting smoking. Our study results showed an encouraging short-term smoking cessation rate among taxi drivers, a population with high tobacco consumption. However, maintaining long-term abstinence is another challenge. Therefore, interventions to enhance long-term abstinence should be considered and reinforced.

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Smoking Cessation Rate and its Predictors among Heavy Smokers in a Smoking-free Hospital in Taiwan

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Introduction
Smoking poses critical risks for heart disease and cancers that rise dramatically as the number of cigarettes increased. Heavy smokers are the most important target for smoking cessation program. The aims of the study were to obtain long-term cessation rate among heavy smokers and identified their predictors for promoting smoking cessation policy.
Purpose/Methods
Heavy smokers defined as history of more than 30 pack-years were recruited for smoking cessation program in the Quit Smoking clinic. The program provided participants with pharmacotherapies, such as nicotine replacement therapy and varenicline, and/or free counseling sessions. We examined cessation rates at 6-month follow-up and baseline data including history of diseases, the levels of addiction (cigarette consumption amount and scores of Fagerstrom Test of Nicotine Dependence (FTND), expired-air carbon monoxide levels, and kinds of pharmacotherapies.

Results
280 eligible participants of mean aged 53.5 years were recruited for smoking cessation program in the Quit Smoking clinic. The characteristics of quitters were less nicotine addicted and using varenicline. Multiple logistic regressions identified more participants used varenicline had smoking cessation in 6 months than those used nicotine replacement therapy (OR: 2.44, 95% CI: 1.26-4.74).

Conclusions
The smoking cessation rate was 42.9% in 6 months among 30-pack-year heavy smokers attempting cessation program in the Quit Smoking clinic. The characteristics of quitters were less nicotine addicted and using varenicline.

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Pharmacists' perception on smoking treatment and anti-smoking counseling

KANG Eunjeong, LEE Mose, PARK Hyekyung, CHOI Jinhye, ZHANG Haichao, BANG Joonsuk

Introduction
Community pharmacists can play an important role in anti-smoking programs. Currently, pharmacists participate in a smoking cessation treatment program which is supported by the National Health Insurance Corporation. This study aimed to understand pharmacists' perception on this program and their capacity as a professional provider for smoking cessation.

Purpose/Methods
Community pharmacists were recruited through various professional Social Network Service groups including the leaders of the Korean Pharmacy Association, Seoul Pharmacy Association, Daejon Pharmacy Association, Jeonnam Pharmacy Association, etc. An on-line questionnaire was developed by three authors and pre-tested by 7 pharmacists. The survey began on June 5 and last until September 9, 2018. In total, 316 pharmacists participated in the survey.

Results
Pharmacists perceived that their roles in smoking cessation treatment included explaining the usage and adverse reaction of the medications (88.7%), counseling for sustaining smoking cessation (73.1%) and monitoring adverse reactions (65.6%). Pharmacists were unsatisfied (33.4%) more than satisfied (15.5%). The main reason of dissatisfaction was that pharmacists could not initiate smoking cessation treatment using nicotine replacement medications. They needed motivation skills most and 43.7% of them felt lack of expertise in counseling.

Conclusions
On the one hand, community pharmacists would like to participate in the national smoking cessation program actively by initiating themselves with nicotine replacement medications. On the other hand, they feel lack of expertise in smoking cessation counseling. These findings show that both modification of the current national smoking cessation treatment program and professional development of pharmacists are needed in order to expand pharmacists' role in smoking cessation in Korea.

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Integrated management of disengaging from tobacco dependence: a study of a virtuous case in the Emilia-Romagna region

MANTOVANI Chiara, MARTUCCI Gianfranco, BOSI Sandra

Introduction
Primary treatment is a privileged setting for taking integrated action that is in accordance with major models of preventing and managing chronic problems. A study of cases that had positive outcomes with mixed qualitative/quantitative methodology provides starting points for developing models of implementation.

Purpose/Methods
A case study on 3 levels: reconstruction of organisational development, qualitative and quantitative discussions. Case analysed: integrated action on smoking at a Primary Care Centre in a municipality in the Emilia-Romagna region, in cooperation with local associations (LILT - Italian Cancer Prevention League).

Results
organisational elements found: 1) Community projects in the local area since 2004, in accordance with the instructions contained in the Regional Plan on Tobacco Dependence, including initiatives in schools, workplaces, and health care and community settings; 2) inclusion of an anti-smoking centre in local group-oriented medical care, with regular group treatments for disengaging from dependence. Quantitative analysis: data on anti-smoking courses from 2011 to 2015: 46.2% of patients quit smoking, and the quantitative results (courses offered and patients participating) were better than in a nearby municipality, where anti-smoking courses are an independent service. Qualitative analysis: great satisfaction by the users and health care operators involved; a major effort was required for maintaining the
Oral sessions 1: Thursday, May 30, 2019, 11:00-12:30

**Session O1.7: WORKSHOP for junior researchers: Scientific writing**

**Introduction**
This workshop offers new researchers an introduction to important considerations and input on how to prepare manuscripts for publication.

The world of medical and scientific writing can be a challenge and for some even an obstacle. This workshop offers insight on how the editorial process is set-up, offer input on how to organise and prepare manuscripts, how to choose the best suited journal, and how to prepare yourself for an effective writing process.

**Aim and content**
The workshop will act as an introduction to what it means to write scientific manuscript and offer tips and tricks on how you can become a better writer by learning your own skills and preferences.

The workshop will include discussions and input from the audience, and it aims to prepare researchers of all ages - who are new to scientific writing - on the challenging task of writing for publication in scientific journals.

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**Session O1.8: WORKSHOP: Primary health care and health promotion**

**Background/Problem/Objective**
Although primary health care is key for health promotion, primary health care and health promotion are silos. Breaking down these silos has the potential to implement health promotion at the core of health care and to realize health promoting and health literate health care organizations and empower households, families and individuals, as the nucleus of health promotion and health care. Based on the spirit of Astana and impulses from the WHO Euro and the Austrian Ministry of Health, health promoting primary health care (HPPHC) shall converge health care and health promotion (e.g. including a population health perspective and primary prevention interventions).

A guidance document on implementing HPPHC for health professionals and senior managers is to be developed. It shall give answers to the following questions: Why should we aim towards HPPHC? What does HPPHC mean? And how to proceed to achieve this aim? Therefore, the aim of the workshop is to discuss the case and the implementation of health promoting health care in primary care/community settings from different perspectives (GPs, hospitals, patients).

**Workshop Design**
A preliminary concept note of the guidance document is presented. Representatives of WHO Euro, the International Hospital Federation (IHF), the World Organization of Family Doctors (WONCA) and the International Network of Health Promoting Hospitals and Health Services (HPH) will discuss the basic approach, challenges and chances of HPPHC from their point of view. Moreover, workshop participants are invited to give their input on key aspects of HPPHC (e.g. teamwork, integrated care, patient participation) in the plenary discussion.

**Expected Results**
The workshop contributes to a better understanding of HPPHC as well as to key questions of HPPHC:

- multi-professional cooperation: How multi-professional cooperation can be realized in HPPHC/can contribute to health promotion?
- integrated care (esp. cooperation primary care and hospitals): How integrated and people-centered health care and especially the role and cooperation of primary health care and hospitals and public health professionals can evolve to realize HPPHC?
- patient participation: How families/patients and communities can be activated and encouraged to participate in planning and “living” HPPHC to develop a more proactive health service?
- supporting HPPHC: How can international organizations and networks support the implementation of HPPHC on a national and organizational level?

Results are used to develop a guidance document on HPPHC in primary care and community care setting for senior managers and health professionals.

**The way forward**
Cooperation partners and audience will be invited to participate in a board consultation process in order to review the guidance document, which will start at the end of the year. The guidance document is expected to be finalized by the end of 2020.

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Session O2.1: Digitalization in health care and health promotion II

Discussion on the effect of introducing clinical decision support system to prevent hospital-acquired pressure injury.

HUANG Hsiu-Yen, CHEN Yao-Wei, LEE Ting-Ting, HUANG Hui-Ting

Introduction
The Clinical Decision Support System (CDSS) assists caregivers in providing individual care based on patient assessment and promptly provides appropriate and empirically, evidence supported care guidelines to help improve medical quality.

Purpose/Methods
To discuss and compare the nursing process before and after the CDSS applied to prevent pressure injury, if the technology acceptance of the nurses and the record quality of the pressure injury nursing plan are both significantly improved, so that we can reduce the hospital-acquired pressure injury (HAPI) prevalence. This study was conducted in a regional teaching hospital in the north of Taiwan. For the 70 registered nurses in the hospital, a structured questionnaire was used before the introduction of CDSS and three months after the introduction, two cross-sectional studies were used to evaluate the nurses’ acceptance of the pressure injury prevention care information system. And collected electronic medical record database. To compare the complete rate of prevention pressure injury nursing care and the incidence of hospital-acquired pressure injury record before and after the CDSS.

Results
There’s a significant improvement for nurses’ technology acceptance after the CDSS was applied. The nurses’ pressure injury prevention record complete rate was increased from 88.9% to 99.9% (p < 0.001). And the incidence of hospital-acquired pressure injury was decreased from 0.57 ‰ to 0.21 ‰ (p < 0.001).

Conclusions
This study implemented CDSS to assist pressure injury prevention bundle care, through the system, it can really help the nurses to make clinical decisions, especially the new nurses, not to be limited by clinical experience and expertise, and provided a quick access to evidence-based prevention care knowledge and skills, so they can offer patients with correct and effective quality care.

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The use of internet communication technology in the comprehensive care of the elderly

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Introduction
In Taiwan, the demand for medical care increased tremendously and there is a shortage of qualified care providers. Taiwanese government tries to shift institution-based health care to community-based or home-based health care. Although all stakeholders involved, such as government, healthcare institutions, family, academic institutions, charity organizations and NGO’s (Non-Governmental Organizations) are working hard to provide the necessary care, the efforts to meet the rising demand remained fragmented.

Purpose/Methods
Using cloud storage of medical records as the backbone, we integrate advanced information technology, such as 4-5 G communication, smart phone/tablet, wireless transmission, Internet of things, wearables, etc. effectively manage and integrate community resources, invited governmental agencies, other healthcare institutions and charity organizations to join in and established a platform for further academic research and industrial investment in addition to continuously improve our care quality.

Results
The readmission rate both the 14 day post discharge and 30 day post discharged have dropped significantly. The satisfaction scores of participants, family and care-givers have been very high. The government, insurance bureau, patients and their family and the careproviders are all pleased with the outcome.

Conclusions
We believe that new information and communication technologies (ICT) will play an important role in the future care of our elderly. and our integrated health care model in linking the hospitals, nursing homes, day care stations, community centers and individual homes with joint efforts of all involved (Government, healthcare institutions, Universities, NGO’s) by fully taking advantage of modern information technology, will be very well accepted and becomes a norm in the future.

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Measuring sustainability in health care – model and tools in the prevention of diabetic foot ulcer

HELLSTRAND TANG Ulla, HELLSRAND Stefan

Introduction
UN promotes sustainable development including good health. Non-communicable diseases (NCD) related to lifestyle and envi-
Advantages of implementing Personal Health Records for migrants

CHIESA Valentina, CHIARENZA Antonio, MOSCA Davide, RECHEL Bernd

Introduction
The aim of this study was to systematically review the evidence and the state of the art on the implementation of the Personal Health Records (PHRs) for migrants.

Purpose/Methods
Articles implemented specifically for migrants and refugees, following the PRISMA guidelines were identified by searching the scientific and grey literature, checking the reference lists of articles and by consultation with experts. Publications were included if: published in English, French, German, Italian and Spanish. There was no limitation set on date of publication, study design and type, and the country of study implementation.

Results
The literature search yielded an initial list of 1439 and after the first and second screening 33 articles were retained and 20 different PHRs were identified. Electronic Records, which include Electronic Personal Health Records and Electronic Medical Records, have numerous benefits compared to Patient-Held Records. Some of these benefits includes, improved quality and continuity of care, adherence to guidelines, patient and health care worker satisfaction, patient education, data sharing, reliability of statistical information. In addition, Electronic Records are time-saving and they reduce costs as they avoid duplication of diagnostic and therapeutic interventions.

Conclusions
Our findings suggest that PHRs, especially the electronic ones, are efficient and effective tools for registering, monitoring and improving the health of migrants.

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Session O2.2: Governance and leadership for HPH II

The development of certification integration in health promoting hospitals in Taiwan

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Introduction
Assessment tools for a plural certification system encompassing HPHs, age and environment friendly, and smoking free healthcare were introduced in Taiwan. Taiwan launched an integrated certification with a set of 7-standard and 41-substandard tool as a platform to round off the overlapping existing in the plural system and integrate all the elements to simplify the certification practice in 2017.

Purpose/Methods
We examined the development process and validity of the tool with a stratified random sample of 46 hospitals, 31 integrative and 15 non-integrative HPHs, and characterized the develop-ment pattern between integrative and non-integrative HPHs. Two focus groups with 10 representatives of integrative HPHs convened to examine the impact of the integration using the-matic analysis.

Results
The mean of compliance with the tool was 57.15 (SD 28.05) out of a maximal of 82. Higher scores were found in those hospitals with experiences in HP. Cronbach’s alpha for the seven scales in the tool ranged from 0.88 to 0.96. A majority of the hospital rep-representatives agreed that the sub-standards are understandable (≥80%), applicable and important (both ≥70%). WHO HPH hospi-tals, large hospitals, HP certified hospitals were significantly re-lated to higher overall compliance. The integrative self-assess-ment tool was verified as valid and acceptable by performing ex-ploratory factor analyses in each standard. The least compliance
was in standard 5 (implementation and monitoring) and the most in standard 7 (Environment-friendly healthcare). The most prominent differences between integrative and non-integrative HPH were in standard 5 (implementation and monitoring) and in standard 1 (policy and leadership).

Conclusions
More support, extensive cross-disciplinary cooperation, and integrative patient assessment were found as a result of the integration project. This integration version of certification could be a more parsimonious and efficient approach to implementing health promotion.

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Cross-institutional Critical Incident Reporting Systems in Germany

VOIT Doris

Introduction
Due to their complex work processes and the many interfaces, hospitals are particularly challenged to analyze and eliminate sources of error and critical situations and to implement corresponding preventive measures to avoid them.

Purpose/Methods
Based on the German "Patients' Rights Act" of 2013, the new "Directive of requirements for cross-institutional critical incident reporting systems (CIRS)" came into force in July 2016. It regulates the structured voluntary participation of hospitals in comprehensive cross-institutional CIRS against the background of compensation surcharges. With a monetary incentive, legislators want hospitals to increase their exposure of their critical events to the public, so that the learning potential can be used by others involved in patient care. The goal behind this is to increase patient safety with this instrument. Since two years, hospitals get money, if they pass on their interesting critical events to a cross-institutional CIRS.

Results
In the past, German hospitals have continuously strengthened a "safety culture" in patient care. Since 2016, mandatory internal CIRS in Germany have proven themselves and are now recognized by law as an integral part of quality management in healthcare facilities. On top came cross-institutional CIRS that offer in this context a new opportunity to make the self-made experiences available to others and thus to share knowledge as well as to get professional support for the processing of own critical events and to use new insights for their own daily work.

Conclusions
To demonstrate this with an example, the operation of a nationwide CIRS, the "Hospital CIRS Network Germany 2.0", collects and comments safety-relevant events of potentially all German hospitals. The reports are first anonymized after entry and classified, then a nationwide expert advisory board consisting of representatives of professional societies, professional associations and other institutions comments and advises the cases. This network has so far published more than 1,000 CIRS cases in its freely accessible and anonymous online database.

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Evaluation study of health-promoting Hospital’s activities in the private Hospital in Indonesia

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Introduction
The implementation of health promoting in hospitals (HPH) as an integrated part with curative health services is still considered to be running slowly in hospitals in Indonesia. To find out how the HPH is implemented, the hospital must evaluate HPH status as a basis for improving HPH efforts undertaken. The aim of this study is assessing the achievement of private Indonesian hospital regarding the HPH standards.

Purpose/Methods
This cross-sectional study was conducted through the participation of 511 hospital workers of the five private hospitals belonged to Muhammadiyah Organization in Jakarta, Bandung and Yogyakarta cities in Java island of Indonesia. Data were gathered using self-assessment tool for HPH including demographics and the national HPH standards, i.e., Management policy, Hospital community assessment, Hospital community empowerment, Implementation of community development, Partnership, and Promoting a healthy workplace.

Results
The hospital’s workers had a fair average score in knowledge (5.77 ± 0.08; max =10) and good attitudes (30.34 ± 0.14; max=40) regarding HPH, but they were still low in their involvement in HPH activities (26.02%) and HPH training (10.76%). Among the HPH standards, the lowest score belonged to the hospital community assessment (6.73 ± 0.10) and the partnership (6.73 ± 0.09); the highest one belonged to the promoting a healthy workplace (7.86 ± 0.09). The average score of compliance with the HPH standards was 7.06 ± 0.11 which shows reasonable progress of the hospital towards the HPH standards.

Conclusions
There is a need for the management policy to increase the involvement of the hospital workers in HPH as much as possible.

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Evolution of the Strategic Plan of the HPH Catalunya Network

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Introduction

The evolution of the HPH network and the update of its strategic lines and the evolution of the activities of Health Promotion promoted by Public Health department of Catalan Government orientated the necessity to updated of the strategic lines of work of the HPH-Catalunya (Spain) in the end of our second Strategic Plan. The lessons learned since we joined in the HPH Network in 2008 to develop the activity of health promotion in the catalan hospitals were other points to bear in mind also.

Purpose/Methods

We organized a session to prepare the new Strategic Plan. The session had a first part where all members of the HPH Catalan Network shared information about the activities developed and the aims achieved. In the second part we did a SWOT with the aim to establish the situation of the network and we debated about if our mision and vision were well defined. The third part was dedicate to define and concretate the lines of work for the next four years.

Results

The result was a new strategic plan with 3 lines of actions: - To increase the capacity of influence of the Regional Network - To give added value to healthcare organizations that are part of the Network - To boost training and research in health promotion. Each line have different objectives to achieve and as a consequence each objective have different activities to develop and facilitate it. We defined different indicators also to facilitate the evaluation and follow up of each objective.

Conclusions

To have an updated strategic plan is a good tool to manage the Regional HPH network. Updated the strategic plan is a good practice to maintain a good climate of work in the network and to continue developing the culture of health promoting in the healthcare organizations. Aligning the lines of work with the lines of the HPH and with the lines of action of the Health Department of our Government we facilitate the developing of the activities of health promotion in the Catalan Health Organizations.

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Annual HPH indicator set displayed in a national web report supports management learning

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Introduction

The Swedish HPH network have since long, through an annual self-assessment form, monitored and followed national indicators among HPH-members covering all four HPH-perspectives i.e. patients, staff, communities and management. In 2016 the network decided to test using aggregated data of existing quality indicators routinely monitored in health care and public health authorities. In addition, these indicators would hopefully be presented in a public web.

Purpose/Methods

Applicable indicators in the four HPH-perspectives were identified. Results from national quality indicators in Swedish health care are today presented on the site “Health care in numbers” (https://vimeo.com/305712675) hosted by The Swedish Association of Local Authorities and Regions (SALAR). A first HPH indicator report was presented on this SALAR web in September 2018. In a pilot test in 3 out of 21 regions the applicability was evaluated. During 2019 experience at department level shall be evaluated.

Results

The Swedish HPH web indicator, using data systematically collected for nationally quality or public health reports generates possibilities to compare performance between organizations, and also at different levels of organizations. Evaluations show that public presentation on the SALAR web strongly strengthens the accessibility and visibility of data, but also the need for further development of web information, of nominator/denominator indicators.

Conclusions

The model is seen as an important step forward as a tool for monitoring, learning and sharing of management experiences. This is one of several prerequisites for systematic improvements and there will be continued of use of self-assessment tools in the Swedish HPH network. To enable learning from this data there is a need to allocate time to staff for analysis of the HPH web indicator report and complementary information.

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HPH regional governance in Friuli Venezia Giulia: regeneration and enhancement during the health reform

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Introduction
After a period of good governance [2003-2017], our network had to face the new HPH agreement under the 2015 health reform that has redesigned the organizational structure of the health services. During 2018 we worked on the rebuilding of the regional network. Currently we are facing a new reform which, starting from January 2019, redistributed the boundaries and the strategies of new health services.

Purpose/Methods
In order to cope with these continuous changes, we acted during 2018 with very strong organizational policies. The Health Regional Department has played a fundamental role, indicating in the management lines an "ad hoc" chapter about HPH and the deadlines for the renewal of Coordinators and Committees.

Results
In February, each HPH member appointed the new corporate HPH coordinator. In April the regional HPH Committee was convened in order to share the job description of the HPH coordinators. In July we made official the HPH regulation. It includes the figure of the link professionals, that will be the health promoter connection in every department. Then we wrote the draft of the new HPH regional worklines 2019. In November each HPH member of the network has nominated the local committees.

Conclusions
To sustain health promotion, the role of top down and bottom up leadership is essential. However, in reality, the leaders might not consider health promoting efforts in health services to be a first priority, partly because they do not have an adequate understanding of the vision of HPH. We have learned that it is not enough to have passion or to produce evidence: it is necessary to show clarity of the HPH management processes indoor and outdoor, to stabilize the strategy and strengthen the vision.

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Session O2.3: Supportive communities
Cultivating a Community-Service Based Training Program for Volunteers who Care for People with Dementia

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Introduction
Currently, more than 90% of people with dementia live at home, and 50% are cared by families in Taiwan. In response to the Taiwan "Long-term Dementia Care Policy 2.0", a "Station for Dementia Community Service" was established to provide patient and caregiver supporting services. The station is in great need of volunteers to participate in service. Therefore, we plan to train skill-based volunteers who are interested in dementia care to participate in the curriculum for enhancing the quality of service.

Purpose/Methods
We establish four-stage training model for volunteers' awareness and motivation: 1. Cognitive courses: to understand the symptoms of dementia, coping with mental symptoms of dementia, communication skills and evaluation after class. 2. Symposium: to assess the motivation of the volunteers. 3. Apprenticeship (3 sessions): to assess the level of awareness and servicing attitude. 4. Internships (12 sessions): to allow volunteers to have hands-on interaction with patients. The completion of the four-stage course assessment will be issued by a qualified volunteer.

Results
A total of 48 volunteers signed up for the training courses, of which 45 passed the written test of cognitive courses, and 20 volunteers participated in the symposium. There were 8 volunteers signed up for the internship course, and 6 became qualified to participate in apprenticeship to obtain certification. All volunteers learned a lot from the course and the internship process, such that the feedback was 100% satisfaction with their training.

Conclusions
Through the specialist training model described, we enhanced volunteers' awareness of dementia and allowed actual participation in traineeship and internship courses to understand the operation of dementia group, with successful completion of group tasks. Volunteers were increasingly motivated through the interaction with dementia patients and their families. Now, these volunteers have participated in dementia screening and dementia prevention promotion at health stations. In the future, we can gradually establish an accessible dementia-friendly community to improve the quality of care.

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Educational Intervention in Prevention of Frailty and Functional Decline in elderly community

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Introduction
Every country in the world is currently facing the problem of an ageing population. Taiwan has officially entered the stage of an "aged society" as Taiwanese people over 65 years old accounted for 14.05% of the country's total population. The proportion of elderly people among those with frailty and disabilities is gradually increasing. The aim of this study is to determine an individual educational intervention on prevention of frailty and functional decline.

Purpose/Methods
In Neihu Community of Taipei City, we executed the "Active Ageing and Physical Life" program with the goal of preventing and delaying the occurrence of disability in the elderly population. The items of tailored educational intervention programs focused on physical fitness, nutrition, oral care, health management, mental health and social participation. Several functional tests...
were assessed at program entry and reassessed at program conclusion (12 weeks), including hand grip strength, walking speed, 30-second chair stand test, and muscle mass.

Results
The average age of all participants was 71.1 years old. The means of hand-grip strength at baseline and follow-up was 39.59 kg and 42.66 kg. The means of 30-second chair stand test at baseline and follow-up was 16.93 and 19.35. The muscle mass at baseline and follow-up was 23.81 and 24.07 kg. The walking speed at baseline and follow-up was 7.09 and 7.38 m/s. Notably, there were statistically significant improvements in 30-second chair stand test and hand grip strength.

Conclusions
A brief education session using the tailored educational intervention program was effective in improving knowledge of potential frailty and preventing of declined daily function in the elderly.

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Taipei City to mobilize Compassionate Communities

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Introduction
Compassionate Communities is an approach to social change that aims to promote and integrate social approaches towards the terminally ill, deceased and bereaved in the everyday lives of individuals and the community. The Public Health Palliative Care approach is an international movement towards placing the responsibility of terminally ill, deceased and bereaved to the community so that the process of death is everyone’s concern.

Purpose/Methods
We are collaborating with organizations and individuals across the Taipei City to mobilize Compassionate Communities. We built compassionate communities with four strategies. 1. Policy support in addition to government and parliamentary support, the use of social media and social commitment to the public. 2. Organizational localization and transforming the hospital assessment quality, while correcting the service process and staff value. 3. Resource integration, in addition to actively gaining consensus on community issues and focusing on vulnerable groups and strengthening health inequalities. 4. Community participation is the most important strategy, especially with regard to community empowerment and holistic care.

Results
In 2016, Taipei City Hospital was the first to prevent suffering, and introduce the Taipei Declaration on the Prevention of Suffering, which was published in Journal of Palliative Medicine. We are collaborating with organizations and individuals across the Taipei City to mobilize Compassionate Communities. We built compassionate communities with four strategies. 1. Policy support in addition to government and parliamentary support, the use of social media and social commitment to the public. 2. Organizational localization and transforming the hospital assessment quality, while correcting the service process and staff value. 3. Resource integration, in addition to actively gaining consensus on community issues and focusing on vulnerable groups and strengthening health inequalities. 4. Community participation is the most important strategy, especially with regard to community empowerment and holistic care.

Conclusions
The Public Health Palliative Care approach is an international movement towards placing the responsibility of terminally ill, deceased and bereaved to the community so that the process of death is everyone’s concern. By engaging and empowering local communities, this will help them provide palliative care and support. Getting active support from local people is the driving force for us.

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Assessing and managing cardiovascular disease risk factors in a Greek Rural Area after the collaboration of the Municipality of Evrotas and a District Hospital.

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Introduction
The aim of the study was to determine the prevalence of major cardiovascular disease risk factors towards the creation of a registry by the Municipality of Evrotas. This effort will guide targeted health promotion actions, six years after the beginning of the ongoing Greek socioeconomy crisis, bearing in mind that over 75% of CVD deaths occur in low or middle-income countries and regions and the rural areas of the Municipality have difficult access to resource settings.

Purpose/Methods
This was a population-based cross-sectional study with multi-stage random sampling technique. Participants were permanent dwellers randomly selected from all rural electoral wards of our Municipality (rural area population: 6,242 persons). Individuals were screened using portable lab testing for hypercholesterolemia, hypertriglyceridemia, and hyperglycemia. Diet, smoking, the frequency of performing blood lab testing were also assessed by a group of Medical doctors and trained nurse/non-physician health workers. The participants were given leaflets for better knowledge of cardiovascular risk factors.

Results
Our sample comprised of 321 permanent dwellers over 30 years. We found that 74.75% of the participants followed a diet close to the Mediterranean Diet. We also found: Hypertension Grade 1,2,3 : 33.96% 10.59% 7.48% respectively. Normal blood pressure :47.97% Triglycerides mg/dl: <150 55.76%,150-200:26.79%, > 200: 17.45% Smoking habits:Smokers : 22.11% quitters .5.29% non smokers:72.6% Total cholesterol (mg/dl): <
Conclusions
The prevalence of major cardiovascular disease risk factors seems to be a significant public health problem even in the rural areas which followed a diet close to the Mediterranean one. The low number of resource settings needs to be tackled with primary care proven preventive strategies and other levels of care including maintaining medical records from the social and health department of our Municipality and sustainable connection with other state and private referral facilities.

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Home Medical Care Decreases Patient Hospitalization Rate and Emergency Department Rate, Experience of Yonghe Cardinal Tien Hospital

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Introduction
At the end of March in 2018, Taiwan officially entered the “Aged Society”. A home nursing care statistical report in January 2017 revealed that among its 228 patients, 65.7% lived in apartment units higher than the second floor, which imposes difficulties such as being carried down the stairs or simply unable to leave their homes for outpatient care etc. In order to help patient receive necessary medical care, we participated Health Insurance Department’s "Integrated Home Medical Care Program".

Purpose/Methods
We started “Integrated Home Medical Care Program” since 2017, for the disable patients with clear medical demand and provided a series of continuous and whole-person medical care including “Home medical care”, “Intensive home medical care” and “Hospice care”. The outcome indicators including the hospitalization rate, the emergency department rate and the re-hospitalization rate within 14 days after receiving service one year later. A self-administered satisfaction questionnaire was used to assess the professional care knowledge, care capacity and quality of service.

Results
Since January 2017 to June 30, 2018, we served 305 patients. Most patients (96%) were over 65 years old. Medical records of 296 patients were checked and showed improvements of the hospitalization rate (63.9% vs 31.4%), the emergency department rate (64.5% vs 38.5%) and the re-hospitalization rate within 14 days (30.8% vs 12%). The result of questionnaires (107/153, 70.6%) showed high satisfaction, especially for the quality of service. The results showed patients get good and high quality home medical care.

Conclusions
Based on our experience of “Integrated Home Medical Care Program”, the model of home medical care can not only save time that patient and family spend on visiting outpatient clinic, but also increase time for patient care and education. Patients can get good medical care at home thus reducing the need for emergency or hospitalization. This is a policy worth promoting. How to make more doctors willing to provide home medical care will be the next challenge in Taiwan!

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A Sustainable Health Promotion Model for the Elderly Community, by the Elderly Community

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Introduction
Majority of the elderly faced at least one chronic health conditions and these challenges result in high healthcare cost. Health promotion programs have a significant impact on supporting the elderly in adopting healthy behaviours to reduce health service utilisation. Despite the positive program outcomes, these programs still won’t able to sustain due to limited resources in a challenging economic environment — this project aimed to develop a model to sustain health promotion programs for elderly in a district of Taichung County.

Purpose/Methods
The goal of sustainability is to integrate and embed health promotion programs within organisations, as well as long-term and supports services. A systematic community need assessment was conducted to map out resources and draw on pathways or entry points to ensure that programs are easily accessible and available to the community beyond the initial grant period. By identifying and analysing both fiscal and in-kind resources which potentially act as key factors to maintain and expand the programs.

Results
To achieve “healthy aging in place”, a total of 27 community care centres, two dementia care centres, three day-care centre, four nursing homes, delivering a range of health and social services including palliative care to address elderly’s health needs in every stage. Fifty-nine elderly volunteers actively involved in various kinds of healthy activities including the meals-on-wheels and Out-GO active aging. They act as the drivers of the program and continue to reap the rewards for the communities.

Conclusions
There is no doubt that health promotion interventions are important to ensure desirable effects, therefore require long-term support if they are sustainable. The programme effects may quickly disappear if they withdraw the needed support too early. As policymakers and funders are increasingly concerned with allocating scarce resources effectively and efficiently, this model hopes to shed lights connecting important local resources in order to address the root causes of health challenges by enabling community members to take impactful action.

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Session O2.4: Health information and education

Association of Education, Health Behaviors, Concerns, and Knowledge with Metabolic Syndrome among Urban Elderly in One Medical Center in Taiwan

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Introduction
The purpose of this study is to examine the relationship of education, health behaviors, concerns, and knowledge with metabolic syndrome (MetS) among urban elderly living in northern Taiwan.

Purpose/Methods
A total of 1181 participants (405 men, 34.3%; 766 women, 65.7%) were surveyed. MetS was defined using the modified National Cholesterol Education Program Adult Treatment Panel III (NCEPATPIII). An empirical model consisting of education, health behaviors, concerns, knowledge, and MetS was estimated.

Results
A total of 34.4 percent of the respondents (405 persons) met the criteria for MetS. High education level was associated with reduced odds of MetS [senior high school: odds ratio (OR) = 0.50, 95% confidence interval (CI), 0.28-0.88; college: OR = 0.45, 95% CI, 0.25-0.85]. The health behaviors of regularly monitoring waist circumference and blood pressure were associated with reduced odds of MetS (OR = 0.58, 95% CI, 0.51-0.64; OR = 0.61, 95% CI, 0.41-0.89). When the total health knowledge score was higher, the odds of MetS were lower (OR = 0.98, 95% CI, 0.97-0.99). It was found that each additional point on a scale of hypertension and diabetes knowledge was associated with 7% and 8% reductions of the MetS odds, respectively.

Conclusions
This study demonstrated that high education level influences the odds of MetS. The development of health education programs that can enhance prevention and self-monitoring for MetS by providing the knowledge and behaviors is appropriate for an elderly population living in Taiwan.

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Sexually transmitted infections: the challenges of effective communication to patient and of integration between services

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Introduction
Heart Failure (HF) is a clinical syndrome characterized by typical symptoms (e.g. breathlessness, ankle swelling and fatigue) that may be accompanied by signs (e.g. elevated jugular venous pressure, pulmonary crackles and peripheral oedema) caused by a structural and/or functional cardiac abnormality. Self-management interventions can reduce hospitalizations and improve quality of life, eventough do not reduce mortality.

Purpose/Methods
In 2017 our Hospital adopted a protocol for patient affected by HF with a pamphlet describing which are the symptoms and signs of HF, together with improving adherence to recommendations regarding diet, exercise, medications and smoking cessation. After 2-3 weeks from Hospital discharge the patient attends the Outpatient HF Clinic for clinical assessment and later on a dedicate nurse will attend a structured telephone support, initially once a week and then according to the patient’s health requirements.

Results
From January to May 2017, 149 patients with a first episode of HF have been discharged from our Internal Medicine Unit and 15 (10.1%) have been readmitted within 30 days with the same diagnoses. From January to May 2018 125 patients with a first episode of HF have also been discharged but only 3 (2.4%) have been readmitted within 30 days for HF recurrence.

Conclusions
Patients with HF benefit from regular follow-up and monitoring of biomedical parameters to ensure the safety and optimal dosing of medicines and detect the development of complications or disease progression that may require a change in management. Hospitals with early physician follow-up after discharge, show reduced 30-day readmission, and those that initiated programmes to discharge patients with an outpatient follow-up appointment already scheduled together with a structured telephone support by dedicated nurses experienced a greater reduction in readmissions and a better quality of life than those not taking up this strategy.

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Patient empowerment and structured telephone support for patients with Heart Failure

ZORATTI Raffaele, BATTELLO Claudia, PLAZZOTTA Nadia, TELLINI Tiziana, BUCCARELLO Donata, CHIAVONE Michela
Introduction
In Italy, like in many other countries in the World, sexually transmitted infections (STIs) have increased significantly recent years (+25% since 2005), especially among young people (15-25 years old) and homosexuals. Given the repercussions of the STIs (neoplasms, infertility, epidemics, etc.), prevention, early diagnosis and integrated management of the index case and contacts are fundamental. Interaction and communication with patients are focal points to ensure the quality of the health intervention.

Purpose/Methods
A program was conducted, involving all the 9 provinces of the Emilia-Romagna Region, to train the operators and to review the paths for patient with STIs. A regional multidisciplinary working group was established to define the training program. The aim of the project was to strengthen the network of professionals, to improve communication and counselling skills and to create homogeneity and fairness of access to care.

Results
At the regional level, 15 training sessions were held with the participation of more than 900 operators belonging to different specialized disciplines and professional roles. During the meetings, the themes of motivational counselling, anthropology, management of the patient’s emotionality and communication were targeted. The meetings allowed the scientific updating according to the international guidelines; they were a precious opportunity to share critical issues and to plan future collaborations.

Conclusions
Following the meetings, integrated multidisciplinary paths were formalized, specifying how to send/take care of patients between different services. The program allowed: - to increase the integration between services - to develop a common "language" for the management of patients - to improve the balance between the standardization and the personalization of health care - to increase the safety and quality of assistance.

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Implementation of an out-patient clinic for fatty liver disease at the Health Care and Prevention Center of the Krankenfürsorgeanstalt der Bediensteten der Stadt Wien (KFA)

TEUFELHART Manuela, MEHL Benedikt, MIKULA Katharina, WINKER Robert, SCHERZER Thomas-Matthias

Introduction
Non Alcoholic Fatty Liver Disease (NAFLD) is one of the most common liver diseases with a prevalence of ~30% in the Western population and up to 85% in obese people. Complications include Non Alcoholic Steatohepatitis (NASH) with and without fibrosis, cirrhosis and hepatocellular carcinoma as well as the association with all components of the metabolic syndrome (MetS). Main risk factors for the development of NAFLD are obesity and insulin resistance (IR).

Purpose/Methods
The Fatty Liver Index (FLI) is a simple predictor of steatosis (Bedogni et al.,2006). FLI is calculated in the context of health care examinations. Patients with values ≥260 are referred to the outpatient clinic for fatty liver disease with the aim to reduce liver fat content and subsequently minimize the risk for progression and development of associated diseases. To verify steatosis an abdominal ultrasound and a FibroScan® examination are conducted. Alcohol consumption is assessed using standardized questionnaires. The simple steatosis is a reversible condition with lifestyle modification as the main treatment option. Weight reduction of 7-10% indicates a significant reduction of intrahepatic lipid accumulation. In group sessions patients are instructed how to change nutrition habits and increase physical activity. Regular check-ups with a hepatologist including laboratory tests and FibroScan® examination are performed every 3 to 6 months.

Results
Between 02/2016 and 03/2018 FLI was calculated in 15222 clients. FLI was ≥260 in 23.4% (m: 64%; f: 36%), of which 497 patients were referred to our fatty liver out-patient clinic.

Conclusions
Steatosis is an early sign for the development of MetS including diabetes and cardiovascular diseases. Therefore the main focus should be on lifestyle intervention to prevent NAFLD patients from MetS and liver diseases.

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Session O2.5: Weight and risk management

Health Literacy for weight management in over weight and obesity School Aged Children

SOMSUP Sarittha

Introduction
Overweight status and obesity status in children are increasing all over the world and also in Thailand, the incidence and prevalence of overweight status and obesity status in school aged children are rising most rapidly results from the age group of growth and development in all aspects. Health Literacy for weight management in over weight and obesity School Aged Children is a point of view to be the key of sustainable success.

Purpose/Methods
The descriptive prospective study was performed to study of health Literacy for weight management in over weight and obesity School Aged Children of Health Region 4,Saraburi province, Thailand in aspect of the perception awareness how to building health literacy for management of overweight and obesity.

Results
There were 360 school age children who had overweight and obesity participated in this study. 80% were overweight children and 20% were obese children. There were significant correlation
In this study, the overweight children have less awareness of weight management, all of did not know and need to improve themselves. In aspect of perception and awareness, obese children were more perceived than overweight children with statistic significantly (p <0.05).

Conclusions
In this study, the overweight children have less awareness of themselves. We should to give more attention to build the awareness of weight management to prevent the transformation to be the obesity status if they keep continuing increase their weight without control. The results that were found from this study could be provide to create the participatory weight management programs and behavioral modifications programs to effectively and efficiently reduce obesity among school children in the future.

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The Causal Factors Influencing over weight and obesity in School Aged Children

SOMSUP Sarittha, MON RAT Napaporn, SAISOOM Wimon, NAKPROM Saranya

Introduction
The incidence and prevalence of overweight status and obesity status in school-age children are rising most rapidly results from the age group of growth and development in all aspects. The causal factors affecting overweight and obesity should be study in all dimensions not only in school aged children but we should study in parents, teacher and also closed friend that can be the influence factors to help overweight and obese school children to achieve the success of weight management.

Purpose/Methods
This descriptive study is objected to study causal factors affecting overweight and obesity in school-age children in the dimensions of consumption behavior, physical activity, perception, awareness and health literacy of overweight and obesity among affecting children, parents, teachers and close friends

Results
There were correlations of overweight and obesity status in school-age children with inappropriate consumption behavior, less physical activity, spending time with mobile phone and less time for stretched muscle exercise in field of weight management. In aspect of perception and awareness, obese children were more perceived than overweight children. The parents were perceived in aspect of inappropriate behavior consumption in overweight and obese children.

Conclusions
The Causal Factors Influencing over weight and obesity on school aged children that were found from this study as inappropriate consumption, less physical activity, perception and awareness of parents, teacher and close friend could be provide to create the participatory weight management programs and behavioral modifications programs to effectively and efficiently reduce obesity among school children in the future.

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Eating habits and self-reported fatigue: questionnaire results from a large Japanese cohort

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Introduction
Fatigue is a symptom experienced even in supposedly healthy individuals. We have previously shown that eating habits (and not the diet itself) may contribute to higher body mass index (BMI). However, the relationship between eating habits and self-reported fatigue has not been sufficiently explored. In this study, we evaluated eating habits that may contribute to an increase in fatigue using questionnaire results from Japanese adults receiving health check-ups at our health check-up center.

Purpose/Methods
Japanese adults who received health check-ups at our hospital during an 8 month period from April to November 2017 were enrolled into this study. Participants age, gender and response towards a standardize questionnaire (provided by the Japanese Ministry of Health Labour and Welfare) were recorded and analyzed to explore the relationship between eating habits and increase in self-reported fatigue. Fatigue was ranked from a score of 1 to 3, a higher number reflecting an increase in symptoms.

Results
6517 Japanese adults (3272 men) were enrolled into this study. Mean age was 49.9 ± 13.7 years old. BMI was 22.7 ± 3.6 kg/m2. There were significantly more participants who reported eating faster than average (meal duration), skipping breakfast, snacking after dinner and eating less than two hours before sleeping (late meals) in the group with higher fatigue scores. In contrast, there were more participants who exercised regularly in the group with lower fatigue scores.

Conclusions
The results of our analysis demonstrated that simple eating habits may not only have an effect on an individual’s BMI but also affect their fatigue status. Although there are many studies focusing on different types of diet, simple practices such as eating slowly, eating breakfast regularly, less snacking after dinner and less late meals at night are not only relatively easy to follow but may also lead to a decrease in fatigue.

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Development of “Evidences-based Guideline on Children Obesity Prevention and Management” to Tackle Children Obesity in Taiwan

YEUNG Chun-Yan, LEE Hung-Chang, CHIANG Bor-Luen, WANG Ying-Wei, TAO Mao-Meng, LIN Yu-Cheng, CHEN Wu-Yuan, LIN Li-Ju

Introduction
Childhood obesity is one of the most serious global public health challenges of the 21st century. In just 40 years the number of school-age children and adolescents with obesity has risen more than 10-fold, from 11 million to 124 million. In Taiwan, prevalence of obesity in elementary school and junior high school students were 14.6% and 16.9% respectively in 2017. In order to achieve the 2025 global target “No increase in overweight among children under age 5, school-age children or adolescents by 2025” set by WHO Commission on Ending Childhood Obesity, most countries are taking action and some have achieved a leveling-off in childhood obesity rates.

Purpose/Methods
The Health Promotion Administration of Ministry of Health and Welfare of Taiwan launched the project of development of “Evidences-based Guideline on Children Obesity Prevention and Management” to tackle the high children obesity prevalent rate in Taiwan in 2017. A committee was established by Taiwan Pediatric Association enrolling members with various expertise including pediatricians, obstetricians, dietitians, nurses, psychiatrists, physical activity professionals, and school teachers. Guideline was developed by using the Grading of Recommendations Assessment, Development and Evaluation method to grade the quality of evidence and strength of recommendations. Finally, the representatives from the related stakeholder groups were invited for the approval of the guideline.

Results
The framework of the evidences-based guideline followed the principle recommendations by the Commission to tackle childhood and adolescent obesity in different contexts around the world, and comprised of epidemiology and risk factors, relationship of obesity and diseases, clinical assessment and management, dietary and physical activities intervention, general prevention strategy, and health promotion strategy in school. We also edited the “Childhood and Adolescence Obesity Q and A Handbook” compiling some frequently asked questions for the public.

Conclusions
Obesity can affect a child’s immediate health, educational attainment and quality of life. Children with obesity are very likely to remain obese as adults and are at risk of developing serious non-communicable diseases. The Commission called for governments to provide leadership and for all stakeholders to recognize their responsibility to act on behalf of the child and reduce the risk of obesity. Implementation of this guideline in different fields including families, schools and social communities is mandatory and would be the next important step.

The SKIP study (Supporting Kids with diabetes In Physical activity: feasibility of a randomised controlled clinical trial of an online intervention for 9-12 year olds with type 1 diabetes mellitus.

BLAKE Holly, KNOX Emily, RANDELL Tabitha, LEIGHTON Paul, GUO Boliang, GREENING James, DAVIES Bethan, AMOR Lori, GLAZEBROOK Cris

Introduction
Physical activity is important for children with type 1 diabetes mellitus (T1DM). The aim of the research was to assess the feasibility and acceptability of a randomised controlled trial comparing an online physical activity and self-monitoring programme for children with T1DM (STAK-D) with usual clinical care.

Purpose/Methods
49 children aged 9-12 with T1DM were randomly assigned to intervention group (STAK-D website plus PolarActive activity wristwatch), or usual care. Data were collected on feasibility, acceptability, fidelity and contextual influences of trial delivery. Participants completed measures at baseline (T0), 8 weeks (T1) and 6 months (T2) of clinician-patient communication about physical activity, self-reported physical activity (PAQ), predilection for physical activity (CSAPPA), fear of hypoglycaemia (HFS) and perceived health (CHU-9D, CHQ). Objective physical activity data was collected at end of T0, T1 and T2. Intervention participants were interviewed about their experiences at T2.

Results
Completion rates for self-report and objective data were above 85% for the majority of measures. Completion rate for clinical data was 63.3% to 63.5%. Recruitment and data collection processes were acceptable to participants and healthcare professionals. Self-reported sedentary behaviour (−2.28, p=0.04, 95% CI=−4.40, −0.16; p = 0.04; dppc² = 0.72) and parent-reported physical health of the child (6.15, p=0.01, 95%CI=1.75, 10.55; p = 0.01; dppc² = 0.75) improved after 8 weeks in the intervention group.

Conclusions
The SKIP trial design was feasible and acceptable to participants and healthcare providers. Some short-term improvements in outcomes were observed, although technical issues and low intervention engagement may have hampered the potential efficacy of the intervention it its current form.

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Session O2.6: Tobacco prevention and coping II

Application of social cognitive theory to the quitting smoking after cardiac catheterization

WENG Shiue-Shan, CHEN Mei-Ju

Introduction
Quitting smoking is one of the most effective ways to ameliorate coronary artery disease. Based on the social cognition theory, this study aims to provide for patients who perceived threat of illness after cardiac catheterization with the smoking cessation services after discharge in order to achieve the goal of successful smoking cessation.

Purpose/Methods
We initiatively approached patients after cardiac catheterization and provided for them with tobacco cessation programs based on the social cognition theory. A total of 567 patients received cardiac catheters from hospitals in the northern part of Taiwan from 2014 to 2016, of whom 124 were smokers. 87 of the smokers were discharged from the hospital, they agreed to participate in this program. They were grouped according to the multi-services on their choices and we analyzed the effectiveness of smoking cessation in each group.

Results
The analysis of 75 patients with complete data after follow-up of 3 months were conducted. Among patients who had not quitted smoking before this program, not only did those of willing to quit smoking have cessation smoking rate of 37.5% (n=9), but those of unwilling to quit smoking from the beginning also had cessation smoking rate of 87.8% (n=68), there were no difference on long-term quit rate.

Conclusions
Through the experience of this study, it is expected that more professionals will be involved in the health promotion intervention program after discharge for the high-risk groups.

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Characteristics of Cigarette Smoking Early Quitters and its Effects on Long-term Cessation in a Smoking Free Hospital in Taiwan

HWANG Lee-Ching, CHANG Yu-Chen, HUANG Wei-Hsin, CHAN Hsin-Lung

Introduction
Smoking cessation programs have had limited success with multiple barriers. Scientific evidence on quitting patterns could help public health sector to design appropriate cessation programs. The aims of the study were to obtain the characteristics of early quitters and its effects on long-term quit rate.

Purpose/Methods
A sample of cessation program in the Quit Smoking clinic was surveyed. Assessments were held at baseline and 2 weeks, 3 and 6 months to attain participants’ status of cigarette smoking and provide additional counseling and support. We defined early quitters who quitted smoking in 2 weeks after they visited the clinic, and delayed quitters who did not quit smoking in 2 weeks but quitted at 3 months. We examined associations between quitting patterns and baseline measurements of the level of nicotine addiction, social influences to smoke and psychological attributes. We also evaluate quit rates at 6-month follow-up.

Results
The analysis included 142 participants who had quitted smoking at 3-month follow-up. Based on our definition for quitting patterns, the study sample consisted of 87 (61.3%) early quitters and 55 (38.7%) delayed quitters. The results revealed early quitters were older, with comorbidities, more smoking years, higher breath carbon monoxide levels and Fagerstrom Test of Nicotine Dependence (FTND) scores than delayed quitters. No significant difference was present on gender, marital status, social influences to smoke, psychological attributes, educational levels and cessation experience. Logistic regression adjusted by age and gender identified positive associations between quitting patterns and breath carbon monoxide levels and FTND scores. 83.1% of quitters at 3 months had successfully quitted at 6 months. There was no significant difference between two groups in 6-month quit rates.

Conclusions
The study findings showed that characteristics of early quitters were older and more nicotine addicted than delayed quitters, however, there were no difference on long-term quit rates at 6 months.

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“Post-partum” Individualized relapse tobacco prevention program for women after pregnancy

KOALICK Susann, GIEBL Sabine, ABBÜHL Catherine

Introduction
Many pregnant women stop smoking or reduce their smoking for they children. Half of all women relapse within half a year of giving birth, and within a year, 65-85% start tobacco-smoking again. According to studies, 30% of women who manage to stay smoke-less continue to be - the support of the partner and the environment - Breastfeeding only. - Advice on breastfeeding and support by a specialist in tobacco cessation
Purpose/Methods
The mothers are invited by trained health professionals in the clinic after the birth of the child to the program. They register electronically by means of a web-based document system at the Swiss National Stop smoking Quitline. Four weeks after discharge, the Quitline consultants are in first contact with the women and provide up to 3 months of accompanying telephone support. The talks are free and confidential. The advice is offered in several languages.

Results
- Results of implementation of the program in various electronic systems of the clinic’s - Training and education material for health professionals - Information Mother Flyer - Web - dokument Quitline - Outcome target (6 months) Min. 70% are still non-smoking - 7-day points pre-clearance

Conclusions
The program started 2016. Various examples of clinics will show how the offer has been implemented into the Electronic Collection and Documentation System, the challenges and achievements associated with it. The effectiveness of telephone counseling has been scientifically proven. A successful co-operation of the tobacco stop quit line and the clinics.

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Does continuous visits to doctors make patients with hypertension and diabetes stop smoking and drinking?

KANG Eunjeong, ZHANG Haichao

Introduction
Korean clinical guidelines ont he treatment of hypertension and diabetes recommend that clinicians advise smoking cessation and stopping drinking whenever patients visit them. The purpose of this study was to ascertain if continuous visits for hypertension and diabetes related to higher probability of stopping smoking and drinking.

Purpose/Methods
We used the Korean Health Panel Survey 2014-2016. KHPS is a household panel survey which started in 2008 and gathers information on socioeconomic characteristics, chronic conditions, health behaviors, and health service utilization and expenditures. Continuous treatment of hypertension and diabetes was defined when the number of outpatient visits was greater than or equal to four. A random-effect panel model was used to estimate the effect of continuous treatment of hypertension and diabetes on smoking and drinking.

Results
The prevalence of hypertension and diabetes was 29.8% and 12.1% in 2016, respectively. The average number of outpatient visits for hypertension and diabetes was 8.5 and 9.0 per year, respectively. The proportion of hypertension patients who received continuous treatment was 94.26% and 78.51% of diabetic patients received continuous treatment in 2016. A cross-sectional analysis of 2016 and a panel model using data from 2014-2016 both showed no significant association between continuous treatment and smoking or drinking.

Conclusions
We could not find any association between doctor visits and patient behaviors of smoking and drinking. Although it is very difficult to change human behaviors only from doctor’s advice, it is disappointing to know that current primary care doctors are not successful to curtail smoking and drinking in patient with hypertension or diabetes. Financial incentives for provides towards health promotion and disease management is crucial and also our current national monitoring system for hypertension and diabetes need to be modified.

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Session O2.7: SYMPOSIUM on implementing clinical health promotion

Implementation of health promotion in health care – Facing the challenges and seizing the opportunities

SVANE Jeff Kirk, TØNNESEN Hanne

Worldwide, implementation of new evidence in health care is a challenge. This also applies to health promotion evidence. For instance, evidence-based intensive health promotion interventions may reach only 0-35% of patients in many organizations. However, some progress is currently being made on evidence-based implementation strategies that could help effective interventions and programs become part of real-life practice. As an example, a new operational program for health promotion in hospitals that includes a fast-track implementation model (Fast-IM) and a comprehensive reporting format has been tested in an RCT and recently published. It was found to improve implementation at the level of clinical hospital departments by way of enhanced lifestyle risk identification (81% vs. 60%, p<0.01), information and intervention (54% vs. 39%, p<0.01 for information/shorter intervention and 43% vs. 25%, p<0.01 for intensive intervention), as well as compliance with WHO standards in the area (95% vs. 80%, p<0.02). The program also appeared to be acceptable to clinical staff and managers.

Relying on such proven strategies and programs from the field of implementation science, healthcare organizations may be able to successfully ramp up health promotion implementation for the benefit of patients, staff and communities.

In this symposium, we will look at the evidence concerning strategic implementation of health promotion. The presentations will focus on sharing knowledge on implementation of health promotion activities, health promotion quality management and prospective benefits to obtain. The symposium will finish with a more general discussion among the participants and speakers of further perspectives, opportunities and challenges.
Session O2.8: SYMPOSIUM: Application of integrated healthcare services in hospital settings: the HPH approach

WANG Ying-Wei

Introduction
Integrated healthcare is a significant component of the HPH model that is designed to improve access, quality and efficiency of healthcare delivery and to eliminate gaps in service delivery. The symposium features experiences on promoting integrated healthcare service modes in hospital settings, with themes primarily based on standards of integrative care, patient-focused and service/policy oriented applications in health-promoting hospitals.

Purpose/Methods
A 90-minutes symposium featuring presentations on the promotion of integrated healthcare service modes in hospital settings, featuring examples on standards of integrative care, patient-focused and service/policy oriented applications in health-promoting hospitals.

Results
A 90-minutes symposium featuring presentations on the promotion of integrated healthcare service modes in hospital settings, featuring examples on standards of integrative care, patient-focused and service/policy oriented applications in health-promoting hospitals.

Conclusions
A 90-minutes symposium featuring presentations on the promotion of integrated healthcare service modes in hospital settings, featuring examples on standards of integrative care, patient-focused and service/policy oriented applications in health-promoting hospitals.

Comments
This is intended for a 90-minutes symposium featuring presentations on the promotion of integrated healthcare service modes in hospital settings, featuring examples on standards of integrative care, patient-focused and service/policy oriented applications in health-promoting hospitals. The following abstract is part of this symposium: Achieving good standards in integrative health promoting hospitals in Taiwan by Dr. Chia-Chi Lee

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Session O3.1: Supportive practice
The relationship between herb usage and elders’ wellbeing in indigenous communities

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Introduction
Indigenous food culture is developed along with the life experience of various ethnic groups. Different indigenous peoples use local herbs to develop tribal characteristics. Studies have shown that planting plants and aromatherapy can lead to multiple benefits including relieving stress, promoting mental health and physical flexibility. The goal of this study is to understand the relationship between herb usage and elders’ wellbeing by using herbs as an intervention tool for health promotion programs (HPP).

Purpose/Methods
An 8-week biweekly 90 minutes course is designed and offered to the Atayal elders in Wulai District. The topics include herbs planting (planting and care skills), aromatherapy (essential oil effect and massage technique), and healthy diet (herbs nutrition facts). To make the healthy diet course become more interactive and engaging, the participants were instructed to cook using traditional Atayal special flavors such as litsea cubeba (Makauyl) and Zanthoxylum ailanthoides (tana).

Results
There were 19 active participants and 13 valid questionnaires (average age of 75). Several questions related to physical, mental, emotional, social, and cognitive status were filled by the participants before and after the course. Based on the paired sample t-test performed on the collected samples, it is shown that there are statistically significant differences in herb using skill, mental health, emotions, and social status.

Conclusions
The goal of the study is to understand the relationship between herb usage (planting, aromatherapy, diet) and elders’ wellbeing for HPP. Study shows that there is a positive relationship between herb usage and the elder’s mental health and socialization while showing no significant differences for physical health. The latter is due to the fact that this community has been actively holding physical activities including DIY and painting class, therefore physical flexibility has not increased further.

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Hospital’s Pastoral Care Service: Promotion of “High Touch”

STAWASZ Mariola Zofia

Introduction
Fu Jen Catholic University Hospital (FJCUH) has been opened on September 29, 2017. FJCUH is the newest hospital in Taiwan with highly developed healthcare technology. At present, there are 380 ward beds in this hospital, and its clinics daily serve average 1800 patients. Among different hospital departments and healthcare professionals, there is also the Pastoral Care Department in order to take care of the spiritual needs of patients with different religious faiths. Spiritual needs can be defined as — in the first place — the search for the meaning of an individual’s life and the purpose of being alive.

Purpose/Methods
From May 1 to October 30, 2018, 2450 of the total number of 5850 patients who stayed in FJCUH were visited by its pastoral care workers (PCW) and evaluated by the five-step process the Chinese Version of Spiritual Interests Related Illness Tool (C-SpiritIT): (1) Related to beliefs/religion (2) Positive attitudes toward life (3) Love to/from others (4) Seeking for the meaning of life (5) Peaceful mind.

Results
From the total number of 4821 visits of the patients by PCW, we got 2515 written spiritual evaluations, which were put into the medical records and discussed with the medical care team. The outcome showed that 60% of the visited patients were found as facing their illness as some spiritual distress which needs accompanying compassion, active listening, and sharing life experiences. Additionally, satisfying patients’ spiritual needs concerns seeking the meaning of life. Taking these attitudes into account would also enhance the self-recognized spiritual growth of a medical team which cannot be done without the so-called “high touch.”

Conclusions
Of course, all patients expect to be treated in a hospital with the possibly best equipment and technology and do not believe their doctors would send them to a hospital which did not have such an excellent facility. However, they want more than the best equipment and technology. They especially want a healing experience. There is evidence that with only high technology the patients cannot satisfy their spiritual needs. Thus, the dimension of healing is an integral part of the holistic care. Bringing into effect the patient’s healing experience requires a clever merging of the world of “high tech” equipment and of a typically human encounter. No technology can take the place of human interaction which in many ways is promoted by PCW.

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Psychosocial support for elderly people through the Art of Healthcare Clowning

CULEN Monica, EDWARDS Gary

Introduction
Demographic changes and an ageing population are great challenges for modern societies. The goal should not only be to prolong life through scientific advances, but to also seek a good quality of life and care. RED NOSES International recognizes the need to provide the highest available standards of health care and well-being for all ages.

Purpose/Methods
The “Variété” format actively seeks to answer the needs of the elderly, e.g. reduced mobility and social isolation. The tailor-made workshops that last for 3-5 days and are adapted to the individual capacities of the participants. The clown artists encourage the elderly participants to rediscover old talents and try out new artistic tricks, be it in the field of dance, magic, acrobatics or music. The elderly “circus artists” develop a small circus act that showcases his or her abilities, talents and personal history. On the last day of the workshop, the participants present their acts to their families, caretakers and cohabitants in a final show.

Results
This format aims at contributing to the development of compassionate, respectful and person-centred care. During the interaction, humour is used to convey respect for human dignity and for the personhood of the other.

Conclusions
Humour put to service of elderly patients in hospital wards also decreases feelings of isolation. Additionally, it can increase patients’ cognitive response and willingness to accept treatment (especially for patients with dementia).

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Using Current Medical System To Practice Spiritual Care- Take The Intensive Care Unit as An Example

YILING Juang

Introduction
Fu Jen Catholic University Hospital is a general hospital in Taiwan with its vision for both holistic care and social care. Holistic care prioritizes “human” and incorporates the physical, mental, social and spiritual care. In ICU, although the medical equipment can support medical team to determine the illness correctly, our patients also needed to be comforted for their spiritual needs. Besides the medical team also need to understand more clearly about the different needs of the patients to provide quality medical service.

Purpose/Methods
For the methods, the researcher uses Deming Circle-PDCA to implement this plan. PLAN: (1) Discover the spiritual needs of patients and provide spiritual care for them. (2) Provide the related social, mental and spiritual information for the medical team and patients to improve the medical care quality. DOING: (1) Use the current medical system to discover the spiritual needs of patients and their family spontaneously or passively transferred through, especially for the patients in last stage therapy, in CPR or using the endo with ventilator for more than 14 days. (2) After the visit, fill up the spiritual care assessment form and upload to the medical system. It will serve to help the medical team members to fully understand patients’ mental and spiritual conditions. CHECK: Analyze monthly the percentage of the amount of spontaneous finding and passively transferred cases with the total hospitalized patients. Expect to reach at least 50%. ACT: Discuss the findings in ICU management committee and correct those findings.

Results
At least 50% of the patients in ICU will receive spiritual care. The spiritual care assessment form will be uploaded to the medical system. The effect of spiritual care will be expanded to the entire medical team to help those patients and their family to adapt to their illness and to become more peaceful. By doing so, the newly established hospital will be able to put its vision of holistic care into practice and build up a humanitarian medical culture.

Conclusions
ICU patients faces more challenges. Therefore, it is the best opportunity to provide spiritual care. A well-established spiritual care system can shorten the length of stay in the hospital, and improve medical quality.

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Session O3.2: Health equity – access to health care

Development of Interview Items for Screening of Patients who Forgo Medical Care Due to Economic Reasons

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Introduction
Japan has high poverty rate among OECD nations. JMA reports 11% Japanese forgo medical care due to economic reasons. MIN-IREN’s survey revealed 63 death in 2017 was caused by delayed treatment due to economic reasons. Healthcare services need to address the situation and provide required care and support for
such patients. A study was made on simple questions to screen patients at such risk.

**Purpose/Methods**

Subjects were 265 patients 20 or older with continuous cases at 5 facilities. Self-administered questionnaire was used to learn the experience, social status, income, education, and subjective economic situation. Experience was determined if the answer was a member of the household did not see doctors last year due to economic reasons. Multivariate analysis was made for correlation of the Experience and subjective judgement of economic situation.

**Results**

16.7 percent had the experience. Subjective economic status showed higher determination coefficient than combination of objective items (age, sex, education, income), and stronger correlation with the Experience. Multivariate analysis showed significance in correlation with Meal Restriction by economic reasons (ORs 8.10), No Room for hobby or extravagance (ORs 2.61), Having Difficulty before pay day of salary or pension (ORs 4.51).

**Conclusions**

Subjective economic description was more effective than objective economic status in screening the risk to forgo medical care. Since asking about education or income is generally hesitated, using subjective economic situation is actually easier and more hopeful to make intervention in medical field.

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**Evaluating equity in healthcare: pilot test of a self-assessment tool in sixteen countries**

**CHIARENZA Antonio, DOMENIG Dagmar, CATTACIN Sandro**

**Introduction**

Several sets of standards addressing the issue of improving access to health services and quality of care for various target groups have been published in recent years. Certain standards focused on improving healthcare providers’ responsiveness to the needs of different population groups. Since most healthcare standards address the needs of specific target groups at the risk of discrimination, they usually focus on one single dimension of discrimination, such as origin, disability or sexual orientation. The main goal of this research, on the contrary, was to improve healthcare organisations’ awareness of equity standards that are not focused on specific groups, but on vulnerable people. The research also aimed to verify the extent to which the equity standards developed were taken into consideration by healthcare organisations and to analyse the consequences of implementing an equity assessment process in healthcare organisations.

**Purpose/Methods**

A Self-Assessment Tool (SAT) containing a set of equity standards developed by the HPH Task Force Migration, Equity and Diversity was administrated in 52 healthcare organisations in 16 countries. A survey addressing participants from pilot organisations was used for data collection. Both quantitative and qualitative data were collected concerning: the characteristics of the health care organisation and the service users mostly facing barriers to accessing good quality of care; the compliance score with the standards; the information provided to support the score assessment. In addition, participants were asked to provide information on the burden of data collection and the general experience with the self-assessment process. Data from the self-assessment were analysed quantitatively as well as qualitatively.

**Results**

The findings confirm that healthcare providers do invest in improving equity in the access and delivery of services to the most vulnerable groups. However, many health organisations have inadequate policies to improve equity and are insufficiently engaged in improving equity in participation and promoting equity.
outside the organisation. 1) in terms of policy, there is evidence of inadequate implementation of equity plans, particularly equity monitoring and equity training; 2) in terms of participation, there is insufficient identification of groups at risk of exclusion, initiatives to support effective participation and evaluation systems to assess effective participation; 3) in terms of the promotion of equity, there is insufficient research on health inequities and the difficulties of ensuring equity in partnership agreements.

Conclusions
The overall evaluation process was considered positive by pilot institutions as it allowed health care organisations to identify gaps and to plan improvements based on the findings of the self-assessment. Indeed, developing explicit, actionable and measurable equity standards can both be a crucial mechanism for ensuring strategic commitments to equity in health care delivery and can enhance quality improvement and performance measurement initiatives as drivers of change.

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Virtual Family Center

YLITÖRMÄNEN Tuija

Introduction
The Virtual Family Center (VFC) is a web-based family-oriented service that provides customers with information and early support for various family-related situations, including well-being and health, growth and development for children and families, as well as early support and care. At present, the services are fragmented. The focus of services are shifting from remedial services to early support, preventive activities, and promotion of health and well-being. The new electronic services forms a structure for reconciling the regional social and health care services, municipal services and the activities of various organizations.

Purpose/Methods
To eliminate the fragmentation of information to different sites and services, by creating a network concept. The objective is to lower the threshold for children, young people and families to seek help and support at an earlier stage by guiding them to the right services at the right time. A modelling of an interfaced web service and a preliminary sitemap with content has been in development.

Results
The VFC connects public and private actors and diverse organizations and associations. It provides for anonymous, easy and fast information sharing, and time and place independent services. By directing the customer to the right service, the service process becomes more efficient and the customer will be better heard.

Conclusions
The VFC gives the customer opportunities to take part in their own health promotion. The customer monitors and anticipates in their own well-being, produces information and participates in the service. The network support information flow between professionals, thus reducing operational overlaps, as well as increasing productivity by improving efficiency.
The effect of pulmonary rehabilitation program on ventilator weaning in critically ill patients.

CHANG Ya-Chu, HUANG Yen-Chiu, WU Tai-Lien, HSU Tzu-Chuan, YEH Shu-Min, HUANG Hui-Ting

Introduction
When a patient uses a ventilator for 18-69 hours, it causes diaphragm proteolysis, atrophy, and respiratory muscle weakness. This would lead to ventilator weaning failure. It not only reduces the life quality of the patient but also increases the patient’s mortality rate.

Purpose/Methods
The purpose of the study was to investigate the effect of the pulmonary rehabilitation program on ventilator weaning, with an interdisciplinary approach in critically ill patients. We enrolled forty-one eligible patients in the intensive care unit, with twenty-one patient in the experimental group and twenty patients in the control group. The patients in the control group received routine care, while the patients in the experimental group received the pulmonary rehabilitation program. As the ventilator settings were switched to the pressure support mode, eligible patients were evaluated with the Burns Wean Assessment Program. If patients passed the evaluation, the experimental group started to receive the pulmonary rehabilitation program, including: Stopping the sedative before training, proper pain management, implementing sleep bundle care to prevent delirium, placing a 0.5-1.0 kilogram sandbag on patients’ upper abdomen twice a day for diaphragm training, encouraging patients to perform upper limbs weight-lifting exercise and chest expansion exercise for both 15 minutes. The respiratory therapist performed the inspiratory muscle training once a day with an inspiratory muscle training device.

Results
The results of the study showed that the pulmonary rehabilitation program significantly improved the ventilator weaning rate in the experimental group by 100%, meanwhile in the control group was 60% (p=0.001). It also significantly decreased the duration of mechanical ventilation (p=0.009). The experimental group was 6.29 days, while the control group was 11.40 days.

Conclusions
The pulmonary rehabilitation program can effectively improve the ventilator weaning rate, shorten the duration of the mechanical ventilation, and promotes the interdisciplinary collaboration.

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Enhancement quality of life of frail elderly through weaning nasogastric tube by active interdisciplinary professionals’ intervention

WU Chun-Chieh

Introduction
Dysphagia is a common problem in frail elderlies. More demands of enteral feeding among this fast growing population of elderly. The incidence of nasogastric tube feeding in Taiwan hospitals and nursing homes are 10% and 94% respectively. We aim to enhance the quality of life of frail elderlies through active identification their status of safety swallowing by interventions of interdisciplinary professionals which include Neurologist, Dentist, Otolaryngologist, Nutritionist, Speech and Physical therapist, last but not the least, Nursing Specialist.

Purpose/Methods
Inpatients and outpatients with dysphagia in Taipei City Hospital were evaluated by our integrated team from June to November in 2018. Those who developed swallowing problems (EAT-10 $\geq 3$) or nasogastric tube had already been inserted were recruited. EAT-10 questionnaire score was used to monitor the whole course of management and treatment of the swallowing disorders.

Results
A total of 277 patients (197 inpatients and 80 outpatients; mean age 76.3 years) have no current nor prior history of disease that could lead directly to dysphagia and 165 persons already had nasogastric tube inserted were included in this study in 2018. Analysis showed 21.2% nasogastric tube removal and average 18.6 scores decreased by EAT-10 score after our multidisciplinary professionals’ intervention. All samples experienced no event of any kinds of aspiration episode during this study.

Conclusions
Dysphagia has become an important issue among the complexity and diversity of elderly with multiple comorbidities. Compared to our previous weaning strategy in 2017 (nasogastric tube weaning rate10.6% after training), Multidisciplinary Dysphagia Management Team intervention indeed have better clinical outcomes, and prevented complications. It gives us the hope of better quality of life and less nasogastric tubing among dysphagia treatment of frail elderlies.

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Objectively measured mobilisation is enhanced by new motivational technique in patients undergoing abdominal cancer surgery

PORSERUD Andrea, ALY Markus, NYGREN-BONNIER Malin, HAGSTRÖMER Maria

Introduction
Mobilisation reduces the risk of complications after abdominal surgery. Despite that, the patients spend most of their time immobilised during hospital stay. Hence, the aim of this study was to evaluate a tool called the Activity board, which includes motivational techniques, as a method to improve mobilisation and recovery after abdominal cancer surgery.

Purpose/Methods
Patients who were planned for abdominal surgery due to colorectal, ovarian or urinary bladder cancer, and at least three postoperative days at Karolinska University Hospital were included from January 2017 to May 2018. The patients were allocated to Activity board or standard treatment when they were admitted to hospital. Mobilisation was evaluated objectively with an activity monitor (activPAL) the first three postoperative days, and postoperative recovery was assessed continuously during hospital stay.

Results
In total, 133 patients, mean age 68.1(12.3) years were included. The patients with the Activity board had postoperatively higher levels of mobilisation, compared to standard treatment. The levels were higher both as average over the first three days, for example median number of steps per day 1057 and 360 respectively (p = 0.001) and for each day separately. Further, the group with Activity board had first flatus (p = 0.006) and stool (p = 0.003) sooner, and one day shorter length of stay (p = 0.027), compared to standard treatment.

Conclusions
The Activity board is a promising tool to enhance mobilisation after abdominal surgery due to cancer, in hospital settings. Using the Activity board could lead to shorter time to first flatus and first stool, and possibly also shorter hospital stay.

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Effectiveness of Respiratory Care Program in Reducing Unplanned Readmission to an intensive care unit

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Introduction
Unplanned readmission to intensive care unit (ICU) is a performance indicator of the quality of intensive care, and also associated with increased cost and worse patient outcomes. In 2017, 2.3% of patients had unplanned readmission to the medical ICU within 48 hours from general wards in our hospital. This rate was higher than the average of the medical centers in Taiwan (0.9%). We hypothesized that careful handover and family education can prevent the unplanned ICU readmission.

Purpose/Methods
In 2017, respiratory problems were the main causes of ICU readmission within 48 hours. Therefore, we developed three multidisciplinary strategies for ICU and ward team (physician, ICU nurse, ward nurse, and respiratory therapist). First, the SWIFT (Stability and Workload Index for Transfer) score was used for screening the risk of readmission by physicians. The patients with the score ≥ 15 were enrolled into the program. Second, we establish a manual for teaching and handover. The manual content included respiratory care (chest percussion/posture drainage) and nasogastric (NG) feeding skill. The patient’s family was taught face-to-face with the manual by the respiratory therapist and ICU nurse. The QR code in the manual linking a teaching video and the family can watch it any time. Third, the effect of the family learning was evaluated by ICU team before patient transferring to ordinary ward. After the auditing, ICU nurse made the handover to the ward nurse.

Results
After implementation of the program, 170 patients were transferred from the ICU to ward during the period. 35 patients were screened as high-risk of readmission and the respiratory care programs were performed. The rate of unplanned readmission within 48 hours decreased from 2.3% to 0%. In addition, the correct NG feeding skill increased from 36.3% to 92.7%, and rate of respiratory care by the patients’ families increased from 16.6% to 83%. The satisfaction rate of this program was 100%. The mortality of this high-risk group was zero.

Conclusions
Implementation of a critical respiratory care program decreased unplanned readmission within 48 hours to ICU and mortality of the patients. Additionally, the ability of providing respiratory care among the family members improved during the hospitalization.

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Factors Influencing Successful Weaning From Mechanical Ventilation

CHEN Yihui

Introduction
Weaning predictors facilitate the weaning process, resulting in fewer days of intensive care unit hospitalization and reduced costs for ventilators, which benefits both patients and hospitals. This study evaluated the clinical characteristics and parameters associated with the successful weaning of patients requiring mechanical ventilation at least 24 h in a medical intensive care unit (MICU).

Purpose/Methods
This retrospective study was conducted in a MICU at Hsinchu Mackay Memorial Hospital, Taiwan. A total of 250 subjects who received mechanical ventilation ≥24 h were included. Patients who received noninvasive mechanical ventilation were excluded.

Results
A total of 195 subjects were enrolled for the final analysis, 92 of whom were successfully weaned from mechanical ventilation. The results of the study indicated that the duration of mechanical ventilation for the success and failure groups were 8.14±6.79 and 15.5±12.4 days, respectively, (p<.01). Factors influencing weaning outcomes were maximum inspiratory pressure (27.5±9.86 vs. 21.3±9.76 cmH2O, p<.01), rapid shallow breathing index (RSBI) (83.77±63.56 vs. 120.6±69.81 breath/min/L, p=.01), tidal volume (353.88±120.88 vs. 294.65±98.59 ml, p<.01), Acute Physiology and Chronic Health Evaluation (APACHE) II score (17.73±7.46 vs. 26.17±9.61, p<.01), and calorie density (26.46±9.71 vs. 22.09±12.97 Kcal/kg/day, p = .03).

Conclusions
The APACHE II score, maximum inspiratory pressure, RSBI, and calorie density influenced the outcomes of weaning from mechanical ventilation.

Comments
Our results indicate that appropriate nutritional support, determined by the calorie density, was associated with successful weaning from mechanical ventilation. Other factors influencing weaning outcomes included the APACHE II score, Pmax, and RSBI; further clinical trials on the association between these weaning predictors and long-term outcomes are required.

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Session O3.4: Health at the workplace

Compare the results of 72-hour replacement of peripheral intravenous catheters and 96-hour replacement on the incidence of phlebitis in patients.

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Introduction
The US Centers for Disease Control (2011) recommended that the presence or absence of infection at the injection site determines the timing of peripheral intravenous catheter replacement, which is more proper than routinely replace the catheter every 72-96 hours. Because Taiwan replace the intravenous catheter every three days, considering if the ethnic groups and environmental differences fits the recommendation, thus we discuss the results of 72-hour replacement of peripheral intravenous catheters and 96-hour replacement on the incidence of phlebitis in patients.

Purpose/Methods
This study was to investigate the effect of 72-hour and 96-hour replacement on the incidence of phlebitis in patients. Take the patient in the medical ward as the research object, and divided the 67 patients into: experimental group (n=33) and control group (n=34). The experimental group every 96 hours, while the control group still as routine every 72 hours. 1st September – 31st October, 2017, use a self-made “peripheral intravenous catheter assessment table”, carried out by two care nurses to evaluate if the insertion site had any signs of phlebitis when they handed over the shift, and repeated the evaluation every shifts hand over (Three shifts).

Results
The study showed, there was no significant difference between two groups – changing the intravenous catheter every 72 hours or 96 hours (p=0.783). In addition, the experimental group – changing catheters every 96 hours significantly reduce the medical material costs 53.12 NTD./person (p<0.0001).

Conclusions
There was no significant difference in the incidence of phlebitis between 96 hours group and 72 hours group of changing the intravenous catheters, extending to 96 hours can significantly reduce the medical material cost and related risk of phlebitis.

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Impact of Nursing Staff Turnover on Quality of Inpatient Care

KUNG Pei-Tseng, TANG Meng-Bin, KUO Wei-Yin, TSAI Wen-Chen

Introduction
Background: Insufficient nursing manpower and high turnover rate of nursing staff can cause hospital management difficulties and affect the quality of medical care. Inpatient care quality is an indicator used to monitor the quality of medical care. Objective: This study explored the impact of nursing staff turnover on the quality of medical care for inpatients under a Universal National Health Insurance Program.

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Purpose/Methods
Methods: This was a retrospective and nationwide cohort study. The study subjects were the inpatients from the Department of Internal Medicine, Surgery, and Pediatrics in hospitals between 2006 and 2011 in Taiwan. Hospitals with less than 50 beds were excluded. This study estimated the turnover rate of nursing staff and explored the effect of nursing staff turnover on inpatient care outcomes, including 3-day emergency department (ED) revisit and 14-day readmission after patients were discharged.

Results
Results: A total of 534,632 inpatients and 294 hospitals were included in the study. After discharge, 3.58% of patients had a 3-day ED revisit and 10.79% of patients had a 14-day readmission. With respect to nursing manpower, the average monthly turnover rate was 0.61%. According to logistic regression analysis with a generalized estimating equation approach, the higher the turnover rate, the higher the effect on the risk of 3-day ED revisit (OR=1.05; 95%CI:1.03-1.08) and 14-day readmission (OR=1.02; 95%CI:1.01-1.04).

Conclusions
Conclusions: Our study results showed that every 1% increase in the turnover rate of nursing staff resulted in a 5% increase in the rate of patients’ 3-day ED revisit and a 2% increase in the rate of 14-day readmission. The fluctuation of nursing manpower due to turnover of hospital nursing staff has a significant adverse effect on the quality of care and care outcomes of inpatients.

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A Pilot Study of Nursing Shift Report information System in one of Taiwan’s Regional Teaching Hospital
LIN I-Chun, LEE Hsi-Wen, LIAO Min-Chi

Introduction
Nursing shift reports aim at the successful transfer of information. The old paperwork practice is time-consuming and runs the risk of incomplete documentation and misunderstanding. An insufficient information transfer between nurses could delay necessary treatment, or worse, pose threat to patient safety.

Purpose/Methods
With the help of nursing and information departments, the shift report system was introduced to the gynecology and pediatrics wards. Questionnaires were designed based on the theories of the Task-Technology Fit and IS Success Model. The survey took place on January 2018 targeting 41 nurses to gather their user experience and evaluation of the system’s effects on their work performance.

Results
Smart PLS has been adopted for data analysis. All variables of the average variance extracted exceeded 0.7 and composite reliability reached 0.9, meeting the reliability and validity requirements. The path analysis from task characteristic and technology characteristics to TTF, from TTF to work performance, from information quality and service quality to use satisfaction, from user satisfaction to work performance, were all evident. The model showed an explanatory power of 91%.

Conclusions
Based on the Innovation Diffusion Theory, the pilot study focused first on the gynecology and pediatrics departments and nursing stations. The results showed that nurses adapted well to the system, felt positive about the quality of information and services, and able to achieve a 100% report completeness rate.

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Health inequality between physicians and nurses on physical activity – role of profession vs. gender
CHIOU Shu-Ti, CHUNG Cheng-Fang, CHIEN Li-Yin, HUANG Nicole

Introduction
Health inequalities associated with social determinants are commonly observed in the community. Our study aimed to examine whether such phenomenon existed in hospitals among health professionals on their physical activity, and if so, how such inequality was associated with gender and profession.

Purpose/Methods
Data of physicians and nurses was retrieved from a nationwide cross-sectional survey among full-time employees in 100 hospitals across Taiwan in 2011, with a total of 3998 physicians and 30229 nurses. Information on profession, gender, age, body mass index (BMI), stress score, management status, marriage and being in a health promoting hospital or not was included into the analysis. Being physically active was defined as having 3 or more days with physical activity exceeding 30 minutes in last week.

Results
Prevalence of PA was higher in males (41.2% vs. 26.2%) and physicians (38.8% vs. 26.4%). Role of profession only existed in females (physicians vs. nurses, 31.0% vs. 26.1%). Among males, nurses have slightly higher prevalence than physicians (42.2%, 41.1%). After adjusting for age and BMI, the odds ratio of being physically active for female was 0.704 (p<0.001), nursing profession, 0.829 (p=0.011), management status, 0.883 (p=0.008), working in an HPH, 1.076 (p=0.001), and being a male nurse, 1.499 (p=0.001).

Conclusions
Both gender and profession were associated with health inequality on physical activity between nurses and physicians. Gender gap was higher in nurses than in physicians. Health status of female nurses deserved high attention, even though female is the dominant gender in nurses. Implementing health promoting hospital initiative seemed to be associated with independent beneficial health effect for both physicians and nurses.

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Session O3.5: Adolescent-friendly health care

I-Smile Clowning, cooperation in the daily medical treatment routine

BECK Martin

Introduction
From a child's perspective, visiting a medical facility can differ significantly from adult perception, all the more so when the child is in a state of impaired health. A hospital is an unfamiliar environment and can be experienced as threatening. This is what the „I-Smile program" of the Red Noses is concerned with.

Purpose/Methods
During an I-Smile intervention a clown tries to make the situation noticeably easier for the child in a concrete medical treatment process. He stands on the child's side and helps him to deal with his fear. The clownesque toolbox offers various possibilities to influence the medical treatment process. Among others the clown - creates a positive, relaxed atmosphere - directs the focus from the scary process to a playful clownesque world - reinterprets the treatment situation clownesque (reframing)

Results
Reactions from affected children, feedback of parents and replies of the medical personnel show, that the clown interventions in treatment processes are not only experienced as a colourful brightening, but also as a great emotional support and relief. Various scientific studies have described many positive influences such as the reduction of cortisol levels, an increase in the number of T-cells necessary for the body’s own defence system, but also as a great emotional support and relief. Various scientific studies have described many positive influences such as the reduction of cortisol levels, an increase in the number of T-cells necessary for the body's own defence system with an increase in "killer cells" and significant influences on the respiratory system.

Conclusions
Medical institutions are invited to integrate the acquired "clownesque know-how" into their examination procedures and thus make "threatening" treatment situations easier for children. The clown sees himself as a partner of the treating medical staff. Together they serve the treatment process and everything together serves - the child.

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Development of National Standards for Quality of Adolescent-Friendly Health Care Service in Taiwan.

WANG Ying-Wei, CHIANG Chien-Dai, JAN Chyi-Feng

Introduction
As United Nation General said in “The Global Strategy for Women’s, Children’s and Adolescents’ Health 2016-2030”, adolescents are central to everything we want to achieve. Promoting their health and wellbeing has become a paramount consensus in the global community. We aim to develop national standards for quality of adolescent-friendly health care as a guidance for health facilities to provide adequate and comprehensive health care services for adolescents in Taiwan.

Purpose/Methods
Firstly, we built up a draft framework of adolescent-friendly health care services based on the Task Force on Health Promotion for Children and Adolescents in and by Hospitals (HPH-CA) and “Global standards for quality health-care services for adolescents” by WHO. Secondly, we invited 9 experts to test the content validity and formed the final version of standards for quality of adolescent-friendly health care services. Next we will invite different level of health facilities to participate in the pilot certification program.

Results
We have established 6 major standards, 12 sub-standards and 20 items for adolescent-friendly health facilities accreditation. In accordance with the standards for Health Hospital, the first 5 standards include Policy and leadership, Patient Assessment, Patient Information and Intervention, Promoting a Healthy Workplace and Ensuring Capacity for Clinic Health Promotion, as well as implementation and monitoring. Moreover, we also established Adolescents’ Participation as sixth standard. Regarding the content validity, item-level revealed 0.92 to 1 and scale-level index showed 0.98.

Conclusions
A national standard for quality of adolescent-friendly health care has been developing in Taiwan. We will further implement and adjust the standard and process through pilot certification process. Hope it can help health facilities promoting adolescent health and providing adolescents centered and quality-assured health care services.

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The Well Being Coordination Model [WBC]: stakeholders alliances for the empowerment and resilience in young people

AGUZZoli Cristina, GIACOMini Luisa, BRAIDA Cinzia, RAMUSCELLO Marco

Introduction
The System What’s Up [SWUP]is a program dedicated to mental health and youth resilience. It was created as a systemic response to the worrying needs that emerged in our region to address the risk of youth self-harm and to improve stress management techniques during the age of growth. The strategy we have chosen is based on the activation of a Wellbeing Coordination [WBC], integrated into the school organization and strongly connected to the HPH network, in order to create a protective circuit during growth.
Purpose/Methods
The design of the WBC is based on the integration of the HPH and the Schools for Health in Europe (SHE) standards. The management of WBC is entrusted to a spokesperson of the teaching body, who collaborates with an external figure (psychologist or educator). This core is connected to the school stakeholders group and HPH organization. The WBC is activated with a training phase promoted by the HPH health services. The follow up is done monthly to face the problematic situations.

Results
The start of SWUP (2015/2016) has obtained its final form in the academic year 2016/2017. At the moment it involves all the schools in the province of Udine, in a regional dissemination process. This strategy is a working way to put in place an infrastructure for the health promotion and resilience of children and young people. It's important to use the multimedia technology instead of demonizing it. Young people realized a lot of videos about emotions and stress management [What's UP-YouTube; www.contaminaction.me], bullying or lifestyles.

Conclusions
The young people of this era are more clever than we can imagine, also because of over stimulation by multimedia. By the other side their nervous system is facing an high allostatic load because of the complex process of neuroplasticity during the growth. To help the young in the building process of critical thinking applying it to the reality that they live is the key to give them a self-protection.

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A 10-years follow-up study of a counselling programme for parents of children with disabilities

SULHEIM HAUGSTVEDT Karen Therese, GRAFF-IVERSEN Sidsel, HALLBERG Ulrika

Introduction
The stress and burden on parents of children with disabilities are well documented. The parents' way of handling the situation is crucial to the health and well-being of all family members. We conducted a group-based counselling programme for parents, 2006-2008, aiming at increasing their ability to cope with their life. The participants' experiences and processes of change are earlier documented.

Purpose/Methods
The aim of this study was to explore the parents' experiences and processes of change 10 years after the programme. The study is based on modified grounded theory through qualitative interviews in focus groups. From 71 group-members 10 years ago we now met 58; 10 we could not find

Results
The categories developed were: Feeling motivated for opening up; Making priorities from what is really important; Exploring one's own emotions; Being challenged, also from professionals and Experiencing the processes of the programme's exercises.

The core category was: Becoming more conscious. Almost all the parents remembered some from the programme that had been important to their everyday life during the years, though they had made different individual changes. Their experiences 10 years ago still enhanced their consciousness and challenged them. Existential issues from the programme had encouraged them to redefine their self-understanding, prioritise well and act to handle the actual situation.

Conclusions
The parents described how processes of awareness and self-reflection 10 years ago still supported their mastering of life in individual ways. To think through what was important to them and self-acceptance were still the essential basis to their processes of health promotion; to take care of their recourses.

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Predictive analytics and big data in the case of children and youth

YLITÖRMÄNEN Tuija

Introduction
An integrated model of South Karelia Social and Health Care District (Eksote) is developed for regional monitoring of social and healthcare utilization and costs that is based on the regional and individual perspectives. The data is continuously updated from various source systems and more data can be added easily. The aim was to build an app, with can go through large amount of data and find common factors for different endpoints and test how meaningful those factors are (how strongly they predict an endpoint). In addition, the goal was to make the concerns visible to people working with children and youth, i.e. health care professionals.

Purpose/Methods
Data was combined from various different sources: healthcare, social services, education and pre-school. It was gathered as database backups, csv-files and excel-workbooks, both structural and text data. Before loading data into the data lake, data was pseudonymized. The developed tool was tested with following example endpoints: Average of school grades below 6,5 (scale 4-10): this can indicate that the child doesn't get graduation diploma from primary school or that the child doesn't get to secondary studies after primary school; Disciplinary actions at school: more that 3-5/year or written warning or denying from the teaching; More than 20 absence from school / year without permission; Taken into custody (urgent or non-urgent); Psychiatric care (inpatient or outpatient); Drug problems With the app developed, the analysis can be made to any other endpoint concerning children and youth.

Results
The app finds statistically significant variables for each risk, for example less visits at dental care or more diagnosed respiratory diseases than comparison group. Then the app builds profiles for every child and their families and gives notes to professionals working with children about the risk factors. It is possible to set alerts when the child has certain amount of risk factors. The system updates itself and learns from new data, and risk factors can change in time.
Session O3.6: WORKSHOP on climate change and health - the role of health care professionals

Climate Change and Health- the Role of Health Care Professionals

LIN Ming-Nan, MCGUSHIN Alice, GAN Connie, EZZINE Tarek

Introduction
Scientists project that climate change will amplify disasters. This will intensify existing health risks, with more frequent and severe extreme weather events, poor air, water quality, and emerging infectious diseases. The importance of climate change and health was highlighted in COP21 in Paris. World Health Organization published a special report on Health and Climate Change in COP24 which pointed out the role of healthcare communities. As highly trusted and globally connected professionals, we have to answer the call to action

Purpose/Methods
We will invite health care professionals from different fields to present their experiences in mitigation the climate impact on health. Dr. Ming-Nan Lin is currently the chair of HPH & Environment Taskforce. Dr. Alice McGushin is now the organizer of WONCA Working Party on the Environment. Ms. Connie Gan is a PhD candidate of Griffith University working on climate change adaptation. Mr. Tarek Ezzine is Liaison Officer for Public Health issues of International Federation of Medical Student Association (IFMSA).

Results
Dr. Ming-Nan Lin is also a vice superintendent of Dalin Tzu Chi Hospital. He will share the experiences in the hospital setting. Dr. Alice McGushin will share her experiences in the sustainable practicing policy in one of the biggest health care organizations, WONCA. Ms. Gan will talk about the climate change adaptation of hospitals. Mr. Ezzine will share his experiences on IFMSA’s advocacy for Climate & Health and the curriculum development in medical school.

Conclusions
As health care professionals, we need to know more about the relationship between environment and health. Through the experiences of health care professionals from different fields, we can really know our role of the environment-friendly and sustainable health care practice.
Session O3.8: SYMPOSIUM: Research put into practice – do we get the expected results?

Come & Quit: A new flexible intensive smoking cessation intervention programme

RASMUSSEN Mette, TØNNESEN Hanne

Introduction
Smoking is a major risk factor for the global burden of disease. Smoking cessation is, however, still a major challenge for many smokers. Therefore, it is necessary to develop and evaluate new programmes for successful quitting. The aim was to compare the effectiveness of the new flexible intensive ‘Come & Quit’ programme with the intensive Danish Gold Standard smoking cessation intervention. Secondly, to compare the characteristics of the users participating in the two programmes.

Purpose/Methods
A prospective cohort study, based on data from the National Danish Smoking Cessation Database (SCDB) from 2011-2016. During this period 38.828 smokers were registered in the database after giving informed consent. Patients at the age of ≥15 attending an SC programme with planned follow-up were included. The primary outcome was continuous abstinence for six months according to self-report.

Results
The large majority participated in the GSP 19,180 (76.9%), while 5,750 (23.1%) undertook the ‘Come & Quit’. In total 35.0% of the respondents reported continuous abstinence after six months. When considering non-respondents as smokers the crude quit rate was 23.0%. There was no difference regarding education, sex and daily smoking between the smokers undertaking the two intensive programmes. We found no statistically significant differences between ‘Come & Quit’ and ‘GSP’, for neither men (OR=1.06, 0.92-1.23) nor women (OR=0.94, 0.82-1.08).

Conclusions
The two intensive interventions compared in this study both showed to be effective after implementation in real-life, in smoking cessation clinics throughout Denmark. In total, more than 1 in 3 smokers were successful quitters after six months, irrespective of the intervention. Even though ‘Come & Quit’ was developed to attract men with low or no education, no difference was seen regarding these characteristics in the participants in the two interventions. The most important predictor was compliance (attendance).

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Tobacco cessation and work place experiences of Swedish cessation counsellors certified from 2006 to 2018

GILLJAM Hans, LANDGREN Anton

Problem
Guidelines for training and certification of tobacco cessation counsellors in Sweden were introduced in 2006. Since then, about 1000 counsellors have been certified but little is known how their counselling skills have been utilised.

Methods
A 26-item mail survey was sent via the 18 training centres to all participants who had been certified from 2006 until May 2018.

Results
About 20% of all e-mails bounced, leaving 80% or about 800 who still had valid addresses and 586 responders (65%). A large majority was female (93.9%), mostly nurses or midwives, and 74% reported active cessation counselling while 15% reported being inactive. Most responders (66.7%) worked in primary care and 14.5% worked in hospitals. A majority of respondents (75.5%) spent 0.5-2 hours/week on tobacco cessation and many (62.3%) reported only 0-2 new patients per month in predominantly individual treatment. The replies to questions of support in the work place ranged from moderate to very good for different variables. Although not much time was spent on tobacco cessation the possibilities to do so was stated as good or moderate by 76.1% of the respondents and did thus not seem to be a major barrier for conducting tobacco cessation, as opposed to what sometimes has been said.

Conclusions
Our results show that Sweden has a large and well-trained group of tobacco cessation counsellors. However, most consultations are individual and not much time is spent on tobacco cessation despite acceptable support and possibilities to conduct tobacco cessation in the workplace. Further studies are warranted to examine the reasons behind the short time spent on tobacco cessation and how more patients could benefit from this treatment.

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The Swedish Smoking Cessation Project

LARSSON Matz, MILLER Laura, RANDÉN Monika, LARSSON Anette, HELLBERG Jesper

Introduction/Background/Problem
The Swedish Smoking Cessation Project, modelled from the Danish smoking cessation database (DSD), aims to be implemented in Swedish health care in 2018-2019. The county of Örebro runs a tobacco cessation unit (TPE) based on behavioural and pharmacological therapy. The unit’s response rate at follow up is modest, approx. 50%.
Description of Objectives
The aims were to 1. test the relevance/usefulness of DSD’s methods in a cohort of Swedish smokers, 2. Assess the participant’s degree of satisfaction with the TPE programme. 3. Get information about participants’ background, e.g. the amount of psychotropic drugs used, and study outcomes such as abstinence rate.

Methods/Intervention
An adapted telephone questionnaire from the DSD six months’ follow-up questionnaire was used. 100 smokers previously treated by TPE were selected to a telephone interview approx. 6 months after planned quit date.

Results (effects/impact/changes)
70 of 100 (70%), M/F 38/32, were reached/agreed to participate. The mean Fagerström score was 4.6 on a 10-degree scale; 43% were smoke-free; average satisfaction with programme was 4.4, with the counsellor 4.7 (max. score 5); 27/70 (38%) used psychotropic medication (other than for smoking cessation purpose).

Conclusions/Lessons
Compared with the unit’s normal follow up, the response rate became higher using the modified DSD method. The unit got useful feedback and information, e.g. the participants reported a high degree of satisfaction with the program. The DSD method seems to be suitable also in a Swedish smoking cessation program.

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Smoking cessation in depressive smokers
STEPANKOVA Lenka, KRALIKOVA Eva, ZVOLSKA Kamila, PANKOVA Alexandra, ADAMCEKOVA Zuzana

Introduction
Compared to the general population, in depressive patients smoking is more prevalent, for depressive smokers cessation may be more difficult and may affect depressive symptoms. Depression is more prevalent in smokers, with increasing trend during time.

Purpose/Methods
Observational study using data collected routinely in a smoking cessation clinic from 2004 to 2017 (3,775 patients). Intensive treatment included two-hours psychobehavioural intervention, pharmacotherapy (varenicline, nicotine replacement therapy and/or bupropion), on average 6 visits per year, 12-months CO validated abstinence rate. Psychiatric comorbidity was assessed by the personal history only. Depression symptoms: baseline and 12-months abstinence, Beck’s Depression Inventory (BDI-II), logistic regressions assessed if depression level predicted 1-year abstinence. Change in depression symptoms was analyzed in 835 one-year abstinence patients.

Results
In 2004, 17 % of patients seeking treatment reported some type of mental illness, while 30 % in 2017. Smoking cessation was similarly successful in patients without depression to those with mild depression (42 %, and 39 %, respectively, OR=0.53, p<0.001), but lower for patients with moderate/severe depression (26 %). Among abstinent patients, the higher baseline depression symptoms, the bigger improvement after one year. Overall, the mean (SD) BDI-II scores improved significantly from 9.2 (8.6) points to 5.3 (6.1); p<0.001.

Conclusions
In our centre, the share of patient with psychiatric comorbidity increased significantly between 2005 and 2017. Moderate/severe depression at the baseline predicted slightly lower abstinence after 1 year. But, patients abstinent from smoking experienced considerable improvement in depression.

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Feasibility of implementation of intensive SCI among smokers with non-muscle invasive bladder cancer treated with transurethral resection of the bladder
LAURIDSEN Susanna Vahr, TØNNESEN Hanne

Introduction and Purpose
Addressing smoking cessation among patients with non-muscle invasive bladder cancer is crucial, because continued smoking causes cancer relapses, and risk of multi-morbidity. Despite this knowledge guidelines on smoking cessation intervention (SCI) and engagement of clinicians are sparsely implemented and often patients only receive a brief advice to stop smoking without referral to a smoking cessation counselor.

Methods
First semi-structured in-depth interviews with 10 purposively sampled clinicians who are going to deliver the smoking cessation intervention will be conducted to obtain knowledge about potential barriers and facilitators to implementation of the intervention. Next a feasibility study involving 2 x 25 smokers for SCI in an RCT-design comparing an intensive SCI to treatment as usual is started. The implementation strategy will follow the WHO/HPH model. Outcomes are number of patients screened positive for smoking and receiving the intervention, quit-rate after 6 weeks and 6 months. The projects will follow guidelines for clinical research, and be approved by the scientific ethical committee and the Danish Data Protection Agency before start.

Results
A main challenge is the inclusion rate for SCI intervention, a former Danish RCT among bladder cancer patients undergoing surgery showed an inclusion rate of 60%, but surgical patients have a positive attitude to SCI aiming at risk reduction – and see it as an integrated part of surgical treatment to reduce their risk at
Conclusions

To our knowledge this is the first feasibility study among patients with non-muscle invasive bladder cancer after development of the new and promising WHO/HPH data-driven model for implementation of lifestyle interventions.

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Session O4.1: Digitalization in health care and health promotion III

The Effectiveness of the DIET-STAR mHealth App on Weight Management in an Urban Community

HWANG Lee-Ching, LAI Cheng-Chien, CHANG Betty Chia-Chen, LEE Shu-Chen

Introduction
Mobile phone apps play a significant role in diet education and self-monitoring, and have been used increasingly common in weight reduction programs. Our study evaluates the effectiveness of a mHealth app for diet monitoring in an urban community in Taiwan.

Purpose/Methods
The DIET-STAR app was developed for educating participants on the concept of food categories and their amount a day. The app provided online diet and weight recording, timely feedbacks and healthy diet scores trend over a period of time. A total of 260 participants were recruited during community weight reduction events and completed the input data.

Results
The mean age of participants was 34.7 years and over two-thirds (76.5%, 199/260) were women. The mean number of complete recording days was 15.9 days. In terms of better recording adherence, 93 (35.8%) of participants recorded their daily diet content more than 14 days. Most participants did not have enough daily vegetables and fruits intake. However, their healthy diet scores trend over a period of time. A total of 260 participants were recruited during in community weight reduction and completed the input data.

Conclusions
Our findings suggest that design a mHealth app to improve recording adherence should be an important consideration to help monitor one’s diet and weight, allowing users to maintain healthy eating habits and ideal weight management.

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Efficacy of health self-management app - Associations between using app, the frequency of services received and blood pressure control

HUNG Ta-Chuan, HWANG Tsu-Hsueh, HSU Chih-Hung

Introduction
Since 2014, Mackay Memorial Hospital cooperates with community associations nearby to establish 18 cloud health stations in 5 administrative districts. The volunteers of health stations provide services measuring which include BMI, blood pressure (BP) and abdominal circumference, and then volunteers upload data to cloud system. Medical staffs provide periodically health consulting, checking blood sugar and cholesterol. Combining technology and health promotion, the residents at cloud stations could download health self-management app for BP control.

Purpose/Methods
The residents at cloud stations received measuring services. Their measuring data identified by “RFID member card” have been stored in cloud system, which allow the residents to check their data by app. In order to understand the residents’ participation status of cloud stations and their app usage for health management, we collected residents’ data in recent two years and explored the impact of the app usage and the frequency of services received ([≥52 or <52 times/2years) on blood pressure control.

Results
There were 826 cases from 2017 to 2018. The cases number with and without downloading app were 237 and 589. The downloading group has better BP control rate 85.05% than no-downloading group 77.59% (p<0.001), no matter what they received high ([≥52 times/2years) or low (<52 times/2years) frequent services. But in no-downloading group, the high frequency services received group has better BP control rate 83.87% than low frequency services received group 76.99% (p<0.05).

Conclusions
The residents using self-management app have better BP control rate. The residents without using app also can have better BP control rate while they received high frequency health services. Our hospital establishes accessible health stations, develops health management app and encourages communities to use these resources. The volunteers and nurses at health stations provide these warm services. Combining hard and soft powers (self-management app technology and man-power services) can let the residents at health stations reach the health promotion goal.

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Measuring risk to develop foot ulcers in diabetes – a digital tool to be used in the prevention of diabetic foot ulcer

HELLSTRAND TANG Ulla, EDLUND Åsa, ALNEMO John, SUNDBERG Leif, HELLESTRAND Stefan, TRANBERG Roy, ZÜGNER Roland
Introduction
Every twenty second an amputation takes place, somewhere on the earth, due to diabetes. Diabetic foot ulcers and amputations are preventable and a halving is possible. The prevalence of diabetes is increasing and by 2040 it is expected that 640 million people have diabetes. The aims were to: a) describe the construction of a web program, the D-Foot, which generates an objective risk classification, b) test the reliability and c) evaluate the usability.

Purpose/Methods
The D-Foot includes 22 assessments and 4 questions answered by the patients. The risk classification is coherent with the risk classification in the Swedish National Diabetes Register. Interrater reliability was assessed by 8 certified prosthetists & orthotists (CPO), group 1. By using the System Usability Scale (SUS), ten subjective answers was collected in order to rate the use of an interactive technology. Usability was accessed by group 1 and group 2 (n=5 CPO) and 3 (n=48 patients).

Results
The agreement, tested in 102 patients, for the risk classification using the D-Foot was 0.82. The interrater agreement was >0.80 regarding the assessments of amputation, Charcot deformity, foot ulcer, gait - and - hallux deviation. The interrater reliability for the discrete measurements were >0.59. For continuous measurements, the interrater correlation varied (0.33-0.98). The SUS was 70±16 (45-95), 77.5±13.6 (67.5-100) and 72.9 ±17.3 (15-100) in group 1; 2 and 3 respectively.

Conclusions
Although there was variation in the interrater reliability, the D-Foot is suggested to be used as an objective classification of the risk to develop foot ulcers. It seems that users had good acceptance for digital foot check. Following the routine in D-Foot, health care professionals will be more likely to fulfill the recommendations stated in guidelines which will lead to safer patient care. Patient’s involvement during the foot check gives option for meaningful discussion about self-care.

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Promote Smokers’ to quit with AI interaction programmer- An Experience of Taiwan’s smoke-free hospital

HSUEH Kuang-Chieh, CHEN Hong-Jhe, SHEN Yun-Ju, YU Shan-Sian, LEE Chia-Hua, HUAI Chieh-Chun, PAN Lee-Fei, CHENG Jin-Shuang

Introduction
Cigarette smoking is the most important preventable cause in the world. More than 7 million people died from smoking-related diseases per year including 890,000 of non-smokers being ex-exposed to second-hand smoke, but lots of smokers have not to make a firm decision to quit. Today, Artificial intelligence (AI) is beginning to play a growing role in both health care and health promotion, in our hospital, AI has been used in smoking cessa-tion clinic and promote smokers to quit.

Conclusions
The results indicate that AI interaction programs based on Big data can significantly increase smokers’ motivation to quit, smokers can also know their risks in smoking and their chance to quit, time to interact with AI is also limited(less than 5 minutes) and easy to use on PC, tablet PC or cell phone with internet connected. AI and other intelligence or digital equipment will play a more important role in health promotion care and they will be the future trend.

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Integrated diabetic care system in Taipei city hospital

CHEN Ying-Chun, CHANG Chia Ping, CHEN Chung Sen

Introduction
Education of lifestyle modifications was the essential component of disease control. In order to improved the efficacy of diabetic education,we have constructed an integrated care system. This system consisted of telephoto care by mobile phone app and one stop service to educated the patients and survey four diabetic complications in one visit.

Purpose/Methods
One visit in our clinics, we will provide life style education and survey of microvascular complications including of nephropathy,retinopathy,and neuropathy. Macrovascular complication was also assessed by ankle brachial index at the same visit. We served four complications survey in one stop.Telephoto care team consisted of 18 endocrinologists and 25 certified diabetic educators. We served in office time. Members recorded their blood sugar, blood pressure, and etc on app. Educators will notice the data immediately in the cloud. There were three choices to communicate to team: face to face by phone, telephone, and messages. Notice of abnormal record sent alarm to team.
Results
There were about 3200 members enrolled from our outpatient clinics to the virtual diabetic hospital. The number of loyal patients in our clinics was increased from 18807 to 19401. Care quality including of HbA1c<7% rate was raised from 53.5% to 55.7%, blood pressure <130/80 mmHg from 58.7% to 64.1%, low density lipoprotein <100 mg/dl form 55.6% to 60.2%.

Conclusions
One stop survey complications of diabetes were a patient-center service. Integrated care of patient could increase the percentage of diagnosed complications. Lifestyle modification was the cornerstone of the disease control. Use of the mobile phone to record the data and behavior were easy. These data could immediately notice by educators; thus, we could provide suggestions from hospital to phone anywhere and anytime. Telephoto care system will also provide benefit to disability and remote patients.

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Session O4.2: WORKSHOP on high-tech and high-touch age-friendly health services

CHIOU Shu-Ti

Agenda
14:15-14:30
High-tech and high-touch system design towards integrated people-centered care in an aging era
Shu-Ti Chiou, M.D., Ph.D., Chair, Task Force on Health Promoting Hospitals and Age-Friendly Health Care, Director of Healthcare Quality Management, Cheng Hsin General Hospital, Taipei, Taiwan, Adjunct Associate Professor, School of Medicine, Yang-Ming University, Taiwan.

14:30-14:45
High-tech and high-touch age-friendly services and communication in health care
Wei Chen, M.D., Ph.D., Director, Department of Community Health, Chiayi Christian Hospital, Taiwan; Director, Taiwan Society of Health Promoting Hospitals; Adjunct Associate Professor, China Medical University, Taiwan.

14:45-15:00
High-tech and high-touch design for medication safety for senior patients
Ming-Yueh Chou, M.D., Director, Division of Geriatric Integrated Care, Center of Geriatrics and Gerontology, Kaohsiung Veterans General Hospital; Vice Secretary-General, Asia Pacific League of Clinical Gerontology and Geriatrics, 2009.

15:00-15:15
High-tech and high-touch approach for fall prevention
Dr. Ta-Sen Wei, M.D., Ph.D., Director, Center for Fall Prevention, Changhua Christian Hospital; Chief Physician, Department of Physical Medicine and Rehabilitation, Changhua Christian Hospital, Taiwan; Adjunct Associate Professor, China Medical University, Taiwan.

15:15-15:45
Open discussions

Session O4.3: Community health promotion

Effectiveness of a Screening and Health Promotion Activity for Osteoporosis in a Medical Center in Northern Taiwan

CHANG Yu-Chen, LIN Hsin-Hui, HUANG Wei-Hsin

Introduction
Osteoporosis is a leading healthy issue for the post-menopausal women and elderlies, bearing higher risk of fractures. The aim of this study was to assess the effectiveness of a large-scale health promotion activity for osteoporosis held in a medical center in Northern Taiwan.

Purpose/Methods
A week-long event was held during the month of World Osteoporosis Day (October 20th) in 2018, comprising informative speeches, individualized counseling and risk screening for post-menopausal women and men aged over 65. High-risk individuals were defined as either with a T-score < -1.0 by quantitative ultrasound or with a Fracture Risk Assessment Tool score indicating 10-year major osteoporotic fracture probability exceeding 10% or hip fracture exceeding 1.5%. Then they were referred for Dual-energy X-ray absorptiometry (DXA) and thoracic-lumbar spine radiographs.

Results
A total of 950 subjects attended the screening activities, and 160 individuals were categorized as high risk for developing osteoporosis. 81 subjects underwent DXA and thoracic-lumbar spine radiographs. Osteopenia and osteoporosis were detected in 38 (46.9%) and 33 (40.7%) of the examinees, respectively, according to the diagnostic criteria by WHO. Compression fracture was found in 14 (17.3%) subjects. 15 (18.5%) participants initiated medical treatment during office visits.

Conclusions
A great effect in raising public awareness of osteoporosis was observed in this activity. Combination of two screening tools may enhance the sensitivity for detection of high-risk individuals. It is essential to reinforce the maintenance of healthy lifestyle, fall prevention and medical compliance.

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Open Safety Day in Reggio Emilia: a new opportunity for citizen empowerment

RAGNI Pietro, MASTRANGELO Stefano, VERCILLI Francesco, CAROLI Roberto, CAVAZZUTI Laura, CHIESA Valentina, FORMOSO Giulio, MAZZI Giorgio, CHIARENZA Antonino, MARCHESI Cristina

Introduction
The International Patient Safety Day (IPSD) is a campaign for stakeholders in the health care system to improve patient safety. Only few countries are taking part in this initiative but their number is increasing. In 2018 the focus was on “Digitization and Patient Safety”. Local Health Authority (LHA) of Reggio Emilia participated to IPSD with the awareness campaign “Sicurinsieme” (“Safe-together”).

Purpose/Methods
Stands with doctors and nurses were placed at the entrance of each of our 6 hospitals. Two groups of actions were implemented: 1. safety practices and related processes in our healthcare system were illustrated; 2. citizens were engaged to gather suggestions to improve safety in healthcare provision (e.g. identifying correctly medicines patients take) and to promote the straightforward and free activation of their own electronic health file (so that own data can be always available to healthcare providers).

Results
Throughout the day we talked with about 1200 people on safety issues, specifically: safe use of medicines, their correct identification when changing healthcare setting, hand hygiene, falls prevention, avoiding errors in patient identification. We distributed and taught how to use alcoholic hand hygiene solutions; 26 citizens activated their own electronic health file (many others had it already). Moreover, many people reported positive and negative personal healthcare experiences.

Conclusions
In this first edition of the IPSD, we had a useful interaction with citizens, achieving three results: firstly, to inform them on how we try to guarantee healthcare safety; secondly, to instruct them on how they can be active in promoting safety of healthcare processes and practices; finally, to gather their perceptions about safety in healthcare and suggestions on how to improve it.

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Health promotion practice for low literate community in Hantun village, Chian

Al Wenbo

Introduction
My research practice is an example of HPH in Hantun village, a rural community in Henan Province, China. The significant number of independent elder low-literate patients often struggle with dosages and usage of medicines after prescription. The research practice is looking to empower such patients, giving them better control over their health. The research is lead by a PhD student from the Royal College of Art, UK, guided by the Chinese National Health Centre and supported by the local health clinic.

Purpose/Methods
The research practice uses ethnographic and participatory design methods to target these issues, a workshop was held in a local shop that serves as a community centre. There, locals were gathered together by the head of the local health clinic who acts as doorkeeper. She explained the workshop’s self-learning method to solve problems of health literacy, particularly in terms of understanding complex medicinal information.

Results
The researcher prepared a supply of medicine packages and colourful media – memos, string, tape, plastic stickers, pens – and let the participants use different materials and colours to represent times and dosages. They used these specific visual media to generate colours, dots and images, representing complex information and creating a unique visual language to use in their daily lives.

Conclusions
This workshop helped participants design their own methods to understand medicinal information. It provided grassroots medical services to local people, especially the most vulnerable and poorest, and empowered their medicinal knowledge by community participation.

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Chinese medicine intervention program to improve sleeping quality of Community Residents

CHENG Yu-Chen, CHEN Ching-Yuan, LAI Yi-Ling, CHEN Jian-Jung

Introduction
According to Taiwan Society of Sleep Medicine, the incidence of chronic insomnia is 20.2% in 2015. The high prevalence rate caused the usage of Zolpidem is more than 130 million in 2014 in Taiwan, but 64.5% of insomniac had negative opinion toward medication usage. In the previous study of the community residents around our hospital, the incidence of low sleep efficiency is about 27%. Therefore, we started a Chinese medicine intervention program to improve sleeping quality of community residents in the District near our hospital.

Purpose/Methods
The main purposes of the program are to revamp sleep habits and enhance the willingness of daytime exercise. Before it started, there was a meeting of community volunteers, community health center and Chinese medicine doctor to reach a consensus. The program was hold weekly over an eight-week period.
Doctors and volunteers took turns leading the program. It included sleeping health education, daytime life nurturing exercise (Ba Duanjin), nighttime relaxation method and acupressure. The outcome was evaluated with Epworth Sleepiness Scale, Sleep log, and Pittsburgh Sleep Quality Index.

**Results**

Two communities, 88 people were enrolled in the program. The mean age is 71, and 84% of females. Waking up often during the night and frequent nocturia are the main reasons of their sleeping disturbances. After intervention for eight weeks, the awareness of sleeping condition, the understanding of sleep habit and willingness of daytime exercise have been improved. Moreover, one community keeps on practicing the program by volunteers after eight weeks.

**Conclusions**

After the program, we realized the acceptance of Chinese medicine exercise is higher than lectures for elderly, and it is important that the exercise is suitable for elderly’s physical ability. This year, the program not only improved sleeping knowledge, but also encourage community residents to get more exercise in daytime. We are planning to train more volunteers and bring the program to more communities in the following years. Additionally, long-term effect on the program will be followed in the future.

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A Population-Based Integrated Program Improving Diabetes Care

**DE MONTE Ariella, MARIOTTO Aldo**

**Introduction**

The aim of this study was to evaluate whether implementation of an integrated regional program can be effective in producing improvement in diabetes care.

**Purpose/Methods**

Friuli Venezia Giulia is an Italian region accounting for about 1,250,000 population. A diabetic patients register based on administrative databases merging accounted in 2015 for a morbidity prevalence rate of 6.7%. Guidelines on diabetes integrated care were approved by the regional government. They were disseminated through a multifaceted intervention based on training, incentives to family physicians, primary care reorganization, modeling and proactive medicine. The program was assessed through the before-after intervention measure of process indicators. Analysis excluded gestational patients, those who didn’t consent for privacy reasons and those not included in the same family physician administrative list over the study period.

**Results**

Regionally, significant improvement in 2016 vs. 2015 was observed for all measures. Analysis included 54593 patients. The percentage of patients who received one ore more: A1C test arose from 73.8% in 2015 to 79.1% in 2016 (+7.2%), Microalbuminuria test arose from 44.7% in 2015 to 56.3 in 2016 (+26.0%), Blood Creatinine test arose from 70.7% in 2015 to 76.2% in 2016 (+7.8%), Lipid profile arose from 69.6% in 2015 to 72.6% in 2016 (+4.3%). Those who received at least one Fundus Oculi arose from 42.1% in 2014-2015 to 47.9% in 2015-2016 (+13.8%). Hospital specific diabetes patients admission rate decreased from 342/1000 in 2015 to 328/1000 in 2016 (-4.2%). However, there was significant regional variation among all measures.

**Conclusions**

The evidence based introduction of an integrated professional and organizational intervention improved adherence to diabetes specific process measures in 2016 compared with 2015 baseline for patients assisted in Friuli Venezia Giulia region. A better integration with hospital care and a partial revision of IT system are needed.

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Session O4.4: Health literate healthcare organizations

Systematic Second Opinion before Surgical Procedures in Germany

**VOIT Doris**

**Introduction**

Since the "Act to Strengthen the Supply in the Statutory Health Insurance", which came into force in 2015 in Germany, patients are legally entitled to claim an independent medical second opinion according to the regulations of the Social Code Book 5, if they have to undergo a defined elective operation.

**Purpose/Methods**

On this basis, the Federal Joint Committee (the highest decision-making body of the joint self-government of physicians, dentists, hospitals and health insurance funds in Germany) has developed a new "Directive on the second opinion procedure", which has been in force since 8 December 2018. It regulates the claim of patients to obtain a second opinion initially for hysterectomies and tonsillectomies, but in the future also for other surgical procedures.

**Results**

This new directive is part of the quality assurance system in Germany, which are mandatory for all healthcare providers in Germany. The coordination of the formal requirements for the approval of billing for second opinion services takes place at Federal States level. Specialists entitled to a second opinion have to comply with numerous requirements and will be merged into a list that will be publicly available. The doctors are obliged, for example, to inform patients about their right to seek an independent second medical opinion in order to arrive at an informed decision on the conduct or non-performance of the recommended procedure.

**Conclusions**

The requirements of the process of the second opinion defined in the directive are intended to ensure that the second opinion is of high quality and that further treatment options are adequately explained by the second person.
A Structured Nutrition Care Information System in Hospital Information System

LAI Hsiu-Yi, YANG Hui-Ping, HUANG Kuei-Ying

Introduction
The purpose of Structured Nutrition Care Information System Project is to establish a nutrition care information system. The system architecture consisted of integrated nutrition care procedures and structured contents with a check-list form as a powerful tool to store complete nutrition care information and implement effectiveness assessment. And the system provides a platform for the communication of medical team members across different disciplines.

Purpose/Methods
Nutrition care information system was developed to be a part of hospital information system (HIS) and constructed into five files: nutrition risk assessment, nutrition assessment, nutrition diagnosis, nutrition intervention and follow-up which according to nutrition care process. Statistical analysis of the system function could be used as basis for assessing the quality of related work.

Results
1. Reducing the time of writing by 4.8±3.6 minutes (p=0.0219), which saves time significantly. 2. Major nutrition problem of 35.2% patients was insufficient caloric intake due to pathological factors. 3. Nutrition intervention has improved nutrition problems of 74.3% patients. Major Poor performance of improvement was 44.5% related to disease treatment. 4. Satisfaction survey of inquires is 85.2 points for physicians and 81.1 points for nurses.

Conclusions
An electronic medical record with structured and standardized design than a narrative record can provide more information for improving the quality of health care.

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Information for patients in Easy to Read

FLATZ Karin

Introduction
The UN Convention on the Rights of Persons with Disabilities signed by Austria in 2008 imposes a legal obligation to create inclusive, accessible health care for people with disabilities. The various steps to inclusive health care can only be made one by one, aiming to remove disabling barriers. Part of inclusive health care is accessible and Easy to Read information.

Purpose/Methods
This is why tirol kliniken (the clinics of Tyrol) began translating patient information into plain language in 2017. People with cognitive disabilities were and are involved in the editing of the texts. The inclusion of people with learning difficulties in the work process corresponds to the rules that exist for translation into Easy to Read Language and is one important step on the way to inclusion.

Results
Information for patients in Easy to Read Language enables all people to get important information easily and to make independent decisions on that basis. This is the basis for following medical and nursing guidance and thus moving more safely through the different areas of health care.

Conclusions
The results of the cooperation are manifold. The information for patients in Easy to Read Language, which is available on the website of tirol kliniken so far was developed in a process of mutual learning, a raise of awareness by all participants and better understanding for each other. The inclusion of people with cognitive disabilities is of enormous importance for the health sector, because people with cognitive disabilities are often medically undersupplied due to communication and attitude barriers.

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Effectiveness and Associated Factors of Shared Decision Making and Health Literacy Implementation in Taiwanese Healthy Hospitals

LIN Chia-Chen, HUANG Hui-Ting, LIN Jing-Ding, HWANG Lee-Ching, WANG Chia-Fen, CHIEN Po-Shan, WANG Ying-Wei

Introduction
Based on the original HPH self-assessment form published by WHO-HPH Network, Taiwan initiated its newest iteration of the HPH accreditation in 2017. The new, localized version of the standards incorporated unique features in Taiwan such as age-friendly, tobacco-free and environment-friendliness, culminating in the “Healthy Hospital Accreditation”. The new version standards introduced three new concepts which were shared-decision making (SDM), health literacy (HL) and patient focused method. This study aims to investigate the effectiveness of SDM/HL implementation and their associated factors.

Purpose/Methods
We analyzed the data of 184 hospitals that passed the verification process in 2017 and 2018. The average score of self-assessment performance was 2.72 (out of 3). The lowest score items are SDM and HL, their average score were 2.30 and 2.59 respectively. Furthermore, this study also analyzed the relationship...
among SDM, HL and associated factors. Finally, this study summarized the best practices based on 7 model hospitals in promoting SDM and HL in health care settings.

Results
The results showed that SDM, HL had positive correlations with overall scores. The regression model showed that R-square was 97%, SDM and HL scores could positively predict overall healthy hospital performance. This study also found that the hospital’s quality management center was taking charge of promoting SDM/HL matters, the key promoter received SDM/HL training firstly and then the whole hospital was enrolled.

Conclusions
The hospitals developed its own patient decision aids (PDAs) and invited patients to participate in development, the topics included health promotion, surgical methods selections, treatment of diseases/cancers, home care and end-of-life care selections. In addition to provide training for employees, hospitals also offered individualized counseling and PDAs development competition. In terms of patients and their families, hospitals provided health education, symposiums and electronic services. Questionnaire for employees and patients/families were also conducted to measure the effectiveness of SDM implementation.

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To improve community health literacy through the sharing decision-making mode

CHEN Sih-Hua, LIOU Wen-Chin, DU Si-Rong

Introduction
Shared Decision Making (SDM) is an important strategy to promote patient safety goals. Through SDM process, people can gain important medical knowledge, receive treatment more confidently and be respected, and help reduce anxiety. St. Joseph Hospital, as a community-based teaching Hospital, applies the SDM mode of medical treatment and disease to clinical operations, hoping to improve the health literacy and trust of the community.

Purpose/Methods
Incorporate annual development strategy objectives of the hospital Set up a working group, with the deputy dean of medicine as the convener. The core members include the nursing department, management room and public affairs group, and then form a clinical execution team according to the annual promotion theme Setting webpage to place electronic files, operation procedures and health and education videos of decision-making assistance tools, and use QR CODE to facilitate the selection and browsing Invite eligible patients or family members to participate by using public version Patient decision aids(PDA). Link to community resources to promote. Multiple advocacy strategies to reach all ethnic groups Creative visual PDA to improve the quality of SDM

Results
Implementation of 5 divisions and 8 PDA. 12 health education promotion, 526 person-times. 5 education training sessions, 338 person-times. Facebook fans page, reached 346 people. The pro-portion of employees who knew the decision of sharing medical treatment and illness was 99.9%. The percentage of patients in the organization who know about patient-physician sharing de-cisions is 100%. Complete the comic book of real life situation, hold a conference, and get media coverage.

Conclusions
Use public version PDA can reduce workload, and it is necessary to cultivate the ability of medical personnel to draw and use visual media, so as to enhance the medical team’s recognition of SDM. The implementation of SDM will help enhance the health literacy and trust of medical staff and community.

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Session O4.5: Mental health support and coping

Incidence, Risk, and Associated Factors of Depression, and Suicidal Behavior and Risk of Mortality in Adults with Physical and Sensory Disabilities and Depression

SHEN Szu-Ching, HUANG Kuang-Hua, KUNG Pei-Tseng, TSAI Wen-Chen

Introduction
More than one billion people, or 15% of the world’s population, suffer some form of disability, which is diverse and complex. People with physical and sensory disabilities are in high risk of suicide, but there are few studies on the suicide and death of people with physical and sensory disabilities who are depressed. This study studies the suicide of Taiwanese people with physical and sensory disabilities who are depressed and their risk of death.

Purpose/Methods
This research was a retrospective cohort study. The data came from the registry of the people with physical and sensory disabilities at the Ministry of the Interior from 2002 to 2008. This study extracted from and used (1) data from the Center of Coordinated Value-Added Use of Healthcare Data in Taiwan Government and (2) the National Health Insurance prescription and treatment detail data from 2000 to 2011 at the National Health Research Institutes.

Results
The depression incidence density rate of people with physical and sensory disabilities is 1.29 times that of general population. The risk factors for the higher risk of depression in people with physical and sensory disabilities are rare diseases, mild severity of disability, females, 35-44 years of age, high-school education, divorced or widowed, non-aboriginal, monthly salary between NT$22,801 and 28,800, first-level urbanization of residence area, and Charlson comorbidity index greater than or equal to 3 points.

Conclusions
This study finds (1) categories of people with physical and sensory disabilities who have high incidence density rates of depression, suicide, and death and (2) their risk factors for these incidents. We would like to suggest that governmental social service departments, while serving people with physical and sensory disabilities and their families, should step up their diagnosis, care, and treatment of depression in order to improve the prevention and treatment of depression, suicide, and death of people with physical and sensory disabilities.

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Session O4.6: Healthy lifestyles

Common and specific factors attributable to physical activity between male and female employees working indoor

CHEN Mei-Ju, HUANG Shier-Chieg, LIN Meng-Hui, LIN Yu-Pei

Introduction
Modern humans are deficient of physical activity (DPA) and this may bring public health crisis to the society. One of the most common approach to avoid this to via exercises. However, many factors affect one’s determination and action to exercise. Thus, it is essential to understand the potential factors that affect the exercise behavior of the population to be intervened, so that the
people can modify their exercise behaviors gradually for a better health.

**Purpose/Methods**

We recruited 725 employees of the Taipei City Government working indoor to survey their current physical activity, attitude and satisfaction, self-efficacy, self-perceived benefits, and self-perceived barriers in exercise. Sex difference of the domains and overall contribution of the significant items were also evaluated. Also, the overall contribution of the significant items was evaluated using multiple regression model.

**Results**

Individual statistical analyses of the items of each demonstrated some differences between two sexes except self-perceived benefits. Further multiple logistic regressions found that attentiveness of own physical and psychological health was the common contributor towards persisting exercise in both sexes; while work stress and bad air quality reduced exercise level in male employees, the lack of exercise partners and guidance prominently impeded female employees to a higher exercise level.

**Conclusions**

Our findings provide a basis for planning further health promotion program to improve exercise behavior in workers who indoor.

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**Efficacy of lifestyle interventions in the reversion to normoglycemia in Korean prediabetics: one-year results from a randomised controlled trial**

**NAH Eun-Hee, CHU Jieun, KIM Suyoung, CHO Seon, KWON Eunjoo**

**Introduction**

This study aimed to determine the efficacy of personalized lifestyle interventions on the reversion of a prediabetic state to normoglycemia compared with regular blood glucose testing alone in prediabetes.

**Purpose/Methods**

A randomized, multicenter trial was conducted in prediabetes aged 30 to 70 with fasting blood glucose level of 5.6–6.9 mmol/L and/or HbA1c level of 39–46 mmol/mol recruited from health checkups at 16 health-promotion centers in Korea. The 799 recruited individuals were randomized to either the personalized lifestyle intervention group (LIG) or the control group (CG). The CG was provided with fasting blood glucose and HbA1c tests alone every 3 months during the first year. The LIG was provided not only blood glucose test but five sessions of personalized lifestyle counseling every 3 months during the first year. Data from lifestyle assessments and laboratory measurements were analyzed by 1-year after baseline.

**Results**

The 799 participants randomly allocated to the LIG (n=398) or the CG (n=401). For the analyses of outcomes, 629 participants were included: 325 in the LIG, 304 in the CG. Diet (7.03, 95% CI=4.56–10.86), alcohol (2.24, 95% CI=1.48–3.41), and exercise behaviors (1.85, 95% CI=1.31–2.63) were improved relative to baseline by the personalized lifestyle intervention in the LIG after adjustment. In terms of main outcome, the cumulative incidence of reversion from prediabetes to normoglycemia at the first year was
12-Week Health Promoting Program of Elderly Group and Its Impact on Fitness and Exercise Belief

TSENG Chun-Han, HSIEH Hung-Yu, WENG Chung-Feng, LIN Yi-Hui, CHEN Hsin-Chun, HSIAO Tong-Yun, LIN Yu-Xuan, LU Hsun-I

Introduction
The World Health Organization (WHO) proposed the concept of active ageing, including Health, Security, and Participation, in which exercise is regarded as the best strategy for maintaining health. According to sports health beliefs and sports commitment theory research, which contribute to the development of sports behaviors. Therefore, this study designed the health promoting program for elderly groups to explore the impact on physical fitness and sports beliefs.

Purpose/Methods
This study designed a 12-week program to improve physical fitness, exercise commitment, and health behaviors. 20 elderly from Xindian, Taiwan, were selected as the target group. The chief assistant in publicity and enrollment, and arranged for a 12-week health promoting intervention program, including active ageing and physical fitness, which are carried out in the form of lectures, discussions, and experience sharing. Before and after the program, the test and the sports belief questionnaires are conducted.

Results
There are 17 elderly in this elderly group, including 2 males and 15 females, with an average age of 68.8 years old. After 12 weeks of 2 hours once a week intervention, the participants' fitness (flexibility, muscle strength, balance and cardiorespiratory endurance) were measured before and after. In the paired-T test analysis, it was statistically significant (p<0.05). It showed an increase after the test but with no significant difference in physical disability exercise commitment questionnaire.

Conclusions
The traditional way of teaching was to train the elderly to exercise or teach sports skills. However, the training effect on sports habits was limited. The plan is to improve the physical fitness of the elderly in addition to the actual exercise. To conduct health promoting courses such as exercise benefits, exercise disability, and exercise experience sharing effectively enhance sports beliefs and result in positive impact on the development of sports behavior.

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Opportunistic actions using tools that are effective for enhancing advice given by health care operators on at-risk lifestyles

MARCHESI Cristina, BEDESCHI Emanuela, BOSI Sandra

Introduction
One of the priorities that has been identified in the regional Prevention plan drawn up by the Emilia Romagna region consists of considering opportunistic settings as privileged situations for starting up programmes intended to change individual behaviors.

Purpose/Methods
The method adopted was the motivational approach in opportunistic contexts, including management of chronically ill patients, with an eye on promoting health through: 1) incorporating settings for primary and secondary oncological prevention (medical and health centres, screening clinics, clinics of qualified doctors...); 2) supporting the ill patient with multidimensional action during therapeutic treatment. Each AUSL in the Emilia Romagna Region identified 3 settings to be used for disseminating the motivational approach over three levels; brief advice, delivery of informational material and a map of opportunities in the local area, sending to second-level departments. A telephone support/counselling service was also instituted in Reggio Emilia. The interventions represented a continuation of the actions seen in the regional Prevention plan "using the HPH approach" (development of social/health care networks with common goals and terminology).

Results
The interventions enabled the following results to be obtained in the Emilia-Romagna Region: 508 operators trained out of 602 contacted (84.39%); 10,649 users/patients targeted out of 31,974 users/patients contacted (33.31%); 2966 counselling sessions carried out.

Conclusions
The opportunistic setting proved to be extremely productive in terms of motivating change in individual at-risk behaviours of the persons identified through screening, advisors, public health services, occupational medicine, sports medicine and primary care.

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Session O4.7: WORKSHOP: War, peace and health promotion

OHNO Giichiro

This is the first session to discuss peace in HPH Congress. War destroys huge life and health. Vast majority of the victims are always non-combatants. War also deprives the right to receive medical care. The most reliable way to save the life is to prevent war. Peace is a major premise for promoting health. What can HP Hospitals do for peace? It is a subject of this workshop to explore solution tips for this question.

Supporting and promoting health among atomic bomb survivors (Hibakusha) in Hiroshima
Toh Yoon WONG

The report on medical support activities in West Bank and Gaza strip
Yoshio NEKOZUKA, M.D.

Medical support to Chinese victims with sulfur mustard and Lewisite mixture poisoning exposed to chemical weapons abandoned at the end of WWII
Osamu ISINO, M.D.

Anti-nuclear Weapon Activity by Doctors.
Arata MUKOYAMA

Consciousness change by learning from Café Constitution
Satomi OHNO

Special Report: "Medical matters" in Auschwitz. SS Doctors vs prisoners Doctors.
Maria CIESIELSKA MD PhD, Family Medicine Physician, Lazarski Univ., Unit of UNESCO Chair in Bioethics (Haifa University)

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Session O4.8: WORKSHOP of the working group "HPH and Health Literate Health Care Organizations"

PELIKAN Jürgen, NOWAK Peter

Aims / Rationale / Purpose
• To present and discuss the "International Self-Assessment Tool Organizational Health Literacy in health care organizations (hospitals)" as result of a HPH international Working Group on "Health Promoting Hospitals and Health Literate Health Care Organizations (HPH & HLO)."
• To discuss and plan translations of the instrument in different languages and piloting and validating it in different countries / networks of HPH.

Session design
• The session will start with inputs on the theoretical and methodological background on measuring organizational health literacy or health literate organizations respectively organizational health literacy responsiveness and then present the self-assessment tool.
• Depending on number of participants, either small working groups will be established or single participants will be asked to answer a number of questions concerning the tool.

Supporting and promoting health among atomic bomb survivors (Hibakusha) in Hiroshima

EZKIEL WONG Toh Yoon, AOKI Katsuaki

Introduction
Under the Atomic bomb Survivors Medical Care Law established in 1957, certified survivors receive coverage for their health expenses as well as free medical checkups up to four times per year. Hiroshima Kyoritsu Hospital, which caters to a community of more than 250,000, belongs to a medical cooperative that actively supports atomic bomb survivors (Hibakushas) through various activities such as providing medical health checkups as well as helping survivors receive certification.

Purpose/Methods
We aim to give a presentation regarding the current state of health care and support available to Hibakushas in Hiroshima. We will also describe the various undertakings of our medical cooperative to support Hibakushas living in Hiroshima as well as abroad.

Results
The different types of health promoting activities related to Hibakushas include: 1. Providing medical health checkups to local Hibakushas (4% of total in Hiroshima) 2. Providing medical health checkups to Hibakushas residing abroad (South Korea, Brazil, U.S.A, Canada, Australia, Taiwan etc) 3. Providing medical health checkups to 2nd generation Hibakushas (28% of total in Hiroshima) 4. Helping survivors obtain certification (419 cases, 60% success rate) 5. Providing interactive education regarding Hibakushas to new employees

Conclusions
As a health promoting hospital within Hiroshima city, the first city to come under the attack of a nuclear weapon, we have been actively promoting health among this population subset. As the number of Hibakushas decline, it is important to continue caring for them as we nurture the concept of peace playing a crucial role in health promotion. (No more Hibakushas!)
and its implementation in hospitals and other health care services.

- Finally, next steps for translating, piloting, and validating the instrument in different countries will be discussed in plenary.

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Session M1.1: Health Literacy

The experience of fulfilling shared-decision-making according to the Ottawa Charter in a local hospital in Taiwan

TANG Fong-Ping, KAO Li-Chueh, CHANG I-Ter, CHANG Wen-Kuei, CHEN Chang-Ming

Introduction

The Taiwan Patient Safety Reporting System 2014 annual report demonstrated 31.6% communication-related patient safety events originated from misunderstanding between health providers and patients. The 8th item of the Taiwan Annual Patient Safety Goal is to “Encourage patients and their family to engage in safety work,” and the main strategy is to implement Shared Decision Making (SDM). Therefore, building SDM culture is an imperative issue in the hospital.

Purpose/Methods

This plan aimed to build SDM culture in the hospital, and promote patients' health literacy. Since 2017, our strategy followed by the Ottawa Charter. Methods and measures include: setting up SDM work group, creating Patient-Decision-Aids (PDAs) and evaluating the user’s satisfaction, conducting on-the-job training for employees, promoting education courses for general population, broadcasting the concepts of SDM and health literacy by means of multimedia, setting up SDM network platform, and participating widely in a variety of SDM competitions.

Results

Nine PDAs were created and five of nine tools were practiced and got 92.8% users’ satisfaction. Learners’ satisfaction with on-the-job SDM training courses reached 95%. 98% employees knew the contents of SDM policy, which exceeded the required target of 80%. Total 134 people in community participated in eight SDM and health literacy sessions in five months, and the learners’ knowledge accuracy and satisfaction reached 91%. The SDM website was visited over 8000 times in a year.

Conclusions

Following the Ottawa Charter, SDM policy can be implemented comprehensively and create the culture successfully. SDM was therefore integrated into the working standard and put into practice by multidisciplinary team. Besides, promoting people’s health literacy can effectively enhance communication between health-providers and patients, hence facilitate the SDM process.

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The comparison on the degree of health literacy for two kinds of people seeking health checkup – self-paid and paid by national health insurance. Take a medical center in northern Taiwan for example.

CHANG Hsiao-Ting

Introduction

In the rapid development of economics and technology, People's health consciousness is raised, and the issue of health literacy has received more and more attention. And the gap of health literacy can influence the decision-making and health behaviors of the receivers of medical treatment. This study uses the channel of the prevention medicine of health check-up to explore the health literacy of two kinds of people using health check-up – self-paid and paid by national health insurance.

Purpose/Methods

The cross-sectional study is adopted, and the structural questionnaire of the simple scale (s-MHLS) (mandarin evaluation scale of health literacy) is employed. The questionnaire survey was conducted in the health check-up center in a medical center in Taiwan. The statistical methods are descriptive statistics and inferential statistics, which include Chi-square test, independent sample t-test, one factor variation, and logistic regression.

Results

The average score of health literacy of the self-paid group is 10.71. The average score of health literacy of the paid-by-national health insurance is 9.68, This shows that the degree of health literacy of the self-paid group is higher than that of the paid-by-national health insurance group, showing a significant difference in statistics. Finally, the degree of the health literacy makes no influence on the interval time when these two groups choose the health check-up.

Conclusions

Both, the self-paid group and the paid-by-national health insurance group have good health literacy. The health literacy of the self-paid group is higher than that of the paid-by-national health insurance group. And the demographic variables including age, educational degree, and monthly household income can influence the degree of the health literacy of these two groups.

Comments

Health literacy can cause health risk, the understanding of the degree of health literacy can help with better communication, medical knowledge and health education. And thus people's health can be bettered, the medical service can be used more effectively, and the medical cost can be reduced.

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Interaction Weights in Cross-Domain Governance for Medical Care-Example of Shared Decision Making

HUANG Chien Min

Introduction
Taiwan has good experience in health care administration. In order to get better patient safety, we often use PDCA method to solve and improve the quality of medical procedures and follow new concepts of medical care all over the world. Shared decision making is a new method to get better communication between patients and medical staffs. By this way, patient and his family could have a good talk with medical staff to get a suitable choice of medical treatment.

Purpose/Methods
In this study, we want to know that the cognition of patient while making a medical decision and the effect of intervention of SDM method. We use the Public Affairs Management model (PAM) as the theoretical framework to explore individual cognition and group behavior. The individual cognitive weights are based on the information integration theory (IIT) and the group interaction using the social average theorem (SAT) as the research method. We also validated the validity of quasi-experimental studies of IIT.

Results
The study invited 12 experts to conduct questionnaire interviews and completed the IIT and SAT questionnaires for 10 patients, 15 simulated subjects and 15 clinical nurses. As the results show that most of the experts agree that SDM is helpful. As to IIT questionnaire, 50% breast cancer patients interviewed in this study, the cognition belonged to the equal weighted average model, and SDM intervention have changed cognitive patterns of 40% patients, and up to 80% are with equal weight patterns.

Conclusions
Breast cancer patients and subjects of mock object group have the same cognitive model. Therefore, IIT experiments could be regarded as a quasi-experimental research. In the group interaction, the weight of medical personnel is relatively high, indicating that the influence of medical staff in the SDM process is greater. In general, through the intervention of SDM, it is possible to change the individual’s cognition. The patient may change the rules of information integration after talking with the medical staff.

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Session M1.2: Governance and leadership for HPH

Health promotion in hospitals: communication as a key domain of action on nurse’s practice

GOMES DA SILVA CARVALHO Queliane, DA SILVA ARAÚJO Thabyta, PEREIRA DE JESUS COSTA Ana Cristina, FRANCENELY CUNHA VIEIRA Neiva

Introduction
Poor communication leads to errors, misunderstanding, time consumption and it jeopardizes the relationship among patient, family and health care team. That said, communication can tackle an important role in guaranteeing patient safety and quality of care.

Purpose/Methods
The study aims to identify the most frequent nurse’s health promotion care practices in hospitals. Descriptive analyses with quantitative approach. A validated and trialed four points Likert-type questionnaire was applied to identify health promotion activities in hospital settings. The questionnaire was divided into four domains based on HPH guidelines (Budapest Declaration): DOMAIN A (Encourage an active and participative role for patients according to their health potential); DOMAIN B (Recognize differences in values, needs, and cultural conditions for individuals and groups); DOMAIN C (Create supportive, and stimulating living environments, especially for long-term and chronic patients); DOMAIN D (Enhance the provision and quality of information, communication, and skill training for patients and relatives). The questionnaire was administered to 68 registered nurses of medical and surgical wards in three public teaching hospitals in Recife-PE-Brazil.

Results
The domain D was the most accomplished (Friedman and Wilcoxon’s tests p<0,001), and the most accomplished action in domain D was the item “I communicate with inpatients and relatives, using clear, objective and easy to understand language” (Friedman’s Test p<0,001).

Conclusions
Results showed that nurses acknowledge the importance of providing information and communication to patients and are aware of the urge of communication quality. The study revealed the potential of Nurses’ educator skills to support patient recovery and wellbeing.

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Nurses’ perception of health promotion in Brazilian hospitals

GOMES DA SILVA CARVALHO Queliane, DA SILVA ARAÚJO Thabyta, PEREIRA DE JESUS COSTA Ana Cristina, FRANCENELY CUNHA VIEIRA Neiva

Introduction
Brazil is not part of the international network of Health Promoting Hospitals (HPH), but it supports a unified health system through national policies: humanization; health promotion (HP);
and health care attention net. All levels of care must consider these policies recommendation when organizing patient care programs. Besides that, the development of HP in hospitals is still unsure.

Purpose/Methods
The study aims to understand nurses’ perception of HP in hospitals’ care routine. Interpretive description with qualitative approach, using an open-end tool with two questions: What is an activity of HP in a hospital?; What are the activities, done by nurses, that are aimed at promoting health in hospital context? 68 nurses working in clinical and surgical wards of three teaching hospitals in Recife-PE-Brazil participated in the study. Nvivo11 was used to support data analysis. Ethical considerations were assured.

Results
Nurses’ definition of HP activities was related to the orientation of patients/family about diseases’ treatment, respecting patients’ needs, and supporting quality of life after discharge. Multidisciplinary team was cited as facilitator element of HP. When asked about HP in their daily activities, nurses tend to list medical procedures, care with intravenous devices, tubes, wounds, medication, patient’s self-care, as well as knowing familiar, social, and psychological aspects of patient’s life with emphases in education, communication, and qualified listening.

Conclusions
Under nurses’ perspective, HP activities translate into attending patients’ needs even though related to acute exacerbations or diseases’ treatment. The biomedical model of care permeates nurses’ quotes and it may influence the way they understand patient’s needs during hospitalization.

Comments
This research was supported by Global Affairs Canada.

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Evaluation of Health Promotion in University Hospitals

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Introduction
The concept of health promoting hospitals was presented for the first time more than 3 decades ago by the WHO Regional Office for Europe. In accordance with the idea, hospitals must play a key role in promoting health of society, patients and personnel in addition to treating the patients. The purpose of this study was to assess the status of university hospitals in Tehran City utilizing Iranian version of WHO Self-Assessment Tool of Health promoting hospitals.

Purpose/Methods
This study was a quantitative and cross-sectional research which assessed the status of the 22 in hospitals of shahid beheshti university of medical sciences of Iran. The Iranian version of self-assessment tool included 4 standards(1. management plan and policy, 2. patients and families health promoting, 3. staffs health promoting, 4. promoting health of inner and outer environment of hospital ) and 67 questions was used in this study. The collected data were analyzed by using SPSS 23 software.

Results
The average score of standards from was 6.93 out of 10. Highest score belonged to standard 3 (staffs health promoting) of 7.41 out of 10) and lowest score was related to standard 1 (management plan and policy) of 6.32 out of 10. According to the findings of the study performed, some parts of health promotion programs and its standards are performed in University Hospitals of Iran.

Conclusions
Based on the findings of this study, Iranian university hospitals already implement part of the standards of health promoting hospitals. However, according to different readiness of university hospitals, the process of implementing health promoting hospitals and its standards should be steps by steps.

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What is HPH for you?

AHN Ju Hee, JEONG Yu Jin, LEE Eun Ju

Introduction
The Korean network is a unique structure that includes national, university, public and private hospitals and health associations. The health needs of patients that each institution meets vary widely, and the standards and assessments are so different. What HPH do agencies and customers want? We have to know. What is HPH to us?

Purpose/Methods
From Jan. to Oct. 2018 we asked 102 customers: 1. What is the role of HPH? 2. The role of hospital, not treatment, was? To 10 employees we asked questions 1. and 2. To 10 employees I’ve shown the answers from 102 customers, We asked the same of employees.

Results
Customer responses 1. HPH’s role: Good explain 70% 2. The role of hosp.: Kindly answer me 55% Participate in the chronic ill 45% Before view the customer’s answer, the employee’s is: 1. HPH’s role: Providing information and changing behavior 60% Protect employees 40% 2. The role of hosp.: Participation in policy 40% Health examination 50% Become familiar10%. After view the customer’s answer, the employee’s is: 1. HPH’s role: Good explain60% protect Employees 40% 2. The role of hosp.: Good explain 70% Participation in policy 30%

Conclusions
1. From the client’s perspective, HPH prioritized easy explanation and the role of health manager. 2. From a customer’s perspective, the role of hospital excluding treatment was a demand for dementia and chronic disease. 3. From an employee’s point of view, HPH has priority in information provision and induction of change, but the health of employees is also very important. 4.
In the response of an employee who has seen the customer’s answer, The role of health promotion is that easy explanation takes precedence over information provision. Business, policy and research followed. Through the study, Suwon Hospital confirmed that the explanation of its medical staff is an important way to engage customers in their health.

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Facilitating the evolution of the network HPH-Cat using the brand methodology

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Introduction
In 1998 HPH Catalonia as a Regional network was accepted for the HPH. Since this date HPH Cat has done a lot of activities. Some examples: - It has elaborated two own Strategic Plans - It has organized four Regional Congress, one Confer-ence HPH and two meetings of best practices on health promo-tion. After 20 years of walking promoting health promotion in the Catalan healthcare organizations it was necessary to take a step forward to enable the continuous evolution of the network.

Purpose/Methods
We used the brand building model and strategic positioning as a method that in eight steps facilitates to go to a new position as a HPH network. In each step we had to define: 1. the characteristics of our network 2. the services that we gave 3. the emotional benefits of being part of it 4. the characteristics of our members 5. the symbols of our brand 6. the personality of it 7. three main values 8. the phrase that motivate and makes our brand credible.

Results
The Steering Committee of the HPH-Cat were answered the different items: 1. Meeting point to work. Spread knowledge. Collaboration with the HPH. 2. Knowledge the good practices. Training. Tools. 3. Work with other health professionals with the same objectives. Sharing values and projects. 4. Healthcare centers orientates to incorporate health promotion in their strategic management. 5. The green logo 6. Femal. Middle age. Innovative. Communicative 7. Expertise. Collaboration. Commitment for health 8. We are the Health Promoting Network

Conclusions
The model will serve as a guide in the whole process of the Strategic Communication Plan and will help us to strengthen the brand. We will try to capitalize on this concept to become the benchmark in Health Promotion in the health centers of Catalonia and continue leading the movement of health promoting. We search that everybody associate health promotion with HPH-Cat network. We want to consolidate HPH Catalonia as a brand in order to be easily identifiables in all the environments where we are.

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Session M1.3: Child, adolescent and maternal health

Can it effectively reduce breast engorgement through breast scraping for postpartum breastfeeding women

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Introduction
Breastfeeding is the most ideal way to provide neonatal nutrition, and is the best and safest way as well. The World Health Organization recommends breastfeeding for at least six months or even for 2 years or longer. However in the process of breastfeeding, the engorgement pain of the breasts usually causes breastfeeding interruption.

Purpose/Methods
The purpose of this study was to discuss the effect of breast scraping for improving the postpartum engorgement and pain of the breasts. The study subjects were women on the second day after the delivery into two groups: experimental group (n=23) and control group (n=25). The control group received routine care, while the experimental group received breast scraping on one acupoint (Yingchuang (Breast window) (ST16), Danzhong(Chest center) (RN17), Rugen (Breast root) (ST18), and Shidou (Food hole) (SP17), using scraping stick, from the bottom of the breast to scrape to the areola, each acupoint was scraped 7 times, two times a day in the morning and evening.

Results
The study showed, postpartum breastfeeding women who had breast scraping, had significant difference in the self-aware breast engorgement and the breast pain compared to the group with routine care. We conducted phone interviews one month after the delivery and found out that the experimental group had no breast pain problem, while 32% of the control group had. And about the breast engorgement, there was 4.3% of the experimental group had the breast engorgement, while there was 38% in the control group.

Conclusions
Breast scraping can effectively reduce breast engorgement and breast pain, helping postpartum women to be more confident in the process of breastfeeding, so that to increase the willingness to breastfeed and extend the time to breastfeed.

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Patterns of physical activity among women before and during pregnancy

LO Wen-Yen, CHIEN Li-Yin

Introduction
Regular and adequate levels of physical activity (PA) is recommended for women who plan for pregnancy and pregnant women are encouraged to maintain their PA. The aims of this study were to identify patterns of PA before and during pregnancy and characteristics related to the PA patterns.

Purpose/Methods
This longitudinal study included 622 women recruited from Northern Taiwan, who filled up structured questionnaires in the second- and third-trimester of pregnancy during the period from March, 2015 through May, 2017. Their PA was divided into >=450 and <450 metabolic equivalents-minutes (MET-m) per week based on WHO suggestions. Personal characteristics included age, parity, educational level, and employment status. Longitudinal latent class analysis was used to examine patterns of PA.

Results
The model yielded a three-class solution. They were (1) adequate PA maintenance (pre-pregnancy and second-trimester PA >=450 MET-m but third-trimester PA<450 MET-m); (2) reduced PA (PA>=450 MET-m before pregnancy and PA<450 MET-m during second and third trimester); (3) low PA (PA<450 MET-m before and during second and third trimester). The three patterns account for 12.6%, 24.3%, and 63.1% of the study women, respectively. Significantly more multipara and employed women were in the "adequate PA maintenance" group, more primipara were in the "reduced PA" group. Comparing to "low PA", more multipara and women with an educational level of university or higher were in the "adequate PA maintenance" group, more primipara were in the "reduced PA" group.

Conclusions
More than 60% of women do not have enough PA before and during pregnancy. Almost all women do not have enough PA during third-trimester of pregnancy. Promotion of PA among pregnant women and women who plan to become pregnant is needed.

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Psychosomatic health status and related factors among adolescent in the New Taipei City Adolescent Health Promotion Outpatient Clinics

CHEN Chih-Dao, KUO Hsiu-Wen, YEH Yu-Chun, TSAI Mei-Hua

Introduction
Adolescents are at the intense period of physical and mental changes. In addition to physical, intelligence and emotions also undergo rapid changes which affecting each other and achieving a significant relationship. The purpose of this study is to explore the correlation between adolescent emotional distress and healthy behavior, growth health, sexual orientation, sexual behavior, and family function. The results of the study are expected to serve as a reference for adolescent health promotion policies.

Purpose/Methods
This is a cross-sectional study was conducted in a teenagers’ health care clinic at a medical center in the north Taiwan. A total of 382 adolescents were assessed the physical and mental status using structured questionnaire, include Brief Symptom Rating Scale (BSRS-5), health and behavior problems, and assessment of family function (family APGAR). Multivariate logistic regression was performed to analyze the correlation between adolescent emotional adaptation and related factors.
Results
There were 38.2% adolescents who had emotional distress in the past week. Those who had suicidal thoughts were 16.6%, while those with suicidal thoughts above moderate level were 6.8%. In the multivariate logistic regression analysis, the older, dissatisfied looks or parts of the body, unhappy things in the last week, and low satisfaction with family function with emotional distress were significantly correlated.

Conclusions
This indicated that early detection of adolescents' emotional instability, providing a friendly environment for medical treatment, and giving adolescent-centered intervention programs. For example, psychological counseling has a positive effect on the physical and mental state of adolescents and later life stages.

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Breastfeeding rooms for women workers at Consorci Sanitari Integral

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Introduction
The Consorci Sanitari Integral is a public health and social consortium in Catalonia (Spain) with 3,382 workers: 825 are men and 2,557 are women. From them, 1,442 people are women between 25 and 45 years old, who potentially are in age of giving birth. The problem arises because our country has a short time for maternity leave (16 weeks). As WHO recommends 6 months of exclusive maternal lactation, the company decided to create breastfeeding rooms to promote maternal lactation, while workers got back to work.

Purpose/Methods
We decided to create 3 breastfeeding rooms in our 3 main hospitals to help to maintain the 6 first month of exclusive maternal lactation. Breastfeeding rooms are equipped with: comfortable chairs, sinks, water and soap to clean all materials, refrigerator (to keep milk in perfect conditions) and a double breast pump. The objective of the breastfeeding rooms is to help women workers in our centres Catalonia (Spain) to make compatible maternal lactation and professional life during first 6 months of babies’ life.

Results
The benefits of breastfeeding rooms at work are many. Among them: health promotion for mothers and babies; maternal lactation promotion; higher satisfaction, commitment and fidelity of women workers; less work absenteeism and better corporative image as a health promotion organization.

Conclusions
Our consortium is the first in Catalonia (Spain) of creating 3 rooms for women workers to promote maternal-lactation. Most of public hospitals do not have any breastfeeding rooms for workers, although around 75% of workers are women. A survey with users gave an excellent punctuation on the new rooms. The same users have also participated voluntarily in an internal communication campaign with own statements to promote breastfeeding.

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Cardiovascular health promotion in children and adolescents

BATINICA Maja, BOŽIKOV Jadranka, GRGURIĆ Josip

Introduction
In the scope of cardiovascular health, there is promotion of ideal cardiovascular health in all children, and there is improvement of cardiovascular health metric scores in children with heart diseases. In adult medicine it’s established that health-related quality of life (HRQOL) instruments should be used routinely to get an appropriate overview of the health status of patients with congenital heart disease (CHD). Information on that in children is lacking. Study analyses the self- and parent-reported HRQOL among patients with CHD, treated in tertiary pediatric cardiology care center, with the aim to compare perception of HRQOL between patients and their parents.

Purpose/Methods
A cross-sectional, single-centre, observational study was performed on 38 patients aged 8 to 18 years (20 M, 18 F), with various CHD, under routine follow-up. Patients and their parents completed a HRQOL questionnaire - PCQLITM. We analysed answers on the general health perception item, given at 5-point Likert scale, and subscales: Disease Impact (physical functioning) and Psychosocial Impact (psychological and social functioning). Descriptive and inferential statistics were used for data analysis, including calculation of Spearman’s correlation coefficients between patients’ and parents’ HRQOL scores.

Results
Excellent matching of self- and parent-estimated health-related quality of life was found: in 66% identical, in 18% parental perception was worse, while in 16% parents underestimate children’s impairments.

Conclusions
Perception of all aspects of health, made by patients and by their parents is important in patients’ health care because of getting a comprehensive overview of the health status of young patients with CHD. In case of mismatching, fatal outcomes can happen.

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Session M1.4: Workplace health promotion I

Exploring the two-year effects of evidence-based policy on hospital employees of health promoting hospitals and health services

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Introduction
Hospital employees are important asset and driver of Health Promoting Hospital and Health Services (HPH), which care for the health of their patients and employees. Evidence-based policy supports implementing health contests to raise the concepts of healthy life style and workplace in hospitals. The community health center collaborating with other divisions of Mackay Memorial Hospital continued the "Healthy MacKay Staff Image" program in 2016 and 2017 in hope to reassure the healthy workplace in the hospital.

Purpose/Methods
An 8-month health promotion contest, “Healthy MacKay Staff Image”, occurred in 2016 and 2017 with incentives of rafters in prize and money to winners. A questionnaire was used to collect self-perceived physical and mental health statues and self-reported life styles in snack and beverage consumption, healthy food selection and recognition, and exercise. Body weight, waistline, and BMI of the contestants were measured along with questionnaire responses as pre- and post-test data.

Results
820 and 801 participants enrolled for year 2016 and 2017. The results of each year showed both the reduction of BMI and waistline and the improvement of self-perceived physical and mental health were statistically significant. The accumulative losses in weight were 1487.8kg and 1,487.3kg with average weight loss 1.81kg per person. Furthermore, the improvements in life styles were also significant: late night supper, snack, food label reading, low-calorie foods, vegetables, fruits, exercise habit, and exercise times.

Conclusions
The “Healthy MacKay Staff Image” program was successful and effective on promoting physical and mental health. The program was the most popular ones comparing to other health promotion activities in the hospital with more participants, prize money, weight loss, and walking pace count. Also, 67 abstracts were submitted for the innovative program. We intended to create the health promotion program as a tradition and to localize the program to fit into each division of the hospital.

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Healthy Stairs and Healthy Nutrition in Motol University Hospital

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Introduction
Our motto for year 2019 is Healthy Stairs and Healthy Nutrition in our hospital. We are focusing on strengthening the cardiovascular system and reduction of abdominal fat. Our aim is to mobilize our employees but also patients. Lack of physical activity is an increasing problem and our hospital is working hard to become a good example in this area for both our patients and employees.

Purpose/Methods
The aim is the motivation for physical activity and improving the nutrition. Our pilot project consists of 50 participants. 1. Entrance Analysis on Bodystat machine. 2. Pedometer for each participant. 3. One month of preferring walking within the hospital including stairs. 4. Stairs are marked with motivational labels and will support the physical activity. 5. The participant is provided with healthy diet in cafeteria. 6. Final measurements on Bodystat machine. 7. Evaluation of the pilot project, feedback from the participants.

Results
The project will be finished in December 2019 with questionnaires and interview with the participants. The positives and negatives will be evaluated and the project will be offered to wider group of employees. Patients and their relatives will be included in the project as well, the informational campaign would lead them to the special labeled staircase which will serve for the whole hospital as an opportunity to improve the physical activity.

Conclusions
The healthy and friendly atmosphere in the hospital helps to improve providing quality health care. Improving of the physical condition and lowering the abdominal fat are great complementary activities for the ongoing projects for the employees. The pilot project provides positive motivation for the other employees. The employees participating in the project can then share their experiences with the patients and together promote healthy lifestyle.

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Effect of walking activities to enhance employees’ health lifestyle

CHUANG Chin-Ru, YU Shu-Chuan, HUNG Ling-Yu

Introduction
The World Health Organization points out that walking is one kind of physical activity that is the most easily practiced and recommended. According to the 2013 survey of the HPA in Taiwan, 30.4% of people who’s main exercise are walking. In 2018, our hospital conducted a questionnaire on exercise habits for 219
and 2 D), with an overall Staff reduction and replacement of 30 PN, 12 HW and 2 D) and transfer requests (19 PN, 9 HW). Hospital Administration had to manage many layoffs or job trans-

Doctors (D) to take care of 80 patients. In the last two years the Professional Nurses (PN), 34 Healthcare Workers (HW) and 11

Purpose/Methods
From June to October in 2018, we used the mobile step counter application -Hahago to hold a walking activity for employees. Af-
ter employees registered, they could record the number of daily walking steps. We established a walking group by hahago application that all participants were added in, and can be seen in the group. The outcomes were analyzed and applied by activity satisfaction survey, individual average daily steps and exercise habit questionnaire.

Results
147 employees participated in the walking activity and did for more than 5 months. There were 39 people who’s average daily steps were over ten thousand steps, and 37 people were between 6000 to 9999 steps, and 25 people were between 3000 to 5999 steps. A questionnaire survey was completed by 113 participants. The results showed that the percentage of exercise habits increased from 63.7% to 84.1%, and 89.4% of participants agreed this activity could increase their exercise intention and improve their health.

Conclusions
National Institute for Health and Care Excellence (NICE) indicate that you will remind yourself to walk with pedometer, and achieve recommended daily physical activity. This year we held a health promotion program by mobile step counter application and increased the employees’ interest in exercise walking significantly. It’s easy to do, fun, and with little cost. We will keep using mobile application to let more staff to participate in health promotion activities and make our staff healthier.

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Session M1.5: Mental health promotion I
The effectiveness of stress management training on the resilience of nursing managers

CHANG Li-Chun

Introduction
The emotional labor of nursing managers is significantly higher than general nurses. In long term of working days, it will easily cause negative effects on the body and mind, which will affect the unit atmosphere and the operation of the organization. The purpose of this study is evaluating the effectiveness of stress training courses to improve nursing managers’ resilience.

Purpose/Methods
Participants were nurse managers in Taiwan medical center. The resilience questionnaire is derived from Joint Commission of Tai-
wan. There are 9 questions and using the Likert 5-point scale, the higher the score, the worse the resilience. Participants receive stress adjustment training and take the resilience survey in three different times, like before (T0), after (T1), and one month after (T2). Data analysis is used SPSS 24.0 statistical software, which is performed the descriptive statistics and paired sample t-test.

Results
The three times scores of resilience were 30.78 ± 6.5, 27.3 ± 6.8, and 27.5 ± 7.8. The scores of T1 and T2 were lower than T0 (P<.05). The outcome represent that stress adjustment training program can increase the recovery of the subjects. After tracking three different times survey results. The T1 scores significantly increased. After one month of tracking, the overall resilience is still better than T0.
Conclusions
According to the results, the stress adjustment training can significantly improve the resilience of nursing managers. We find that T1 resilience scores are the greatest, Even though, the resilience declines over time, it is still significantly better than T0. Therefore, it is suggested that medical institutions should hold more stress adjustment programs, especially increasing the frequency of holding, in order to maintain the intensity of employees’ positive thinking, thereby enhancing mental health and achieving health promotion.

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Using Bingo Games to Help Improving Attention for Individuals with Chronic Schizophrenia

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Introduction
Attention plays an important role for people engaging in daily tasks, work, and leisure activities. Individuals with chronic schizophrenia suffered from chronicity of this disorder, resulting in cognitive impairments which include attention deficit. Attention deficit often cause patients greater difficulty in receiving and processing information, as well as learning new skills. Therefore, our patients participated in bingo games twice a week, to train their attention and improve activity performance in daily living.

Purpose/Methods
We selected 10 schizophrenic patients with motivation in participating bingo games and without obvious psychiatric symptoms from chronic psychiatric ward. Then the occupational therapist arranged one hour bingo games twice a week in the following 4 weeks. Before each game begun, the therapist would introduce rules of this activity, then started a three-round bingo game and reward the top three patients in each round.

Results
Patients in the bingo games group presented increased total answered questions of Chu’s Attention Test from 58.6 to 64.9 averagely; the correct answers improved from 56.4 to 63.1 averagely; and the incorrect answers decreased from 2.2 to 1.8 averagely. Beside, four of the participants improved to a higher grade from this test.

Conclusions
Regular participation in bingo games weekly has positive impact on improving attention in individuals with chronic schizophrenia. The improved attention helps patients to have better performance in self-care, social interaction, and activity involvement.

Comments
Individuals with chronic schizophrenia usually present attention deficit in different severity clinically, causing poor performance and learning efficiency, and leads to deterioration of patients’ function gradually. It is recommended that therapists arrange bingo games one to two times a week for patients to train their attention. As the patients’ attention improved, therapists can offer more variety of activities in promoting their mental and physical function.

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Efficacy study of EMDR treatment and mindfulness in patients with traumatic experience anxiety disorder

LIN Chun Jun, ZHANG Yu Zhang, HUANG Hui Ting

Introduction
EMDR can effectively treat anxiety disorders that accompany traumatic experience. Mindfulness techniques can enhance the emotional stability of a case. This study has three cases of anxiety disorders with traumatic experience. Practice the EMDR course after practicing the eight-week mindfulness technique. The degree of anxiety was measured at the first week, the eighth week, and the end of treatment, respectively. The event impact scale is tested after the first week of treatment and after the end of the treatment.

Purpose/Methods
The results of the study showed that after the method of acquiring righteous thoughts, the degree of anxiety decreased slightly, and the degree of anxiety decreased significantly after the end of the EDMR treatment. This may be because the anxiety and fear of traumatic experience cases are mainly from traumatic experience. EDMR treatment can effectively deal with traumatic experience, but the emotional stability ability of mindfulness skills can also play an indispensable role in treatment.

Results
After the completion of the treatment, the anxiety of the case, the degree of impact on the traumatic event and the impact on life adaptation were significantly reduced. Mindfulness techniques can also effectively alleviate the emotional distress caused by cases of traumatic events in the treatment room. It can be seen from the above that mindfulness techniques combined with EMDR treatment can help patients to experience the emotional distress and challenges that may be experienced during EMDR treatment.

Conclusions
The results of this study suggest that EMDR treatment can effectively deal with anxiety caused by traumatic experience, and mindfulness skills are an important way to improve the emotional stability of patients during treatment. Mindfulness techniques combined with EMDR treatment can help the case to successfully complete the treatment of traumatic experience and restore normal life adaptation. The results of this study can also be promoted to enhance the willingness of patients with anxiety disorders due to traumatic experience.

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The significance of pastoral volunteer’s basic training on empathy and visiting patient at Cardinal Tien Hospital

CHIU Ya-Tsen

Introduction
The CARDINAL TIEN HOSPITAL(CTH) is a medium-sized regional hospital in Taipei County, Taiwan. CTH’s ultimate goal is “caring patient for whole person, whole family, whole team and whole system”. In order to achieve this goal, the Pastoral Department of CTH provides a series of basic training courses to the pastoral volunteers, so that volunteers can have a better understanding of the goal, the spirit and the core value of the hospital and the Christian values in their service.

Purpose/Methods
The basic training for volunteers includes a total number of 40 hours. The basic training has two stages, the first stage of the training includes self-awareness, attentive listening and empathy, bedside visits to the patient. The second stage includes pastoral visits, lectures on how to show respect and care for the different needs of patients, the mission and spirituality of the pastoral volunteer. At the end of the course an evaluation of the volunteers is done.

Results
In 2017, there were 21 participants. At the first stage training, 90% of participants had satisfactory self-awareness, 90% on the attentive listening and empathy, and 89% bedside visits. At the second stage, the participants expressed 89% satisfactory on visiting skills and learning from patients or inspiration from patients’ family members. Volunteers were also strengthened in confidence through pastoral visits. The pastoral volunteers expressed they learned about the meaning of life, love for oneself and service to another.

Conclusions
This study shows that basic training on attentive listening, empathy and pastoral visits for new volunteers in CTH are needed. After the pastoral visits, the patients felt more peaceful in body, mind and spirit. The training offered by CTH, such as self-awareness and self-care, attentive listening and empathy, and pastoral visits did help volunteers to have greater self-awareness and personal growth, better understanding of life and spirituality, values and mission of CTH which is love your neighbor as Jesus said.

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Mindfulness-based cognitive interventions in obsessive-compulsive disorder: A case study

LIN Yi-Chun, LIN Chun-Jun

Session M1.6: Tobacco prevention and coping

Effectiveness of a multidisciplinary Interventions for smoking cessation in patients

WEI Fang-Chun, TSAI Yen-Ping, CHIU Ming-Huang

Introduction
Tobacco use has long been a major public health concern, and also the leading risk factor of chronic conditions such as cancer.
and pulmonary, cardiovascular, and respiratory diseases. Medical professionals play a critical role in smoking cessation services.

Purpose/Methods
This intervention program was implemented following the Ask-Advise-Refer strategy: Ask about the smoking status of the subject, giving Advices on cessation, Automatic referral to multidisciplinary team. A multidisciplinary team of physicians, nurses, nutritionists, and case managers were involved in the smoking cessation intervention, playing different roles according to smoking participants’ needs. Physicians provided medical advices regarding the participants’ health status and necessity of cessation. Nurses identified individuals with demand and intention to quit smoking, and conducted health education collaborating with case managers.

Results
A total of 601 participants were included in the analysis. The primary outcome measures included continued abstinence from the self-reported 7-day point prevalence of tobacco abstinence at 3 and 6-month follow up. After giving interviewed by telephone quitting behavior index contains quit rates point three months and six months. The quit rates at 3 and 6 month were 36% and 35%. There were significant differences improvement quit smoking program.

Conclusions
This study offers an additional intervention to improve smoking cessation rates. High intensity behavioral interventions that begin during a hospital stay and include at least six month of supportive contact after discharge promote smoking cessation among hospitalize patients. Systematic behavioral intervention (Ask-Advise-Refer) increases quit rates more than usual care.

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The effectiveness of smoking prevention classes for elementary school students in raising awareness of smoking prevention

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Introduction
Our hospital has been running smoking prevention classes aimed at elementary school students since 2012. The challenge has been to determine whether or not the classes are having an effect in preventing young people from taking up smoking. The aim of this study was to demonstrate that smoking prevention classes aimed at elementary school students are raising and maintaining awareness of smoking prevention among students.

Purpose/Methods
To measure the awareness of smoking prevention, the Kano Test for Social Nicotine Dependence-youth (KTSND-youth) was used in the present study. The intervention consisted of a 45-minute smoking prevention class aimed at 5th and 6th grade students in elementary school. Students who participated in the smoking prevention class were allocated to the intervention group and those who did not to the control group. The short-term effects (3 months) and long-term effects (one to two years) were assessed.

Results
Among the 590 elementary school students in the intervention group, the mean KTSND-youth score before participating in a smoking prevention class was 6.15±4.30, whereas a significant reduction to 5.14±4.21 was observed after 3 months of participating in the class. The mean KTSND-youth score for the control group (148 students) was 6.05±4.13. The long-term effects observed for junior high school students are currently under investigation.

Conclusions
Smoking prevention classes aimed at elementary school students raise awareness of smoking prevention among students.

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The effect of smoking cessation on the treatment of patients with cardiac catheterization

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Introduction
Smoking is the most common risk factor for patients with coronary heart disease, because smoking accelerates atherosclerosis, vasoconstriction, increases myocardial oxygen consumption, leads to increased blood pressure, heart hypertrophy and myocardial hypoxia, and nicotine and carbon monoxide also promote cholesterol deposition. In the blood vessel wall, causing arterial stenosis, not only harms your own health, but also harms non-smokers. Therefore, early cessation of smoking can reduce the risk to the heart.

Purpose/Methods
Patients who were hospitalized for cardiac catheterization were provided with one-on-one smoking counseling and daily care by the smoking cessation guards. After discharge from the hospital, the instructors were 7 days, 14 days, 3 months, and 6 days after cardiac catheterization. Track the success rate of smoking cessation by telephone or face-to-face care visit.

Results
A total of 27 people were offered to quit smoking, and the results of smoking cessation were as follows: 1. 7 days after receiving treatment: 9 people stopped smoking, 2 people reduced smoking, 9 people maintained the original amount of smoking, 7 people lost contact, the success rate was 33%. 2. 14 days after receiving treatment: 10 people stopped smoking, 2 people reduced smoking, 8 people maintained the original amount of smoking, 7 people lost contact, the success rate was 37%. 3. 3 months after receiving treatment: 13 people stopped smoking, 1 person smoked less, 12 people maintained the original amount of smoking, 1 person resumed smoking, the success rate was 48% 4. 6 months after receiving treatment: 12 people stopped smoking,
11 people maintained the original amount of smoking, 1 person resumed smoking, 1 person died, 2 people lost contact, the success rate was 44%

Conclusions
The success of quitting smoking depends on the intensity of motivation, quitting smoking immediately after making up your mind, and the support of family and friends. The timely intervention of smoking cessation guards can effectively improve the success rate of smoking cessation, reduce the chance of heart attack of coronary artery disease, and reduce the risk of heart again.

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Increasing Smoking Cessation Referral Rates in Hospitalized Patients
TSAI Yen Ping, WEI Fang-Chun, HUNG Yi-Pin

Introduction
Smoking almost causes damage to every organ in the body. If you can get rid of the smoke early, it will not only reduce the risk of chronic diseases, It also reduces the chance of wound infection and complications after surgery. Therefore, smoking cessation is very important for hospitalized patients. This project was designed to increase the smoking cessation referral rates to more than 26% for hospitalized patients.

Purpose/Methods
Data analysis found the rate of smoking cessation referral in hospitals is low (13.17%). Strategies to raise this rate significantly included implementing an advocate the correctness of the data obtained by nursing staff, increase the risk assessment of smoking cessation, setting up an automatic smoking cessation consultation system, implementing smoking cessation education programs for health professional and the new smoking cessation program and nursing guidance is the solution to this project.

Results
The smoking cessation referral rate increased to 29.25% and the surgical patients increased from 1.08% to 27.68%, other divisions referral rates have increased from 0% to 28.30%.

Conclusions
This project leveraged interdisciplinary cooperation to combines the hospital information system and adopts the automatic referral function of smoking cessation, which not only reduces the time of the nursing staff operating system, but also provides more patients to receive smoking cessation education services.

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Reduce outdoor second-hand smoke: Inspiration from Legendary Story

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Introduction
In 2007, the Tobacco Hazards Prevention Act of Taiwan had expanded the no-smoking places. Smoking is regulated in schools and most indoor public places, and the exposure rate of second-hand smoke in indoor public places has dropped significantly from 27.8% in 2008 to 5.3% in 2017. The people are no longer smoking indoors. In addition, smokers switched to outdoor and the exposure rate of secondhand smoke in outdoor increased from 36.2% in 2008 to 49.8% in 2017.

Purpose/Methods
An old legend in China, the Yellow River Valley was stricken by rampant floods year after year which brought great calamities to the country and the people. Yu, leader of the Xia tribe, was appointed by Emperor Shun to tame the floods. Instead of using anti-blocking methods to prevent flooding, he uses the method of diversion to transmit the floods of the Yellow River. This study uses the same concept to divert smokers to smoking areas rather than no smoking.

Results
We implement our strategy include environmental improvement and advice smoker to smoking area in october2018. We found that cleaning staff collecting cigarette butts from non-smoking areas has declined. The weight of cigarette butts dropped from an average of 14.89 kg per month to an average of 6.93 kg per month. The decline was 53%. Otherwise, patient satisfaction with hospitals implementing smoke prevention and control ser-vices increased by 0.4% (82.1% to 82.4%).

Conclusions
It is difficult to ban smoking in outdoor place. The wisdom of the ancestors can give us a good reference. We divert smokers to smoking areas rather than no smoking. It is not only to build a culture of respect others, but also to make second-hand smoke not spread everywhere. We also can implement health educa-tion in smoking areas and effectively assist smokers to quit smok-ing.

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Session M1.7: Addictive behaviors – prevention and coping

Web-based drinking prevention program linking school and home for elementary school students

KIM Younkyoung, LEE Chong Mi, KANG Seo Young, KIM Seon Hee

Introduction
The age of onset of drinking behavior is rapidly declining, but drinking prevention education for children is limited. Development of drinking prevention programs can connect schools with families to delay the onset of drinking, prior to elementary school students being accustomed to a drinking culture. This study aimed to develop a web-based drinking prevention program for elementary school students based on theory of planned behavior and to identify the potential effects of it using a pilot test.

Purpose/Methods
The program contents included information on excessive drinking, virtual drinking experiences, writing a family health contract, and training on how to refuse offers to drink. The one group pre-test-posttest design was used in this study. A total of 46 nine-year old students (24 boys and 22 girls) participated in two groups. Students undertook the program with the teachers at school (40 minutes), and with parents or adult family members at home (20 minutes) for five weeks once a week.

Results
After completion, there was significant improvement in attitudes ($z = -3.40, p = .001$), subjective norms ($z = -2.54, p = .011$), and intentions toward drinking prevention behavior ($z = -2.74, p = .006$), but no significant improvement in perceived behavioral control toward drinking prevention behavior ($z = -1.33, p = .183$).

Conclusions
This web-based drinking prevention program was effective in improving intentions toward drinking prevention behavior in elementary school students. The program needs to be expanded to delay the onset of drinking, and can suggest strategies to link schools and homes to increase health behaviors of children.

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Enhancing the Effectiveness of Betel Nut Cessation through a Group Health Literacy Course

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Introduction
Betel nuts constitute cultural food unique to Taiwan. Betel nut chewing can easily lead to addiction and canceration of oral mucosa. In a hospital in Taipei, Taiwan, we observed that 23.9% of people were diagnosed as potentially have oral cancer did not undergo an oral pathology biopsy subsequently. According to analysis, the reasons for not undergoing the biopsy were insufficient knowledge, economic difficulties, and inadequate promotion by health care workers. Assisting and counseling high-risk groups constitute the goal our hospital.

Purpose/Methods
We organized a group health literacy course in a hospital in Taipei. The course spanned 4 weeks, and sessions were provided 1 hour per week. The course was designed for people with high chewing frequency. A questionnaire survey was administered to understand the extent of the participants’ betel nut chewing. The 3A (ask, advise, assess) 3R (risk, relevance, reward) method was adopted to understand the situation of betel nut chewing and enhance our understanding of betel nuts.

Results
During the study period, from September 2017 to August 2018, our hospital assisted a total of 1531 people to receive oral cancer screening. A total of 84 people were screened as potentially having oral cancer and 64 of them (76.1%) reported chewing betel nuts. Among the patients, 56 registered complete attendance during the course. After 3 months, 49 patients quit betel nut chewing, and the effectiveness rate was 87.6%.

Conclusions
This indicates that the program facilitates early detection of cancer and exhibits the effect of early treatment and prevention.

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Public health education for problem drinking in Taiwan national alcohol prevention network

FANG Chun-Kai, LIN Chia-Hua

Introduction
Social drinking is common and accepted, however, problem drinking is not recognized by the public. In order to educate the public, Taiwan national alcohol prevention network held public health activities to promote the health literacy about problem drinking.

Purpose/Methods
There were 8 health care centers authorized by Taiwanese government to attend the project, including MacKay Memorial Hospital, Taipei Tzu Chi Hospital, Taipei Veterans General Hospital Yuli Branch, Tsao Tun Psychiatric Center, Chianan Psychiatric Center, China Medical University Hospital, Tung’s Taichung Metro Harbor Hospital, and Kaohsiung Municipal K’ai-Syuan Psychiatric Hospital. MacKay Memorial Hospital was the core center to integrate and construct the network. The data were collected in 2018.
Results
All 8 centers provided two different activities to promote health literacy about problem drinking, including (1) general speeches in communities and district prosecutor’s offices, and (2) special lectures for primary care providers. In general speeches in communities and district prosecutor’s offices, there were 208 activities and 12,619 participants in 2018. In special lectures for primary care providers, there were 43 lectures and 1,896 participants in 2018.

Conclusions
Social drinking is not illegal but problem drinking is dangerous to threaten health. To educate the public is important to prevent problem drinking and to find some alcoholics to receive health care.

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Alcohol prevention by BRENDA and case management in New Taipei City and Taipei City
FANG Chun-Kai, LIN Chia-Hua

Introduction
Problem drinking is a severe public health issue in Taiwan. How to reduce the amount and frequency of alcohol drinking is difficult for all health provide organization. The BRENDA model is a 6-step processes to enhance the motivation to quit or reduce alcohol. Case management is a popular model in health service. MackKay Memorial Hospital had been authorized by the governments of New Taipei City and Taipei City to practice the alcohol prevention projects. Combining BRENDA and case management, we tried to help alcoholics to quit or reduce alcohol.

Purpose/Methods
All participants would be transferred from outpatient clinics, inpatients of different departments, and social welfare departments. The team members included psychiatrists, nurses, counseling psychologists, clinical psychologists, and social workers. Excluding psychiatrists, all staff were as the case managers at the same time. All alcoholics were assessed with the Alcohol Use Disorders Identification Test (AUDIT) to determine the severity of alcohol consumption and followed at least 3 months. All funds were from New Taipei, Taipei Government, and Taiwan National Heath Insurance.

Results
In 2018, there were 248 alcoholics (new case: 131) in New Taipei City and 91(new case: 56) in Taipei City enrolled into the projects. In the beginning, by the AUDIT, there were 60% severe alcoholism, 40% moderate alcoholism and 0% mild alcoholism in New Taipei projects; and 64% severe alcoholism, 32% moderate alcoholism and 4% mild alcoholism in Taipei project. 3 months later, there were 24% severe, 35% moderate, and 41% mild alcoholism in New Taipei project; and 14% severe, 43% moderate, and 43% mild alcoholism in Taipei city.

Conclusions
Combining BRENDA and case management, alcoholics reduced the severity of alcoholic behavior successfully in both cities. Even low motivation, financial supports enhanced their will to accept health care services. Via good design clinical pathway and model, it is possible to help alcoholics to make their life better.

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Intervention of initiative medicine on smoking patients of a general practice: the use of a spirometer and the trans-theoretical model of change.

COLLA Serena Maria, MARTUCCI Gianfranco, BOSI Sandra

Introduction
The study is a preliminary evaluation of a possible model of initiative medicine in changing smoking habits and early detection of COPD in a GP practice, through the use of an outpatient spirometer and The Trans-theoretical Model (TTM) of change as a motivational tool to quit smoking.

Purpose/Methods
101 patients aged between 40 and 65 years and with Pack Year > 10 were selected from the GP electronic records; 44 accepted the intervention, a spirometry test followed by motivational intervention according to the TTM. Obstructed patients received a prescription of performing global hospital spirometry assessment. Every patient received an intervention according to the motivational stage: patients in pre-contemplation stage received a brief motivational message, with the Anti-Smoking Center (ASC) telephone number; to those in the contemplation stage the motivational balance is administered, according to the TTM; in a stage of preparation, a second meeting is scheduled for the setting of a plan. A telephone follow-up phase (after a period of at least one month) assessed change in smoking habit, number of cigarettes, or in motivational stage.

Results
At the end of follow-up, 42,5% of the sample had an advancement in the change process. Furthermore, 5 new diagnoses of COPD were performed.

Conclusions
According to the main chronic care models, sustainable interventions aimed at reducing smoking impact on health in primary health care setting are needed; this study tried to evaluate the feasibility of an intervention with aspect of primary and secondary prevention aspects, combining clinical and motivational components, with positive results.

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Session M2.1: Digitalization in health care & health promotion
Applying Data Mining Technology to Establish a Personalized Disease Risk Prediction Model

CHIEN Pei-Li, CHEN Shih-Ming, HUANG Hui-Ting, JOU Hei-Jen, LIAO Pei-Hung

Introduction
Prevention medicine is not only a major subject in public health but also an important concept in health promotion, and thus, health checkup plays a promotion role under the concept of disease prevention. Health condition of an individual is a continuous process, which requires a series of observation and tracking. In the past, many potential issues that health checkup results could have revealed were instead left undiscovered.

Purpose/Methods
In this study, we used the partitional clustering algorithm and Neuro network. The network structure of the neural network contained one hidden layer which provides enough accuracy. Thus, there is only one hidden layer in the back-propagation neural network. There are several neurons in the input layer; therefore, there are 2 neurons in the hidden layer when perform the test. Furthermore, there are three neurons in the output layer and they are metabolic disease, cardiovascular, and others.

Results
We found there are significant differences between male and female cases in terms of waist circumference, BMI, and systolic blood pressure and that age, preprandial glucose, and BMI are positively related. As for the network structure of the Neural Network Model, the overall accuracy rate is 81.6% and from the basic information of every individual, it is most useful for predicting the symptom of limb pain in nervous system.

Conclusions
This study aims to assist in the diagnosis of general health check-ups and the results showed that the neural network is the best model in this regard. The neural network model is able to effectively forecast chronic diseases through the information obtained from health checkups, and it is recommended for unnecessary examinations to be eliminated to save time and facilitate the diagnosis procedure, such that accuracy rate of diagnosis can be raised and medical expenses and unnecessary wastage can be reduced.

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The Use of Modern ICT (internet-communication technology) in The Comprehensive Care of The Elderly

LIN Chin Lon, CHEN Hsing-Chu, CHEN Chun-Hsun

Introduction
In Taiwan, elderly population is expected to rise to 20.6% in 2025, the demand for medical care increased tremendously. There is a shortage of qualified care providers. To meet this need, Taiwan-ese government tries to shift institution-based health care to community-based or home-based health care. Although all stakeholders involved, such as government, healthcare institutions, family, academic institutions, charity organizations and NGO’s (Non-Governmental Organizations) are working hard to provide the necessary care, the efforts to meet the rising demand remained fragmented.

Purpose/Methods
Using cloud storage of medical records as the backbone, we integrate advanced information technology, to effectively manage and integrate community resources, invited all care providers and volunteer organizations to join in and use community health station as a hub and send out trained field workers to collect and monitor the health status of community residents. We integrated all available medical record into the each household unit. The record is available only to authorized medical personnel.

Results
The satisfaction scores of participants, family and caregivers have been very high. We are able to reduce the readmission rate.

Conclusions
We believe that new information and communication technologies (ICT) will play an important role in the future care of our elderly. and our integrated health care model in linking the hospitals, nursing homes, day care stations, community centers and individual homes with joint efforts of all involved (Government, healthcare institutions, Universities, NGO’s) by fully taking advantage of modern information technology, will be very well accepted and becomes a norm in the future.

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The effectiveness of providing health-related educational videos to patients with Short Message Service (SMS) utilizing Electronic Medical Record System (EMR)

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Introduction
Information that patients receive in hospitals varies from basic hospital use to procedures and specific disease management. Providing information only by direct communication and leaflets has restrictions due to limited time and places. To solve the problem, Boramae Medical Center planned health-related educational videos to convey various types of information and improve understanding of patients. Furthermore, we performed the study to evaluate effectiveness of providing educational videos to patients via Short Message Service (SMS) using our Electronic Medical Record (EMR) system with the spread of smartphones.

Purpose/Methods
When a certain kind of information is prescribed like a medicine through our EMR system, patients receive SMS with an URL address, free from charge. Clicking the URL enables patients to watch the designated educational videos which contain information about diseases management, procedures and so on. We collected data about the total number of prescriptions and total number of actually clicked URLs to identify the use rate of the service.

Results
From the year 2013 to 2017, the total number of prescribed educational videos were 14759, 33931, 35820, 60129, 49938, respectively. The total number of clicked URLs (actual use rate) was 141%(14759/10467), 123%(33931/27568), 107%(35820/33436), 151%(60129/39798), 124%(49938/40289), respectively. It showed that medical staff have adapted to the prescription of videos and patients have become well accustomed to utilizing videos.

Conclusions
We found that providing educational videos to patients via EMR is effective both on the medical staff-side and patient-side according to increasing prescription numbers and actual use rate. Further study to identify the actual educational effect of videos will be helpful through active feedback from patients.

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Innovative communication enhances access for the general public to health information

OU-YANG Chih-Lin, LEE Chi-Tai, LEE Eric Kin-Lap, CHENG Jin-Shiung

Introduction
In this era of information explosion, the general public is able to access to health information through different channels on the Internets. However, the information spread through internet is frequently erroneous when reviewed by medical professionals. It is a very important topic in health education that the general public is aware of and understand the importance to access to correct health information. Kaohsiung Veteran General Hospital (VGHKS) therefore expects to introduce AI robotics to enhance health knowledge to the public.

Purpose/Methods
Zenbo, a capable robot, is designed to provide assistance, entertainment, and companionship by ASUS. The database of the Patient Decision Aid information of the Shared Decision Making program is stored in Zenbo. When the public comes to VGHKS, they can approach to Zenbo to key in keywords on screen or to scan QR codes with their smartphones for medical information. The information requested can be readily displayed on the screen and/or patient education videos would be shown through stepwise interactions.

Results
The film entitled “Do I need a vaccine for Herpes Zoster when I am aged more than 50 years old?” is stored in Zenbo. The general public decides whether to get vaccinated for Herpes Zoster after watching the film and answering a few health related questions, which offers opportunities for general public to gain awareness for the disease, insight for personal health conditions and willingness to make contribution to community immunity.

Conclusions
Hospital pharmacists provide the general public with correct medical information using Zenbo. The novel and interesting robot increases the willingness of the general public to access to medical information which has been seen profound and difficult to understand. Furthermore, the burden of pharmacist manpower is therefore decreased. How to use AI robotics ideally and to maximize their functions in the future warrant further studies.

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Session M2.2: Patient Safety

Application of OSCE in Evaluation of Learning Outcomes for Patient Safety Clinical Competence of the Postgraduate 2 years Nursing Training

SONG Truey-Yeh, CHEN Shu-Chuan

Introduction
The traditional assessment methods (ex. multiple-choice or essay questions) may not adequately evaluate mastery of essential skills and measure cognitive learning in clinical settings. Therefore, the use of performance-based assessment methods, such as the objective structured clinical examination (OSCE), in undergraduate nursing education is of fundamental importance. The purpose of this study, would like to assess patient safety clinical competence of the postgraduate 2 years nursing training by using OSCE.

Purpose/Methods
In 2015, we start using OSCE to evaluate the core competencies of the postgraduate 2 years nursing training in our hospital. An OSCE with 2 test-stations was arranged to assess the performance of 171 candidates. The broad competencies tested in the N1 OSCE included: prevention of fall care, pain care, restraint care; in the N2 OSCE included the acute care of chronic obstructive pulmonary disease and unstable angina; the measured capacity includes: physical assessment, communication skills, patient counseling skills, technical operations and reporting; Use of structural three-point evaluation scales, Each test station has two examiners, Angoff method by 15 experts, that wants to establish the pass/fail standard per station. Data analysis was performed by 20.0 SPSS statistical software, and analyzed by frequency distribution, percentage, mean and t-test.

Results
The results show that the mean score of N1 and N2 were (70.65±4.22) and (71.65±5.31); the pass rate was 79.3% (~84%);92% of the candidates feedbacked that the test station setting appropriately, 88% of the candidates feedbacked the test was moderately difficult. Each test of the 6 examiner Consistency Analysis results show the Kendall Consistency 0.610 ~ 0.665 (p=0.002 ~ 0.008); the consistency integrity within the test station question Cronbach ‘s α was 0.615 ~ 0.948 , indicating a high level of consistency between the questions. And the the restraint, prevention of falls and pain care quality is also significantly improved in the correct rate of monitor in 2016-2017.

Conclusions
Although OSCE spent a lot of manpower, time and money, these candidates agreed that OSCE really help them to improve the clinical skills.OSCE was useful to evaluation the advanced patient safety competence of nursing staff.

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Implementation of the ABCDEF Bundle to reduce Self-extubation in the Medical Intensive Care Unit

WU Chun-Yi, CHEN Hui-Mei, CHEN Ju-Chen

Introduction
Endotracheal intubation is a common procedure as part of Critical care. Self-extubation of removing endotracheal tube by the patient himself unexpectedly may result in airway injury, arrhythmia, and even death. There were 721 patient-times of indwelling endotracheal tube in our Medical Intensive Care Unit between January 2016 to April 2017. Self-extubation occurred 17 times during this period (self-extubation rate: 0.42%) which was higher than other medical centers (0.27%) that of Taiwan Healthcare Indicator Series, THIS.

Purpose/Methods
The reasons of Self-extubation were lack of an assessment for diagnosing deliriums, practice physical restraint-protocol inappropriately, delayed extubation, and no alarm system for high risk of Self-extubation. The project, lasted from May 2017 to May 2018, implemented “ABCDEF bundle” to reduce Self-extubation. The ABCDEF bundle represents an evidence-based guide for clinicians to approach the organizational changes needed for optimizing ICU patient recovery and outcomes. The ABCDEF bundle includes: Assess, Prevent, and Manage Pain, Both Spontaneous Awakening Trials (SAT) and Spontaneous Breathing Trials (SBT), Choice of analgesia and sedation, Delirium: Assess, Prevent, and Manage, Early mobility and Exercise, and Family engagement and empowerment. The bundle has individual components that are clearly defined, flexible to implement, and help empower multidisciplinary clinicians and families in the shared care of the critically ill. The ABCDEF bundle helps guide well-rounded patient care and optimal resource utilization resulting in more interactive ICU patients with better controlled pain, who can safely participate in higher-order physical and cognitive activities at the earliest point in their critical illness.

Results
During the project period, we had 580 intubated patients, and no self-extubation. After implementation of the above measures, the rate of unexpected removal fell dramatically from 0.42% to 0.00%. The project result showed a clinical significanc of patient safety of care in ICU.

Conclusions
The ABCDEF bundle performance showed significant and clinically meaningful improvements in outcomes including mechanical ventilation use. We would like to share our successful experience of patient safety management as a reference for clinical care.

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To improve the critical thinking of the nurses about peripheral intravenous fluids therapy by classroom teaching of concept map.

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Introduction
There’s around 70-80% of inpatients receive peripheral intravenous fluids therapy, which is an important part of clinical care. In order to ensure the quality of caring of the peripheral intravenous fluids therapy, the clinical teachers have to provide effective teaching methods to avoid implementation mistakes.

Purpose/Methods
The purpose of the study was to evaluate if the classroom teaching of concept map improved the critical thinking of the nurses about peripheral intravenous fluids therapy. We collected 26 nurses from as research object, and divided into two groups: experimental group (n=13) and control group (n=13). The control group had the traditional teaching methods, which put emphasis on memorization and reciting, while the experimental group used the concept map to design the teaching methods for peripheral intravenous fluids therapy, and connected important concepts by using the conceptual structure, and identify the key concepts to classify and had hierarchical sorting design, including: vascular assessment, precautions for infusion administration, nursing care records, and signs of phlebitis, etc. And used the drawing method for critical discussion.

Results
We compared two groups at the end of the course, and the concept map group used the drawing method to record the common problems of intravenous fluids therapy in colors and shapes, and after analysis and discussion, they invented a creative mnemonic phrase “ACIV” for intravenous fluids therapy (Assessment, nurse-patient Communication, IV techniques). The results showed that the experimental group had significantly higher critical thinking skills than the control group (p<0.001).

Conclusions
The results of this study showed that concept map teaching can enhance the ability of nurses to increase their thinking logic and enhance their critical thinking skills compared.

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Comparing the influences of Montelukast and inhaled corticosteroids on growth in young asthmatic children

FANG Li-Ching, WANG Jen-Yu

Introduction
Leukotriene receptor antagonists (LTRAs) and inhaled corticosteroids (ICS) are both suggested as medications for persistent asthma control in international guidelines. Montelukast is a kind of LTRAs and approved by the Food and Drug Administration for the prescription in young asthmatic children. The safety and efficacy of LTRAs and ICS on children were well established. However, their impacts on young children’s growth were not compared.

Purpose/Methods
This study included children with mild to moderate asthma, aged 3 to 12 years by medical records from 2013 to 2017. Subjects were divided into two groups. Group 1 involved children with Montelukast and without ICS control for twelve weeks. Group 2 involved those with ICS but without Montelukast therapy for twelve weeks. Height, weight and body mass index (BMI) before and after treatment were recorded. We compared growth of height, weight and BMI between group 1 and group 2.

Results
Total 164 subjects were enrolled (boy: girl=102:62). Group 1 had 48 children, and group 2 had 116 children. There were no significant differences between group 1 and group 2 in twelve weeks growing of height (1.73±1.65 cm vs. 1.19±1.61 cm, P=0.069), weight gain (0.71±0.97 kg vs. 0.77±1.43 kg, P=0.76) and BMI changes (-0.07±1.06 vs. 0.23±1.23, P=0.14).

Conclusions
The impact on growth from Montelukast and inhaled corticosteroids were not significantly different in short-term use for young asthmatic children.

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Effect of an Automated Screening and Reminding System for Notifying Senior Physicians in the Management of Clinically Deteriorating Patients at the General Wards: An Enhanced Clinical Alert System to Reduce the Incidence of In-hospital Cardiac Arrests

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Introduction
The prognosis of patients with cardiopulmonary arrest have remained very poor, while the awareness of deteriorating physiological condition by the staff was also limited. Early identification through relevant clinical criteria might provide timely investigation and intervention for the prevention of arrests. This reported describe a multi-year program aiming to establish a system to improve the identification of general ward patients with deteriorating physiological condition for timely management.

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Purpose/Methods
This 2,400-bed medical center established a Clinical Alert System in 2006, with physiologic and clinical screening criteria prompting staff members to inform senior physicians for participating in the management of deteriorating patients at the general wards. The system has evolved from paper-based records and phone calls in 2006 to electronic recording with mobile phone notification through short message system since 2013, and then to automated screening of physiological data input with reminding the staff for physician notification since 2016.

Results
Comparison of the notified cases (n=5,819) during the electronic recording/notifying period (2013 to 2016, n=5,819) and the automated screening and reminding period (2016 to 2017, n=2,065) showed that the incidence of subsequent cardiopulmonary arrests was significantly reduced for the latter period, with increase survival rate for inpatients (p<0.001). A markedly increased number of notification to senior physicians was also found, while the emergent endotracheal intubation could be avoided in some cases.

Conclusions
The establishment of an automated screening and reminding system for clinical alerting provides beneficial effectiveness on the enhancement of patient safety by reducing the incidence of unexpected cardiopulmonary arrests. This process, incorporated into the electronic medical record system can improve the alertness of medical staff to timely deal with the patient’s deteriorating condition, and providing education relevant to patient safety.

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Radiation exposure can be alleviated by innovative multidisciplinary care model in patients received percutaneous coronary intervention

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Introduction
Any radiation may carry risk of malignant disease, skin or eye damage, or other hazards. However, most interventional cardiologists neglected protection of radiation exposure to the patients or operators. This aim of study is to investigate the impact of innovative multidisciplinary care model on alleviating radiation exposure in patients received percutaneous coronary intervention. A multidisciplinary team was organized, including interventional cardiologists, dermatologist, intensivists, radiation technicians and nursing staffs from 2 hospitals with cardiac catheterization lab.

Purpose/Methods
The patient were divided into 3 groups: pre-interventional phase (n=64) from March to November 2016, interventional phase (n=42) from December 2016 to January 2017 and post-interventional phase (N=80) from February to December 2018. The key interventions include innovative head, eye and neck protection device, reduce frame rate of fluoroscopy with 15 frames/seconds instead of conventional 30 frames/seconds, reduce frame rate of video recording with 7.5 frames/seconds instead of conventional 15 frames/seconds and guideline for radiation protection.

Results
There is no difference among three study groups in baseline characteristic. The eye radiation dose of patients improved from 4.5±3.9 mSV in pre-interventional phase, to 2.2±2.4 and 0.7±0.6 mSV in post-interventional phase (p<0.001). The neck radiation dose of patients reduced from 22.2±39.1 mSV in pre-interventional phase, to 8.1±8.6 in interventional phase and 3.7±3.5 mSV in post-interventional phase (p<0.001). The back radiation dose of patients reduced from 183.8±286.3 mSV in pre-interventional phase, to 39.2±49.8 and 31.2±42.1 mSV in post-interventional phase (p<0.001).

Conclusions
The innovative multidisciplinary care model with lower radiation protocol and protection device was shown to reduce neck, eye and back radiation dose in patients received percutaneous coronary intervention. The radiation dose of doctors also reduced from 2.0±1.4 mSV in pre-interventional phase, to 1.1±1.3 in interventional phase and 1.2±0.9 mSV in post-interventional phase (p=0.001).

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Session M2.3: Community health promotion

Discussion on the Effect of Practical Smart Phone APP’s Teaching Combined with the Exercise Courses on the Improvement of the Health Status of the Elderly—A Pilot Study

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Introduction
In response to the ageing society, various health promotion activities to prevent the elderly from disability and dementia have gradually gained importance. This study selected two community health service stations of Mackay Memorial Hospital as the subjects. The “body and mind curriculum”, which is based on the practical application of the smart phone APP’s and exercise courses, is designed to enhance the health of the elderly through learning and exercise to promote active ageing.

Purpose/Methods
The course content included practical smart phone APP’s teaching, an exercise promotion among the elders using the elderly health exercise videos from THPA, and the assistance of creating
Volunteering could be an intervention method to prevent mental health problem in aging people.

**CHENG Chu-Hsuan, TZENG I-Shiang, KUO Chan-Yen, WANG Shwu-Guey, HSU Ron-Yuan**

**Introduction**
To investigate the difference of mental health between aging people who are engage Tzu-Chi volunteers and common community residents.

**Purpose/Methods**
This is a cross section study based on Taipei Tzu-Chi hospital regular health promotion program in Tzu-Chi volunteers and community training courses between 2016 and 2017. The participants were recruited to the mental health lesson in the courses. The Tzu-Chi volunteers were treated as the intervention group, and the community residents were treated as control group. The mental health was measured by two kinds of questionnaire, Short Portable Mental Status Questionnaire (SPMSQ) and 15 items Geriatric Depression Scale (GDS-15). The SPMSQ scored with more than 2 errors as cognitive impairment, and the GDS-15 scored with more than 6 as depression.

**Results**
This study included 538 volunteers and 325 community residents. The results from both indicate that less Tzu-Chi volunteers had cognitive impairment problem ($P<.001$) and depression problem ($P<.005$).

**Conclusions**
Voluntary work may prevent mental impairment and reduce the depression problem. Tzu-Chi volunteers have good emotions and social support, and aging people participate may have better quality of life.

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**Promoting Community Health Literacy - Experience of Building and Managing Community Health Stations**

**LI Yu-Chieh, LIN Mei-Wen, YU Shu-Chuan, HUNG Ling-Yu, CHOU Chi-Chun**

**Introduction**
This year, the population over 65 has exceeded 14% in our country, which become an ageing society. Due to demographic structure and lifestyle changes, the health and care of today's people should be focus on prevention and delay of disability in the health front. Not only taking into account personal health promotion, but also include the creation of a healthy community environment, to provide quality and affordable localized medical service, which enable people to have comprehensive physical and mental health.

**Purpose/Methods**
In our hospital, we cooperate with the neighborhood to establish a community health guard station, and volunteers recruited from the head of a neighborhood were received hospital training, relevant knowledge and skills, which provide blood pressure measurement and medical information. Filtering high-risk objects were done for individual education and hospital referral, and achieve secondary prevention due to early diagnosis and treatment. The outcomes were assessed analyzed and applied by service records, education and activity satisfaction survey, and health survey questionnaire.

**Results**
Fourteen community health guard stations were established by 2018, and 63 health promotion education activity were held with 1801 attendance. The satisfaction score was averaged 90.23 percent. 5478 person-times using physiological measurement services with 2754 person-times of education consultation, 52 person-times of long-term care consultation, 73 person-times of hospice palliative care and medical referral, 10 person-times assistive device rental, and 34 people were referred to hospital.

**Conclusions**
The hospital has extended medical services to the community. Compared with acute medical care, we focuses on health promotion related primary and secondary prevention, which is closer to life and easier to obtain. This activity become, at any moment, the concept of hospitals stationed in the community to guard the health of the people. By familiar places, we hope to provide medical information continually through regular time and places, and then build community cohesiveness and implement medical localization.
Mini oral sessions 2: Friday, May 31, 2019, 13:30-14:15

Session M2.4: Workplace health promotion II

Factors associated with occupational burnout among healthcare workers

WEI Fang-Chun, LEE Yi-Min

Introduction
This preliminary study on workplace health promotion examined the association between health-related factors and occupational burnout in the staff of a medical center in Northern Taiwan.

Purpose/Methods
A structured questionnaire which consisted of health needs, exercise environment and utilization status, food environment and utilization status, occupational burnout inventory, and individual characteristics was used in this cross-sectional study to collect data. We applied multiple regression models to examine factors associated with occupational burnout.

Results
385 participants were included, with the following scores on the four sub-scales of burnout: 48.45±17.34 (personal), 46.36±17.39 (work-related), 40.57±20.01 (client-related), and 43.88±16.31 (over-commitment to work). After adjusting for other confounders, the significant related factors of burnout level included: intention to leave the hospital and perceived sufficiency of physical activity levels, for personal, work-related and client-related; satisfaction towards the hospital’s caring for employees, for personal and work-related burnout; intention to leave the profession, professional background, and job characteristics, for over-commitment to work.

Conclusions
The findings indicated that intention to leave the hospital and perceived sufficiency of physical activity levels were two important factors related to occupational burnout. We suggest healthcare organizations provide resources improving staff’s PA and implement strategies enhancing cohesion among healthcare workers to reduce their occupational burnout.

Comments
This study applied a cross-sectional research design, collecting data by using a structured questionnaire in a convenience sample from the staff of a medical center in northern Taiwan. The aims of this study are to have an understanding of physical and mental health status among employees in the healthcare workplace and to conduct a pre-intervention health need assessment of a workplace health promotion program by adopting a holistic approach.

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Design of Music Therapy Program on the Physical and Mental Health of the Elderly in the Community

SUN Feng-Ching, CHANG Shu-Yuan, CHENG I-Ping, HUANG Ling-Ya

Introduction
Some studies have conducted research on elders with music therapy, and found that demented elders have significant differences in cognition, attention, interpersonal interaction, depression, and anxiety. Therefore, delaying and improving dementia, disabilities and weakness through the intervention of music activities, shall be the direction we need to take in compliance with social policy. The main purpose of this study is to design a structured music therapy course for the elderly in the community to delay dementia, disability and weakness.

Purpose/Methods
After the course is designed, community long-term care experts, Occupational therapists, and music therapists will jointly verify the validity and feasibility of the course. The course design is as follows: once a week, 2 hours each course, spanning 3 months. In order to understand the effectiveness of the course, a structured questionnaire was used for data collection. The research tools included the Basic Information Questionnaire for the Elderly, the MMSE, Physical Fitness Scale, the IADL Evaluation scale and Kihon Checklist.

Results
The 14 subjects (of whom 4 are male and 10 are female), who participated in the music therapy program, had a mean age of 75±7.4 years. The score of depression decreased 2.01 points after 12 weeks. The total score of Kihon Checklist Weakness Assessment Scale. showed significant differences after the intervention of the program (t=3.76, p<0.001). Significant pre- and post-test differences were also found in the following functional fitness tests: chair stand, arm curl, chair sit-and-reach, and 2-minute step.

Conclusions
If the elders in the community can participate in structured and highly accessible music activities, it can effectively encourage the participation of the elderly community and delay the disability and dementia through community participation. This program has been included and announced by the Central Unit of Taiwan, it is hoped that this program can be provided to the relevant units for reference, so that more community elders can be benefited by it.

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The association between demographic and work-related factors and occupational burnout and quality of life in healthcare workers

**WEI Fang-Chun, LEE Yi-Min**

**Introduction**
Healthcare work possesses the attributes of being labor intensive and high work load, resulting in heavy stress. Healthcare workplace consists of various professions with varying work patterns. This study aims to investigate demographic and work-related characteristics associated with occupational burnout and quality of life (QoL) in healthcare workers.

**Purpose/Methods**
Study participants were selected by convenience sampling from a medical center in Northern Taiwan and surveyed with a structured questionnaire comprising an occupational burnout inventory, WHO Quality of Life-BREF (WHOQOL-BREF), and demographic characteristics. Multiple regression models were applied to examine the related factors of burnout and QoL.

**Results**
385 participants were included. The results showed younger age was related to higher levels of personal, work-related, and client-related burnout; rotating shiftwork increased the score on client-related burnout, and supervisors had higher level of overcommitment to work than non-supervisors. Older age was associated with better physical health. Doctors had lower scores on psychological QoL than other professions; however, nurses and non-supervisors had lower environmental QoL than doctors and supervisors. Married participants reported a higher level of social QoL than their unmarried counterparts.

**Conclusions**
The findings indicated that medical organizations should focus on younger staff to reduce their occupational burnout by providing relaxation resources. We found various related factors on different domains of QoL, and multiple health promotion strategies for healthcare workers were suggested.

**Comments**
The aims of this study are to have an understanding of physical and mental health status among employees in the healthcare workplace.

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**Spiritual Care Plan for Nurses - “Blessed Time” Spiritual-Growth Groups**

**CHAN Chik-Yi, WU Ya-Li, PENG Jung-En, LIU Chih-Ju**

**Introduction**
Due to the high stress cause many nurses to resign and decrease the stability of nurse team. The purpose of this plan is to enable nurses to have spiritual growth and increase the stability of team and to have better awareness of patients’ spiritual need. Through two years of small groups of the whole nurse team in a comfort restaurant, we provide a safe environment for nurse to take care of spiritual needs, they increase the ability of self-awareness.

**Purpose/Methods**
The purpose of this plan is to provide a space for them to take care of their spiritual need and increase the intimacy of the nurse team. Through two-year spiritual guidance by chaplain, 20 participants in individual nurse team are separated in 5 groups according to their seniority. Every month, they learn reflective listening and empathy, increase self-awareness, and ensure their uniqueness by using expressive art tools.

**Results**
100% participants said that they are willing to attend the small interactive group after each year in their off duty time. Over 90% participants said that this spiritual plan effectively relieve their pressure and increase the belonging to their individual nurse team.

**Conclusions**
Through the small group interaction after two-year spiritual plan, participants are able to self care and awareness. Also, the spiritual groups increase the stability and decrease the resignation of the nurse team.

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**Increase the Retention Rate of New Nursing Staff in the Intensive Care Unit**

**YANG Li-Li, HUANG Li-Chun, CHAN Chik-Yi**

**Introduction**
The shortage of manpower caused by the loss of clinical nursing staff has become a common difficulty for hospitals. In order to explore this phenomenon, we noticed that new nursing staff faced the burden of role transformation and stress adaptation, causing denial and low self-awareness, and the retention of new nursing manpower. Further affecting the turnover rate of the original unit, the continuous vicious circle will become a high pressure, resulting in the continuous loss of nursing manpower.

**Purpose/Methods**
Comparing to clinical teaching focused on professional skills and knowledge in the past, we tried to restore the focus and understanding not only in the professional field, but also emphasizing the “people-oriented” as the core. Providing spiritual care and companionship, such as setting up a supportive growth group, regularly organizing care activities, such as interpersonal relationships and self-worth affirmation through games and interviews, with spiritual care as the main axis, assisting new nursing staff in adapting gain strength and self-affirmation.
Results

New nursing staff can express their affirmation of self-worth and professional image, showing positive correlation with job growth and retention, and the retention rate of new recruits will increase from 40% to 100%. Novice nurses also said that by participating in the program, they can effectively alleviate work stress, enhance self-confidence, and making good relationships in the workplace.

Conclusions

New nursing staff are under multiple pressures during their initial entry into the workplace. In addition to establishing a clinical counselor system, we are more concerned about the predicaments of newcomers facing stress adjustment, and the strength of faith has become the main axis of spiritual care. It is hoped that this experience will provide various units and even references by the institutes, reforming newcomers to stay to jointly creating "quality work environment."

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Session M2.5: Mental health promotion II

Pharmacological and psychological interventions for generalized anxiety disorder in adults: a network meta-analysis

CHEN Ting-Ren, HUANG Hui-Chuan, LIN Kuan-Chia

Introduction

Generalized anxiety disorder (GAD) is a significant and common mental illness with a lifetime prevalence of 3.7%. Main interventions and treatments for GAD include psychotherapy, medications, and self-help interventions. Regardless of the complexity of treatment decisions for GAD, few studies have conducted systematic comparisons of the efficacies of varying interventions. Thus, this study performed a valid network meta-analysis (NMA) of randomized controlled trials (RCTs) to synthesize direct and indirect evidence for alternative interventions for GAD.

Purpose/Methods

We searched four major bibliographic databases, Cochrane Central Register of Controlled Trials, Embase, PsyCINFO and PubMed for the published studies of RCTs of adult patients with a diagnosis of GAD. We extracted data from published reports. The standardized mean difference (SMD) was further calculated for the comparative treatment effects between each intervention and placebo. The ranking probabilities for all interventions were estimated and the hierarchy of each intervention was summarized as surface under the cumulative ranking curve.

Results

A total of 91 articles (14812 participants) were identified in the final NMA. The results showed that norepinephrine–dopamine reuptake inhibitor (SMD -1.84, 95% credible interval -3.05 to -0.62), noradrenergic and specific serotonergic antidepressant (-0.91, -1.62 to -0.20), melatonergic receptor agonist (-0.68, -1.15 to -0.21), SSRI (-0.67, -0.90 to -0.43), azapirone (-0.58, -1.0 to -0.17), anticonvulsant (-0.56, -0.85 to -0.28), serotonin–noradrenergic reuptake inhibitor (SNRI; -0.54, -0.79 to -0.30), and benzodiazepine (-0.40, -0.65 to -0.15) had greater effects than placebo.

Conclusions

Most pharmacological and psychological interventions were more effective for the GAD treatment than placebo and control condition. SSRI, SNRI, buspirose, pregabalin and BZD were more likely to have treatment effectiveness than others. Agomelatine might be a potential effective medication for treatment of GAD. Most psychotherapies and self-help intervention had greater effect than waitlist; however, these might overestimate their therapeutic effects since waitlist could be a nocebo.

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Demographic data of suicide completers and the trend of standardized suicide mortality ratio form 2010 to 2017 in Kaohsiung City, Taiwan

HSIEH Shing-Chen, LIN Ching-Hua, SU Shu-Fang

Introduction

Suicide is a worldwide phenomenon. According to the WHO, in 2015, about 800,000 suicides were documented worldwide. Overall, suicides account for 1.4% of premature deaths worldwide. Differences arise between regions and countries. The first goal to this study was to analyze the demographic data and their methods of suicide completers reported in Suicide Prevention Center of Kaohsiung City Government, Taiwan from January 2014 to August 2018. The second goal was to explore the trend of standardized suicide mortality ratio form 2010 to 2017 in this city after official strategies of suicide prevention.

Purpose/Methods

For the first step, suicide completers reported in Suicide Prevention Center, Kaohsiung City Government from January 2014 to August 2018 were enrolled. Data for analysis included age of completed suicide, sex, marital status, employment status, educational level, and suicide methods. Low educational level was defined as having completed only the compulsory 9-year education or less. Descriptive statistics was used to summarize the data (i.e., percentages, means, and SDs). For the second step, simple linear regression was used to test whether a liner trend of standardized suicide mortality ratio occurred from 2010 to 2017. The dependent variable was standardized suicide mortality ratio, and the independent variable was time (measured in years).

Results

Six hundred and sixty-two suicide completers were reported from Kaohsiung Suicide Prevention Center. Three hundred and ninety-seven (60%) of 662 were male. The average age was 51.7
Suicide death and cases management and survival analysis: a retrospective study in Taiwan, 2017-2018

HSIEH Hsing-Chen, HAUNG Joh-Jone, SU Shu-Fang, LIN Lichu, HAUNG YinJu

Introduction
The male suicide death rate is higher than women, which is a long-term challenge for Taiwan in promotion of suicide prevention. Taiwan is an island at the southeast of Asia with a population of 23 million. The government promotes health promotion policies, including suicide prevention. In Kaohsiung of Taiwan, with suicide managers use technology platforms to care the cases with suicide attempt. Our aims is intensify suicide prevention strategy, study suicide-related factors and outcomes.

Purpose/Methods
This is a retrospective study designed for secondary data analysis, we harvested the data of 155 suicide deaths in Kaohsiung City from January 1, 2017 to August 31, 2018. 36 of the 155 suicide deaths had received at least 3 months of our suicide aftercare visiting service program. 119 of them did not accept the service program. We uses the Cox proportional hazard model for empirical analysis.

Results
In the group of the 36 cases, gender was the only significant factor affecting survival rate after aftercare services. Men had longer survival time than women in the cases who had received aftercare service (odds ratio 2.7:1). Besides, the average age of 155 cases was 53.8 years old, and 65.2% males, and 46.5% with psychiatric diseases, 51% non-smoker, 60.6% non-debts, 29% non-insomnia and 41.9% taking sleeping pills. Multivariate test was showed only debt factor with significantly different.

Conclusions
In Asian culture, Habitually silence and responsibility for family economy were men’s characters. But, people are more tolerant to women’s emotional expression. Men suicide are harder to receive care and assistance than women because of their silence. Our study revealed among those who received aftercare service, suicide prevention effect of men was significantly better than that of women, it will be workable to emphasize the gender issues and the care in our future plan of suicide-prevention.
Session M2.6: Healthy lifestyles

Determinates of Excessive Daytime Sleepiness Level between Different Gender among Two College Freshmen in Northern Taiwan

TSOU Meng-Ting

Introduction
The main aims of this study are to investigate the different determinates of excessive daytime sleepiness among college freshmen in different gender. We analyzed the factors such as self-perceived health status, hours spent on television and computer, and the relationship with excessive daytime sleepiness in youth group.

Purpose/Methods
From July 2012 to September 2012, self-rated questionnaires were collected from freshmen of 2 colleges in northern Taiwan. It included habits, sleep hygiene, emotion and health perception, and hours spent on television and computer. Excessive daytime sleepiness was rated by Epworth sleepiness scale (ESS).

Results
The prevalence of excessive daytime sleepiness among college students is approximately 27.1%. When the depression score increased by 1 point, the Epworth sleepiness scale increased by 0.33-0.39 in the men and women. When they had smoking habit, the Epworth sleepiness scale increased by 0.78 and 0.04 the men and women, respectively. For every additional hour spent using computer on working days, the Epworth sleepiness scale increased by 0.11 in women.

Conclusions
Youth who develop symptoms of excessive daytime sleepiness should receive regular assessment of sleeping pattern and emotional states. The presence of other disease, drug intake, sleep hygiene, and time spent on the television/computer may affect sleep and should be assessed in detail. This analysis will assist in differential diagnosis and allow doctors to offer appropriate sleep hygiene education to these students.

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Effect of Disease Knowledge and Self-Efficacy on Blood Glucose and Weight Control in Gestational Diabetes Women.

CHANG Chiung-Wen, LU Yu-Ying, LIN Pei-Ying, HUANG Hui-Ting

Introduction
At present, GDM affects some 5~10 percent of pregnancies in Taiwan. Effectively controlling blood sugar level in expectant mothers is important to reducing the negative impact of GDM on both the mother and her fetus.

Purpose/Methods
This longitudinal study enrolled 60 pregnant women with diagnoses of GDM as participants. Data were collected at three time periods: during the 24th-28th week of pregnancy, during the 29th-32nd week of pregnancy, and after infant delivery. Data collection was using structured questionnaires, including the Diabetes Knowledge Scale for Pregnant Women and the Self-Efficacy Scales for Diet and Exercise Behaviors. Data on the prenatal weight, blood-sugar level, and of participants were collected from medical records. Data were subjected to descriptive and inferential analyses using SPSS 20.0.

Results
1. Participants scored relatively high on “disease-related diet concepts” and scored relatively low on “disease management”; 2. Participants who scored higher on dietary self-efficacy than exercise self-efficacy typically scored poorly on the question “When I feel pressed for time, I believe I am still able to adhere to my regular exercise and dietary regimen; 3. Disease awareness, exercise self-efficacy, and postpartum HbA1c were significantly associated, while disease awareness, dietary self-efficacy, and total weight gain during pregnancy were significantly associated.

Conclusions
The disease awareness, dietary and exercise self-efficacy of women with GDM can significantly change with the number of weeks of pregnancy. When the disease knowledge and self-efficacy are better, the weight and blood glucose control during pregnancy will be significantly improved.

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Developing physical activity habit in daily life: the Walking for Health program in nursing department

CHANG LiChun

Introduction
Studies have found sedentary lifestyle and insufficient physical activity (PA) is associated with obesity and metabolic syndrome. Walking is one of the most effective, inexpensive, and safe PAs.
This program aims to establish a habit of PA for the staff of nursing department.

**Purpose/Methods**

The Physical Activity Guidelines of Taiwan recommends adults should do at least 150 minutes of moderate-intensity PA per week, such as brisk walking. The current program applied a fixed-time (every workday after lunch), fixed-duration (30 minutes), and fixed-intensity (walking 100-110 steps/minute) method. The participants were asked to walk with a posture keeping back straight and bending elbow to 90 degrees. We assessed the rates of participation, compliance, and achievement to evaluate the program effect.

**Results**

The results indicated that the participation rate increased from 7% at the beginning of the program to 54% after 6 months, 84.3% of the participants complied with the 3 fixed-rules, and 97.5% achieved the goal of 150 minutes of moderate-intensity PA per week. We also found 60% of the non-participants were unable to do because they had to attend meetings at noon, and some individuals could not walk for a 30-minute duration because of insufficient time.

**Conclusions**

This intervention program provided evidence showing healthy lifestyle with physical activity could be developed in daily life in workdays. We suggest inviting more healthcare workers to participate in the Walking for Health program to achieve the goal of health promoting hospitals.

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**Effects of different training mode intervention on aerobic capacity, body composition and sleep quality in middle-aged women**

**LIN Shu-Mei, WANG Ting-Yao, HUANG Hui-Ting, CHIEN Pei-Li**

**Introduction**

Middle-aged women often have a tendency to gain weight due to decreased basal metabolic rate and physical activity. In order to make women’s elderly life more quality, women’s physical fitness and health in middle age is an issue that needs attention. High-intensity interval training (HIIT) could enhance the rate of fat metabolism and aerobic endurance. Based on this foundation, HIIT may provide other benefits to middle-aged women.

**Purpose/Methods**

To investigate the effects of different training mode on cardio-pulmonary fitness, body composition, and sleep quality in middle-aged women. Thirty-two women (age: 45.0±7.2 yrs, body fat percentage: 38.3±7.1%) participated this study performed HIIT (120% critical velocity, running 2 minutes with 1 minute rest, repeated 7 times) or moderate-intensity continuous training (MICT, 80% critical velocity for 20 minutes) 3 times a week for 12-week. Participants were asked to wear Mi band II to record the steps and sleep status.

**Results**

The body fat percentage (HIIT group: 39.7±4.5% to 38.5±4.7%, MICT group: 36.9±3.2% to 35.7±3.3) and maximal oxygen uptake (HIIT group: 30.7±5.3 to 33.8±5.3 ml/min/kg, MICT group: 30.8±3.5 to 33.3±5.0 ml/min/kg) were significantly improved in both groups (p < .05), and there was no difference between the groups (p > .05). However, the HIIT group significantly improved the ventilation threshold (26.3±5.6 to 29.5±4.2 ml/min/kg) and increased the proportion of deep sleep (31.1±8.0% to 33.2±9.2%) (p < .05).

**Conclusions**

When training was the same, both HIIT and MICT could significantly improve body composition (similar effects on body fat percentage improvement) and cardio-respiratory fitness (similar effects on maximal oxygen uptake improvement). However, compare to MICT, HIIT could also improve high-intensity exercise ability and sleep quality. This study highly recommended that middle-aged women to choose HIIT to improve body composition, cardio-pulmonary fitness and metabolic and sleep status.

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**Effects of Calorie Restriction with Exercise Intervention on Weight Control and Self-Efficacy in Obese Middle-aged Adults**

**WANG Ying-Fang, YANG Yu-Ru, HUNG Ta-Chuan**

**Introduction**

Exercise and calorie restriction are the first choices for the intervention of obesity. Self-efficacy is related to behavioral changes and is an important indicator of success in obesity treatment. The purpose of this study was to investigate the effect of single behavior change with exercise and dual behavioral changes with exercise and diet on weight control and self-efficacy in obese middle-aged adults.

**Purpose/Methods**

A total of 38 subjects (60.1±2.98 years of age) were enrolled in the study. Subjects were divided into the combined diet and exercise group (DE group), exercise group (E group), or control group (C group). Subjects in the DE and E group received high-intensity intermittent exercise training three times a week, 50 minutes each time for 12 weeks. The DE group also received calorie control, nutrition education and counseling, they photographed their daily dietary intake and uploaded it to an instant message software. A dietitian analyzed their daily intake and then gave feedback about dietary modifications. The C group did not receive any intervention. Paired t-test was used to examine changes in body composition, dietary intake, and diet and exercise self-efficacy. One-way ANOVA was used to compare changes in parameters among groups. Correlations between variables were examined by Pearson correlation coefficient. The significant level was set at α = .05.
Results
At the sixth weeks of intervention, the DE group had significant decreases of body weight (BW), body mass index (BMI), waist circumference and body fat, while the skeletal muscle showed significant increases. The C group had significant decreases of body fat, while the skeletal muscle showed significant increases. After 12 weeks of intervention, the BW of the ED group decreased 2.4%, and the BMI decreased 2.4%. BW of the C group decreased 1.2%, BMI decreased 1.3%, and the skeletal muscle increased 2.9%. There were no significant changes in the body composition of the E group. Regarding self-efficacy, “adherence to exercise habits” increased 23.9% from the pretest in the C group.

Conclusions
Dual behavioral changes with exercise and calorie control can reduce BW and BMI in obese middle-aged adults.

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Session M2.7: Management of NCDs and chronic diseases

Treatment Effectiveness of Systemic Exercise Therapy in Patients with Ureter Stones

CHON Sunghui, LEE Jungmin, PARK Juhyun, YOO Sangjun, JEONG Hyun

Introduction
For ureter stones less than 5mm in diameter, medical expulsive therapy (MET) can be expected stone spontaneous passage. This type of treatment is one of the treatment methods to help the stone passage. Drug intake (α-blockers), water intake as well as proper exercise can increase the rate of stone passage when performing MET. But most of the exercise to help the stone passage is “drink a lot of water, walk, go up and down the stairs etc ”. It lacks relevant papers and information. Explanation of non-systematic exercise by a health care provider may result in the patient not being able to actively follow the care of the healthcare provider, resulting in poor treatment effectiveness. The purpose of this study is to develop a systematic exercise program and to present it as an academic basis.

Purpose/Methods
We developed systematic exercise through literature, and we designed case-control study. From March 2018 to Nov 2018, we trained systematic exercise therapy for patients with MET (case group) who were diagnosed with ureter stones. We compared stone free rate in patients who underwent exercise therapy with the patients in 2017 who did not exercise education.

Results
Systematic exercise helped to remove stones. The group that performed MET + exercise therapy (case group) (OR = 11.306, 95% CI (4.783 – 26.726) were significantly higher than those of control group (only MET). Also, we found that the smaller the stone size, the higher the stone free rate (OR = 0.866, 95% CI (0.790 - 0.949))

Conclusions
Systematic exercise therapy in the treatment of stone has been shown to help increase the rate of stone passage. I think this study will be a helpful baseline for organizing the ureter stone exercise program

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Navigating Cancer Care Model from a Taiwanese Medical Center - Cancer Patients’ Needs and Service Effectiveness

LIN Chung-Yi, NIEN Yu-Ting, CHENG Fang-Ju

Introduction
Cancer has become the leading cause of mortality in Taiwan for years. At the time of diagnosis, patients are usually overwhelmed by fear. There may be a delay in treatment without appropriate supports. Patients also need self-management skills in response to cancer symptoms or complications produced by treatment. Our hospital has started navigating program to provide helps for cancer patients since 2010. This study aims to assess the needs of cancer patients and the service effectiveness of our program

Purpose/Methods
In cancer outpatient department, we set an isolated space, which under charge of nurses trained with cancer care and knowledge about social resources. In addition to ordinary referral, our patients largely come from automatic referral by system once cancers diagnosed, or referral by volunteers (cancer survivors) after visiting patients. Our service includes instructing caring skills, social resources application, providing assistive devices and combined care with multiple specialists such as dietitians or psychologists. To assess effectiveness, we randomly interviewed patients monthly.

Results
We collected data of the 6664 people who received our service from Jan. 2016 to Dec. 2017. Patients aged 51-60 (26%) and 41-50 (24%) account for majority, while 61-70 (18%) followed by. According to our data, caring skills, negative emotions and financial difficulties are the most common problems cancer patients face. Our navigating program can deal with the above problems and improve patients’ self-management.

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Self-management factors affect chronic disease

FANG Wen-Hui, KAO Tung-Wei, CHEN Wei-Liang, WANG Chung-Ching, WU Li-Wei, PENG Tao-Chun

Introduction
In Tri-Service General Hospital survey, there are 74.8% old people in the community who had the chronic disease and 74.32% people had over two kinds of chronic disease in 2016. Self-management of chronic disease is an important issue, so we promoted “Health self-management course” for old people.

Purpose/Methods
The core concept of cross-theoretical model: based on changing the balance of process, decision-making, and self-efficacy, we designed an open-ended questionnaire to survey the elderly's self-management of chronic diseases, their views and intentions on interests, obstacles and willingness. We planned health promotion plans and developed structured questionnaires for extensive surveys.

Results
Sampling the elders with chronic diseases over 55 years old in the Neihu District of Taipei City, using 34 open-ended questionnaires with five directions as the tool, issued 34 copies and returned 30 copies. The returned rate was 88.2%. The survey found that the factors affecting the self-management of chronic diseases in the elderly are as follows 1. Conscious benefits: improve bad habits, delay deterioration, avoid complications (80%), healthy life (83%); steady mood (57%), know more about yourself, and seek medical care immediately (27%), get information from other people’s experience (43%) 2. Consciously hinder: most of individual factors, relevant pipeline information (20%) 3. Promote willingness: for the sake of self and family happiness (67%), physical psychology has been strained or stressed (23%), when chronic symptoms cannot be resolved (27%)

Conclusions
The benefit of managing chronic diseases mainly prevent diseases and avoid deterioration. Maintain or restore health status for self and family. Therefore, in addition to the course management, we can become friends with the community.

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When an HMO and a service provider combine forces for the benefit of their Patients

OFFER Keren, HALLAK Michal, ELINSON Smadar

Introduction
In 2018, Assuta Medical Centers, Israel’s largest chain of private hospitals, initiated a program in collaboration with Maccabi Health Services, Israel’s second-largest HMO. The goal of the program was to provide knowledge and tools to diabetic patients and to enable them to take responsibility for their health by improving adherence to treatment and healthy life habits.

Purpose/Methods
The program included six sessions of an hour and a half during the dialysis session by a multidisciplinary team (a nurse, dietitian, social worker, and a physiotherapist). The lecturers used illustrated posters that were prepared in advance. The program benefits from the fact that the patients were “captive audience” during their dialysis treatment. The intervention was based on existing workforce and simple teaching aids and required very little resources.

Results
A survey conducted in the dialysis unit shows an increase in overall satisfaction. The workshop was explicitly mentioned as improving satisfaction. Hb A1C levels had declined from an average of 7.46% prior to 7.08% post-intervention (N=24, statistically not significant due to size of sample). The unit's staff reported an increase in the sense of competence and ability to answer the patient’s questions. A good relationship is established between the insurer and the service provider, who often represent conflicting interests.
A pilot study on the care integration model of chronic diseases in Taiwan.

HUANG Shou-Yung, HUANG Wei-Ling, CHEN Ling-Sui, HWANG Shang-Jhih

Introduction
In 2016, the life expectancy of people over the age of 65 was as high as 19.8 in Taiwan. In the past, the Department of Health and Welfare promoted a number of chronic disease prevention and control programs and constructed prevention and treatment networks for various diseases. With the development of disease prevention and control programs, there was a lack of integration between disease and disease prevention, and there was also a lack of cooperation and information exchange between institutions.

Purpose/Methods
We invite experts from diabetes, kidney disease, pulmonary obstruction, and cardiovascular experts to form an expert panel to discuss the integration direction of care for chronic diseases. Combine current scientific evidence and literature, integrate existing care models for diabetes, kidney disease, cardiovascular disease, and chronic obstructive pulmonary disease, and aim to establish a health promotion agency for chronic disease prevention and control.

Results
After expert meetings and literature review, the preliminary conclusions are as after, 1. Integrate kidney disease and diabetes; 2. To develop comprehensive care guidelines, from health promotion of front-end disease prevention to integration of mid- to late-stage disease referrals; 3. Establish a health education trainer training system and integrate the certification system; 4. This disease should be phased care and integrated from the hospital into the clinic; 5. Establish a CKD and DM care network platform that should have a consistent national wide information integration system.

Conclusions
The concepts of health literacy and health management should be incorporated into follow-up plans. Establish a comprehensive caring model for DM and CKD disease, and combine inspection and care processes to establish medical detection and reference standards. The hospital establishes a basic model and then promotes it to community clinics to establish an operating model for early diagnosis and treatment of DM and prevention of CKD disease. Integration care should receive some payment benefits to support the operation of this new system.
Applying Artificial Neural Network method to Evaluate the Service Quality of Emergency Rooms: Case Study of a Medical Center Hospital Located in Central Taiwan

SHIEH Jiunn-I, WU Hsin-Hung, HUANG Kuan-Kai

Introduction
Many patients and their families start their journeys from the emergency department, so the emergency department is important to hospitals and health systems. The poor service quality reduces the efficiency of services and satisfaction. In addition, poor service quality increases the patient treatment time and psychological stress. Therefore, it is essentially important to evaluate patients’ perceptions of emergency rooms in terms of line planning, medical professionalism, efficiency, and services.

Purpose/Methods
A case study was conducted to evaluate the service quality of emergency rooms from a medical center in Taiwan. The questionnaire developed based on SERVQUAL model has nineteen questions. The survey was taken on October 1- November 15, 2015 with 250 patients or their families. A total of 202 valid questionnaires were received and validated, representing an 80.8% return rate. An artificial neural network-based derived importance-performance analysis was developed to identify strengths and weaknesses of service quality of emergency rooms.

Results
The results show that “Verifying the name of patient before medical treatment”, “Clearly marked signs”, “Solving problem for nurses in real time”, “Well-skilled nurses”, “Detailed descriptions of the patient’s condition or examination results by physicians”, and “Well professional capabilities of medical personnel” are the major strengths, whereas “Significant entrance sign” and “Active care of your personal needs” are the major weaknesses of the service quality of emergency rooms to be improved by this medical center.

Conclusions
This case study developed an artificial neural network-based derived importance-performance analysis to evaluate the service quality of emergency rooms based on the SERVQUAL model in a medical center. The management team needs to concentrate on the six major strengths to gain competitiveness. In contrast, two major weaknesses should be placed in the highest priority for continuous improvement in order to remove customer dissatisfaction immediately. Then, the management team can significantly improve the quality and provide better services in emergency rooms.

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Intervention of pharmacists in first-visit patients of integrated geriatric clinic

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Introduction
The National Health Insurance in Taiwan guarantees all the citizens of adequate healthcare. Due to the ageing society and convenience to medical resources, therefore highly concern of polypharmacy arises in Taiwan. To the first-visits of the integrated geriatric clinic, the intervention of pharmacists before patients visiting doctors helps recognizing previous habits of medication use and potential drug-related problem (DRP).

Purpose/Methods
From April 1st to December 31st 2018, a total of 331 patients to Kaohsiung Veterans General Hospital integrated geriatric clinic were enrolled. These patients were being surveyed of compliance to previous medication, drug-drug interaction between prescriptions and OTC products or traditional Chinese medicine, and suggestion of dose adjustment, the evaluations were provided as comments to the doctors.

Results
The analyzed patients with average age 79 y/o, and 62.2% with medication from different medical institutions. 67.7% of whom showed good compliance, while reasons related to poor medication use were self-adjustment (40.4%), self-discontinuation (31.3%), and inappropriate use due to medication knowledge insufficiency (28.3%); platelet aggregation inhibitors and benzodiazepine derivatives were two main groups with poor compliance and patient education being done right after DRPs were found. The mean number of drug used before and after clinic integration was 6.3 and 5.9, and one potential inappropriate medication in average before patients’ first visit.

Conclusions
Intervention of pharmacists helps fully understanding patients’ actual medication behaviors. Polypharmacy is frequently seen in most of the elders; geriatric integration service reduces number of medications and improves compliance as well. Pharmacists’ evaluation prior provides an efficient way to this comprehensive care.

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Evaluation of Real-time online service on pharmaceutical care communication

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Introduction
In the healthcare team, pharmacists have the responsibility of providing professional services to improve patients’ medication
Mini oral sessions 2: Friday, May 31, 2019, 13:30-14:15

safety. To help patients, pharmacists will provide professional guidance and demonstration, answer questions and give advice regarding medications. When foreigners go picking up the medicines at the pharmacy, pharmacists usually provide medicine bags and health education leaflets with instructions in foreign languages. However, if foreign patients have more questions, both parties have to communicate in a language that they are not really familiar with.

Purpose/Methods

“BEasy!” is an interpretation App which can help people speaking different mother tongues to communicate with each other through the real-time voice and video calls; moreover, it can also be applied to pharmacy care services. For example, when foreign patients come for medical consultation, pharmacists can use “BEasy!” to interpret the questions first; then the answers given by pharmacists will be interpreted back into the languages that could be understood by foreign patients.

Results

After the consultation, the patients will be asked to fill out a questionnaire to evaluate the acceptance and satisfaction of using this interactive app. This can also help investigate whether various types of methods, including real-time communications between people, word instructions and leaflets will bring about different understandings of safe medication use. We have surveyed 30 foreign workers in 10 days and conducted a statistical analysis. Later, we found substantial benefits in using this interactive app to communicate with patients.

Conclusions

The applied technology innovations are truly a new turn to solve current healthcare problems. The Internet breaks the geographical restrictions with the feature of immediacy. By making good use of this app, we can break down language barriers, help foreign patients and the elders nursed by migrant caregivers, and offer them better medical treatments and a safer use of medications.

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Implementing Integrated Care for Elder with Dementia

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Introduction

Taiwan’s elder population hits 3.2 million, about 14.05% of the total population in 2018. On average, one out of every ten people belongs to the aging group. There’re about 8% of the dementia elderly in Taoyuan. Dementia Care is the important issue in community.

Purpose/Methods

The purpose of this study is to implement integrated care community for dementia elderly to increase life quality of both family and themselves. We developed care policy for dementia elderly, regularly hold health care and health prevention activities, integrated all services, such as AD8 screening, health education, health promotion, memory clinics, pharmacological & non-pharmacological interventions, and follow-up by care manager. We established three day care units in community, recruited volunteers & training, organized the happy family supporting groups, teaching care skills & sharing group.

Results

After one year intervention, 119 subjects were diagnosed demented and treated. A completed case management was done in all of them. Including assessment, giving advice and information, planning, pharmacological & non-pharmacological intervention, and monitoring of care. 30 subjects participated “Activating brain class” in day care unit. 691 people completed training program. 45 families participated the care skills class & sharing group.

Conclusions

Research reveals the following (1) Progress a comprehensive integrated care on dementia elderly is helpful for dementia elderly and their families. (2) The operation programs of the integrated care on dementia are developed from the research are contributory on promoting of dementia care for Taiwan’s elderly. Recommends the community of elder dementia care program to expand and practice the programs of dementia integrated care.

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E-Posters: Addictive behaviors - prevention and coping

The status and demographic analysis in involuntary group treatment for second tiernarcotics users

LIN Yuju, WU Weihsin, LIN Yu-wen, YANG Nan-ping, LIN Ching-feng

Introduction
We use the Relapse Prevention model design and conducted involuntary group therapy for second tiernarcotics users. Analysis of the current collection and attendance status of the group members, basic demographic data, to get an idea of the current situation of drug users in Keelung.

Purpose/Methods
The group has 15 sessions every two weeks, and 60 minutes of structured and closed group therapy. From February 2012 to October 2018, 442 members joined group therapy. We collected members’ demographic data three times: at their initial visit, pre-test in first session, and the post-test in last session. Due to the variability of member’s work status, the post-test was the most important source of data, with pre-test ranking second. If it is impossible to collect, findings were based on the data of the initial visit.

Results
Members need to participate in the group more than 12 sessions in order to reach the standard of completion of treatment. A total of 241 have reached the completion of treatment standards, and the treatment completion rate is 54.5%. According to demographic analysis, whether the completion of treatment in the case is significantly different between the age at which the second tier narcotics is used and the age at the end of treatment. We can also know whether their working or not is related to completing treatment.

Conclusions
This study analyzed the information provided by the group treatment members of Keelung hospital in Taiwan, so the results cannot be analogized to other regions. It is known that the sooner a member starts using the drug, or the younger user, the harder it is for the member to complete treatment, and whether the member has income or not does affect the completion of treatment.

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The Exploration of Well-being and Related Factors-Proactive Coping, Control Belief among Middle-aged Population

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Introduction
Aging has become a global problem and the elderly will be the major proportion of the society. Degeneration of body, chronic diseases, and reducing social functions greatly influence the somatic and psychological status of the middle-aged people. Well-being is an important indicator of successful aging and the factors that affect the degree of well-being are different among...
YING-HUA Chao, SHU-HUA Huang

Introduction
To investigate the daily diet and exercise habits in Miaoli County of Hakka ethnic groups.

Purpose/Methods
In this study, a questionnaire survey method was used to collect samples of 10 community care stations in Miaoli County to investigate their daily diet and exercise habits and to measure their blood pressure, blood lipids, blood glucose, body mass and body mass index (BMI) for a total of 299 the middle-aged and elderly Hakka residents completed the questionnaire.

Results
The study found that the average age was 63 years, with an average body weight of 62.9 kg, an average BMI of 24.1, an average of 186.9 of cholesterol, and a majority of 168 (56.2%) with chronic diseases, of which 80 were hypertensive, 230 (76.9%) did not smoke, 196 (65.6%) did not drink alcohol, 286 (95.7%) did not chew betel nut, and 113 (37.8%) exercised 3-5 times a week. In terms of dietary behaviors, fried foods seldom eats at most 173 (57.9%), high-fat foods rarely eat at most 195 (65.2%), marinades or lard at least 148 (49.5%).

Conclusions
The results of this study can be used as reference for community guiding Hakka residents.

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The relationship between unmet healthcare needs and quality of life in Korean elderly: EQ-5D assessment

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Introduction
The use of medical services is essential to maintaining a healthy life for the elderly and improving the quality of life, but unmet medical treatment occurs for various reasons. Unmet medical care has recently begun to get attention as a significant factor influencing the quality of life in later years in geriatric studies. The purpose of this study is to analyze the relationship between the Korean National Nutrition Survey data and the quality of life through EQ-5D.

Purpose/Methods
In this study, 3,880 out of 4,509 elderly patients aged 65 years or more who participated in the National Health and Nutrition Survey data during the 6th period (2013 ~ 2015) were included from the analysis of unmet healthcare needs. In the study, composite sampled data were used and analyzed by Rao-Scott-square test using weighted questionnaire and test stratification (strata).

Results
It was statistically significant in the elderly who were involved were more than 75 years old (p<0.001), female (p=0.010), having less than middle-school education (p<0.001), without spouse (p<0.001), and lower income (p=0.001). In addition, EQ-5D according to the healthcare needs analysis showed that elderly...
Conclusions
As a result of this study, it was found that the condition to manage health and the satisfaction of medical service, which is an opportunity to assess and affects the quality of life. Even if the elderly do not visit the hospital, they should be able to recognize that they are being managed continuously. In order to do this, the researcher proposes to revitalize community care by national policy.

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International day Stop Pressure Ulcers in the Pilsen University Hospital

MULLEROVA Nina

Introduction
Despite considerable international efforts to reduce the incidence of pressure ulcers, this complication is still a major nursing problem during healthcare providing. Pressure ulcers occur not only in the hospital but also in the home or social services facilities. In our hospital, almost 50% of patients who was admitted with existing pressure ulcers. Therefore, it needs to be constantly devoted to oneself. Important is focus on the systematic education of nurses but also of patients, their relatives

Purpose/Methods
In 2013, Pilsen University Hospital (PUH) actively supported the recommendations of the European Pressure Ulcer Advisory Panel (EPUAP) and joined to the periodically event making international day Stop Pressure Ulcers. As part of this initiative, the professional team of PUH prepares wide range of educations materials and tools to ensure the quality education program for the professional and non-professional public in accordance with the latest international recommendations of EPUAP. We also work intensively on cooperation with health schools

Results
Increasing of the percentage of educated nurses. Systematic and targeted education of health schools’ students to reduce the prevalence of pressure ulcers in the CZ Rep. In 2018, 13% of the PUH nurses were trained. It was also created a discussion forum for chronic wounds care professional. A training symposium for them was organized (over 80 nurses and students were participated). Creation of educational videos and materials targeted at outpatient patients

Conclusions
Even though the issue of pressure ulcers received much attention at different levels, it’s necessary to push ahead constantly. It’s essential that each healthcare providers updates local nursing practices according to examples of best practice and EPUAP recommendations, and then set internal procedures and controlled their compliance. Necessary is focus on continuous education of professionals and the laic public. Only by this systematic mechanism we can achieve of pressure ulcers occurrence minimizing.
Analysis on the Treatment of Non-opium Addiction Cases in Psychiatric Center in Southern Taiwan

CHANG Shu-Min, CHEN Wei, LI Chun-Hong, LU Huei-Lan, CHENG Ching-Ming

Introduction
The purpose of this program was to enhance the treatment motivation of non-opioid users, strengthen anti-drug skills, and reduce the reuse caused by withdrawal symptoms or cravings. Treatment strategy included outpatient follow-up, case management, health education, psychotherapy and family therapy, providing a better social psychology management for addicts.

Purpose/Methods
Subjects were the non-opium drug addicts in Tainan area of Taiwan. The medical treatment methods include outpatient examination, follow-up, group psychotherapy or individual psychotherapy. The test items include urine examination, liver and kidney function test, blood cell index examination, blood serum examination of type virus and sexually transmitted diseases examination. Statistical analysis of data was performed with SPSS18 version.

Results
The outpatient follow-up rate was 93.1%, and the treatment completion rate was 64.4%. According to the DSM-5 diagnostic criteria, a total of 110 cases met the diagnostic criteria for drug addiction, of which 72 (44%) were mild substance use, 19 (12%) were moderately used, and 19 (12%) were severely used. The negative urine test rate was 73%, and the urine test negative rate was 99% when the last quarter of the treatment was performed.

Conclusions
The treatment effect has reached the expected goal. The biggest reason is that the source of the case is mostly referral from the judicial authorities. It is necessary to report to the local inspection department and check the urine regularly, only one case used drug during the treatment. On the whole, there is a goal of achieving effective harm reduction. However, there is currently no effective drug treatment model for the treatment of opioid addiction. In the future, it may be considered to conduct research on addiction drugs in a trial manner, and through the professional training and empowerment, with case management as the core, the rehabilitation of patients with non-opioid drug addictions.

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Use Team Resource Management techniques to prevent the incidence of pressure injury in patients.

JIAN SIAO-HUEI, HSIEH HUI-LING, YU YING-TIAN, CHANG HSIN-YI, TSENG MENG-CHUAN, HSIEH PEI-CHI, CHUANG SHU-TING, CHIEN SOU-HSIN

Introduction
The Taiwan Joint Commission has used pressure injury as an indicator of Taiwan’s clinical performance since 2011 (TCP). The occurrence of stress injury will prolong hospital stay, increase infection, and cost more medical fees. In 2017, the prevalence of pressure injury in the emergency ward of our hospital was 0.24%, which is higher than the average rate of our hospital (maximum of 0.11%). The literature points out how to prevent pressure injury is an important issue.

Purpose/Methods
We use Team Resource Management (TRM) for analysis pressure injury factors. The team members can through the group discussion for revising the flowchart and planning the curriculum of pressure injury prevention. Moreover, we will provide the records sheet and turning patient reminder sheets for family members and stick the reminder sheet to bedsides. Furthermore, we can use assistive devices, like triangle flip pillows. Finally, the prevalence rate of pressure injury can decrease via handovers, teamwork, effective communication, reminding and supervising.

Results
The prevalence rate of pressure injury had decreased from 0.21% to 0.11% from January to September 2018. The main reasons for causing a lower prevalence rate of pressure injury is providing the preventing interventions immediately. Thus, effective prevention for pressure injury can decline the prevalence rate and increase the concepts of pressure injury among the nurses and medical team.

Conclusions
Using TRM skills to prevent pressure injury can increase patient safety, implement the pressure injury intervention correctly, the corporation of team members, discuss and make the strategies of preventing pressure injury, analysis and improving from cases, promote the knowledge of nurses, understanding the pressure injury care prevention and making individual preventing interventions. TRM not only can reduce the prevalence rate of pressure injury, but also can increase the cohesion and confidence of nurses. Hence, improve patient and family satisfaction.

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Occupational Health Promotion in Hospital: Hazards Risk Assessment and Prevention

CHUN CHI Tsai, WEN YI Lin , WEI CHI Tsai, WAN CHEN Li, CHING-CHENG Lin

Introduction
Multidiscipline specialist team organized in Kaohsiung Municipal Siaogang Hospital has provided integrated occupational health services for our workers monthly. In addition to scheduled practice, complains from workers had been paid special attention. Technicians, who carried the practice of Extracorporeal Shock Wave Lithotripsy (ESWL) for renal stones, were uneasy about the potential health hazards of radiation and noise at workplace.

Purpose/Methods
A team, assembled with occupational physician, occupational nurse, industrial hygienist and health management and promotion specialist, visited ESWL room to perform risk assessment about environmental hazards and potential health impact. The team also had provided advices about necessary engineering protection technology and medical surveillance for workers. Potential radiation exposure during the procedure of locating renal stone using fluoroscope, and noise exposure during the procedure of ESWL could be identified.

Results
The X-ray had been well protected by concrete wall. Environmental assessment showed no radiation out of room. Wall and observation window with sound proof material also had protected the workers form noise-association injuries. Noise dose assessment also showed it less than background noise level. These measures provided workers evidence about low-risk of health harm. Although the risk was low, personal protection equipment to protect ears from noise injury and medical surveillance about exposure to radiation and noise had been recommended.

Conclusions
The results of medical surveillance also showed that no health harm could be found in these workers. Occupational team work, comprehensive risk assessment, proper engineering technology, adequate protection equipment, medical health assessment and health management and promotion could protect workers in hospital from occupational health injury.

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The Effectiveness of Discharge Planning Link with Long-term Care 2.0 Plan Implemented by a Regional Hospital

YAO Wen-Chen, TSAI Hin-Chu, LIN Yu-wen, YANG Nan-ping, LIN Ching-Feng

Introduction
In response to the rapid aging of Taiwan’s population, this hospital began participating in the Ministry of Health and Welfare’s Discharge Planning Link with Long-term Care 2.0 Plan in September 2017. Through the link between hospital discharge planning assessment and counties and cities’ long-term care management...
centers, elderly patients are provided with appropriate medical care and living care resources after discharge from acute medical care.

Purpose/Methods

Through the training of discharge planning case managers and the revision assessment standards and service process, a platform for hospital-wide admission medical team consensus and communication was established. Through the patient-centered care model, early assessments of the long-term care needs of the cases were conducted to link the long-term care management center and provide timely long-term care services.

Results

From September 2017 to October 2018, 99 cases were accepted, with an average age of 76.8 years old. Prior to discharge, the case long-term care needs assessment completion was 100%, and the cases' satisfaction of the hospital discharge planning was 94.6%. Referral to Long-term Care 2.0 Services including: home services accounted for 53.2%, wheezing services accounted for 23.7%, home rehabilitation accounted for 11.5%, life aids accounted for 11%, and home care accounted for 0.5%.

Conclusions

In Taiwan, with the limited number of hospitalization days under the medical payment model DRG, through hospital discharge planning link with Long-term Care 2.0, long-term care management centers can obtain assessment data before cases are discharged, to enable cases to receive timely continuous and individual long-term care.

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Using health control belief model to improve lung movement execution rate in elderly patients with chronic obstructive pulmonary disease

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Introduction

People with COPD often suffer from deterioration of their health status due to various factors that do not lead to sustained lung rehabilitation. How to make patients willing to continue regular exercise to maintain good health is a major test for clinical nursing staff. Using the health control belief model to reinforce the value of individual cases to exercise behavior will reduce the rate of repeated hospitalization, thereby improving the quality of life of the case and achieving the goal of continuous exercise.

Purpose/Methods

To formulate a screening form for COPD in the elderly and to develop a standard procedure for the teaching of COPD, to design an individual treatment plan for the nursing guidance checklist, to apply the health control belief model and concept, to evaluate the learning effect of the primary caregiver, to correct the cognition of the disease, to strengthen the knowledge transfer, to enhance the value, Improve social and medical support systems.

Results

In January 2017 to December total 150 patients with COPD, 14 days readmission rate of 16%, The implementation rate of nursing guidance through health control belief model was 85%, patients with disease awareness to take a continuous lung movement implementation rate from 56% to 80%, The 14-day readmission rate for COPD was 5% in 2018, Decreased 11%.

Conclusions

Rehabilitation exercise is an important clinical nursing measure, using the health control belief model to have systematic nursing guidance, invited family members to participate in this process, and set up suitable nursing care plan to assist the persistence of lung dilatation in elderly COPD cases and effect recovering from ineffective airway clearance. It could be reduced due to poor quality of home care into hospital again.

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Development of senior-specific, citizen-oriented healthcare service system in South Korea based on the Canadian 48/6 Model of Care

KIM Yoon-Sook, LEE Jongmin, SHIN Jinyoung, EUN Kyeong, KIM Kyoung Jin, HAN Seol-Heui, CHOI Jaekyung

Introduction

The current medical delivery system in Korea in the age of ageing faces the risks of increasing the number of medical and caring refugees, thereby requiring a comprehensive breakthrough. This study attempts to develop a senior citizen-oriented healthcare service system in which daily care, professional care, and rehabilitation are organically organized between medical institutions and local communities, thereby meeting the daily life needs of the elderly and induce well-being, wellness, and well-dying.

Purpose/Methods

For the development of senior-specific, citizen-oriented healthcare service, the research conducted the three steps of 1) systematic review; 2) literature review, bench marking, and focus group interviews; and 3) confirmation with experts.
Results
This senior-specific, citizen-oriented healthcare service system is an integrated medical treatment system for elderly patients that enables patient-specific treatment planning and respective mediation. The system screens and evaluates 10 items that organically influence the health of the elderly not only at the time of admission but also during hospitalization and discharge. This system enables a systematic link between medical institutions and community resources, as it aims for the continuous management of issues that have occurred to patients even after discharge (i.e. back in the community). Furthermore, the system establishes a multidisciplinary treatment plan that considers patients and their families so that diseases that are common to the elderly are diagnosed and treated in a timely manner.

Conclusions
In the medical delivery system in Korea, it is difficult to establish a senior-specific, citizen-oriented healthcare service system by the efforts of one hospital. Government-led systems need to be extended. Subsequently, patients, families, and caregivers, as well as providers of care, can organically organize daily care, professional care, and rehabilitation according to their roles to improve the quality of life, health, and safety as well as meet the needs of the elderly.

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Creating a learning organization to improve the age-friendly care in Primary health centers

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Introduction
In rapid aging transition, primary health centers (PHC) play a critical role in providing health promotion in the community. Therefore, age-friendly health services recognition (AFHSR) in PHC has been established since 2016. However, we found variety challenge during course of AFHSR. In order to improve the age-friendly care in PHC, the aims of this study were assessment current problem and create a learning organization to find the way to enhance the age-friendly care quality in PHC.

Purpose/Methods
A three-stage study design was conducted. First, five focus groups interview were conducted, forty-one PHC managers were recruit to collect quality and quantitative data. Second, nine individual interview were conducted, including PHC manager, public health bureau manager to assessment problem of PFC. Third, creating a learning organization, including public health researcher, architect, high/low AFHSR achieved PHC manager, public health bureau manager to discover optimize method of PHC.

Results
In focus-group and individual interview, problem assessment and management system were critical issue in PHC. Most PHC were short of efficiently detect elder’s problem and manager were lack of resource inventory, integration and extended resource capability. In learning organization, members suggest that PHC should conduct learning organization as training mechanism and sequentially enhance problem detect, administrative, community outreach, and community health construction capacity.

Conclusions
Administrative and community relates capacity of PHC was highly correlated with age-friendly care quality. Creating a learning organization as continual education system would continual progress institution capacity and age-friendly care quality.

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The evaluation of hearing status and efficiency of Hearing aid in Elders in nursing home

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Introduction
Taiwan has become aging society (over 65 years old 14%) since this March. How to maintain the quality of aging life and establish well social welfare policy has become an important challenge for government! According to research, about 80% over 70 years old of people would encounter hearing impairment. Presbycusis may be associated with dementia, depression and increase social and family burden. However, the hearing status of nursing home was not well know. This study focused on the elderly in nursing home, to evaluate the importance of hearing service and hearing aid efficiency and motivation.

Purpose/Methods
Method: In nursing home, those Age> 60 years old. MMSE>24 and bil ear hearing PTA differences <10dB (bil ear symmetrical) were recruited, and past history of ear disease were excluded. We investigated thirty-six elderly’s personal history, PTA, tympanography, HA (hearing aid) status, and questionnaire of HHIE (Hearing Handicap Inventory for the Elderly) and OARS (social resource scale) We used SAS to analyze the association between PTA , HHIE, OARS , and hearing aid wearing status

Results
1 Relationship between PTA and HHIE 2 Relationship between PTA and OARS 3. Relationship between PTA and HA

Conclusions
The PTA results are really positive related with HHIE, no matter in emotion, social, screening or total score. However, only question seven of OARS was significantly related to Rt ear PTA threshold. Maybe it’s because most elderly in the nursing home are satisfied with self life, thus OARS was really high. Those who wear HA seem to have moderate to heavy HI (hearing impairment).

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Effectiveness of Multiple-Nutritional Care Intervention Program for Community frailty Elderly

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Introduction
The frailty is an important and urgently needs of public health problem in Taiwan. There are many ways to prevent frailty, whereas nutrition intervention is the key for healthy aging and active aging except exercise. This project aimed at improving the nutritional status of the elderly, reversing frailty, and preventing or delaying the occurrence of disability through the Multiple-Nutritional Care Intervention Program and combination with the participation of interdisciplinary teams and early intervention.

Purpose/Methods
1. The elderly met greater than one of three indicators of the SOF (Study of Osteoporotic Fractures), they were eligible to participate this project. 2. This project designed multi-nutrition program from September 19, 2017 to December 12, 2017. It took one hour every time and every week with a total of twelve weeks. 3. The instruments included sociodemographic data, Kihon Checklist, BMI, upper hand grip, lower extremity endurance, and activity satisfaction ratings were used to measure before and after three months after this program.

Results
The project screened a total of 22 frailty elders accounting for 3.6%. There were 88% of elderly participated in this project with a participating rate above 90%. The mean course satisfaction (5-point Likert scale) was 4.7 points. The Kihon Checklist improved by 2.27 to 3.10 points (p=0.002), with an improvement of comprehensiveness of 1.72 (p=0.002) and improvement of depression of 0.55 (p=0.117). Moreover, the overall improvement in the degree of dietary nutrition (p=.014) and oral function (p=.036) was significant. In addition, BMI measurement improved 0.52 kg/m2 (p=0.001), upper hand grip increased 0.1kg (p=.788), and leg muscle endurance increased 1.36 times (p=.107).

Conclusions
This project showed that interdisciplinary teams’ multi-nutrition care intervention program can enhance knowledge of diet and nutrition of the elderly, can indeed improve the frailty of the elderly for achieving the goals of delaying aging, maintaining self-care ability, and health promotion.

Comments
YES, I submitted abstracts (Effectiveness of Multiple-Nutritional Care Intervention Program for Community frailty Elderly) belong to this session

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Nursing Home Diet Satisfaction Level Investigation

LIN Yu Hui, LEE Ya-Chu, WEI Shu-Yi, YEN Chia-Chi

Introduction
Population aging is a global phenomenon. Min-Sheng Hospital Nursing Home provides care for mostly elders over the age of 65 who has difficulty providing self-care during daily lives and must rely on caregivers. Dietary nutrition provision is critical so we have conducted a dietary satisfaction level survey for the residents and their family members to serve as reference for developing diversified diets and improve the residents’ dietary satisfaction as well as quality of life.

Purpose/Methods
The subjects are receiving normal meals or semi-liquid meals, and data is collected using the questionnaire interview method. Survey Questionnaire Divided into 6 parts, including: Are you satisfied with the dishes, flavors, portions, special meals, snacks and the meal delivery time? The Likert 5-point scale scoring method was used to represent the different satisfaction levels whereby 5-point means very satisfied, 4-point means satisfied, 3-point means ordinary, 2-point means dissatisfied, and 1-point means very dissatisfied.

Results
Two dietary satisfaction surveys have been conducted each year, and a total of 37 questionnaires were collected. Satisfaction questionnaire results: dish variety = 3.8±0.6, taste = 3.8±0.6, portion = 4.1±0.7, special meal = 4.1±0.5, snack = 4.0±0.6, and meal delivery time = 4.0±0.8. Suggestions: cut into smaller pieces, boil softer, no spicy, and not enough fruits.

Conclusions
The meal satisfaction survey filled-out by the residents and their family members indicated meal varieties and tastes have a lower satisfaction level. The diets are often restricted by disease or chewing and swallowing function deterioration. Therefore, it is a big challenge to meet the preferences of each resident for each meal. It is necessary to improve ingredient purchases, change the dish varieties, and enhance the cooking techniques in order to increase the residents’ dietary satisfaction level.

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Using multimedia film education to reduce the anxiety of patients with hyperbaric oxygen therapy

CHEN Su-Chieh, CHANG Wan-Ping, TSAI Pei-Jane, WU Mei-Chuan, WEI Cheng-Yu

Introduction
With the popularization of hyperbaric oxygen therapy, we need provide detailed health education for patients when they face
the situation such as the cumbersome preparation before treatment, the anxiety of using masks during the treatment, and the fear caused by unfamiliar environment. Therefore, by means of using the multimedia education to reduce the patients’ fear and anxiety before treatment, increase the smoothness of the treatment process.

Purpose/Methods
If diagnosis by the specialist doctor, watch the 3-minute multimedia video content environment used for the environment, the precautions for the entrance and exit, use of the mask, balance of the inner ear and the teaching of oxygen, and after the film is completed, practice wearing mask after video demonstration.

Results
From January to September 2018, a total of 81 cases were accepted, and 45 people participated in multimedia education. The correct rate of wearing masks increased from 66% to 85%; the familiarity of the treatment environment increased from 66% to 93.6%; The statistics of the anxiety self-assessment table decreased from 67 points to 48 points; the fluency before entering improved and the patient’s tension was reduced.

Conclusions
Hyperbaric oxygen therapy enables patients to learn through the film, understand the treatment process and reduce anxiety. It can really reduce the mental and human burden of the education, so that the nursing staff can successfully complete the treatment.

Comments
The hyperbaric oxygen therapy, in order to make patients fully understand the treatment process, in the past used written information, but the content is lengthy and no substantive concept. Through the intervention of multimedia education, it is indeed necessary to enhance the absorption of treatment content by patients, and it is recommended to incorporate this into the clinical care guidelines.

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Elderly and Non-elderly Use of Emergency Medical Services by Telecommunicator in Taiwan

JONG Gwo-Ping

Introduction
Taiwan’s population is gradually aging; however, there are no comparative data on emergency medical services (EMS) use by telecommunicator between the elderly and non-elderly. This study aimed to investigate the use emergency medical services (EMS) by telecommunicator between the elderly and non-elderly.

Purpose/Methods
We analyzed the emergency calls dealt with between January and October 2018, by EMS in one city in Taiwan. All calls were divided into two groups: elderly (>65 years) and nonelderly (<65 years). Nontransport and transport calls were compared between the groups for demographic characteristics, transport time, reasons for calling EMS, vital signs, and emergency management.

Results
There were 2,003 EMS calls: 452 nontransport and 1551 transport calls. The elderly accounted for significantly (P < 0.05) more (608 (39.2%)) transport calls than did the nonelderly (145 (11.4%)). The elderly had a higher proportion of histories for cardiovascular disease, cerebrovascular disease, hypertension, diabetes, end-stage renal disease, cancer, Parkinson’s disease, and Alzheimer’s disease. In addition, the elderly had significantly longer total transport time, more nontrauma reasons, and poorer consciousness levels and lower oxygen saturation and needed more respiratory management and more frequent resuscitation during transport than did the nonelderly.

Conclusions
The elderly have more specific needs than do the nonelderly. Adapting EMS training by telecommunicator, operations, and government policies to aging societies is mandatory and should begin now.

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Nutritional strategies in healthy ageing

CHANG Hui-Ping, WEI Tzu-Chin, LIN Chih-Hsuan, WU Ming-Jie, GONG Ting-Ci

Introduction
Taiwan has entered the stage of an aged society as the elderly population had reached 14% at the end of March 2018; it is expected to become a super-aged society in 8 years. Taipei City, the capital of Taiwan, the elderly population accounting for 17% and the aging index reached 122%. Faced with the rapidly aging society in Taipei, the Taipei Community Nutrition Promotion Center (TCNPC) was established in Junly 2018 to improve nutrition and quality of life for older adults.

Purpose/Methods
TCNPC recruited three registered dietitians and two administrative research assistants to manage and implement the Center’s nutrition intervention plan for the elderly population. TNCPC integrate community resources and develop nutritional strategies including: (1) provided individual nutrition consultation; (2) performed group nutrition education activities; (3) implemented malnutrition risk screening using MNA-SF; (4) trained community nutrition care personnel and community seed volunteers; (5) educated the Dining Site to provide healthy diet; (6) developed cooperation with grassroots level clinics, etc.

Results
As of the end of December 2018, the results are shown below: (1) 191 older adults were referred to individual nutrition consultation. (2) 2,141 older adults participated in group nutrition education activities. (3) Conducted 1,352 MNA-SF screenings and 4.8% older adults were at high risk of malnutrition. (4) 870 community nutrition care personnel and community volunteers par-
Using multiple strategies to reduce the incidence of neurological injury in ward falls

CHEN Yenhsi

Introduction
This unit is North Medical Center neurosurgery and rehabilitation wards. Falls occurred in patients with stroke or head trauma-based, due to poor muscle endurance or physical activity disorders. The ward incidence of inpatient falls in the third quarter of 2014 was 0.07%, in line with our evaluation criteria. However, the incidence of inpatient falls in the fourth quarter of 2014 was 0.21% and the incidence of falls in the first quarter of 2015 climbed to 0.22%, of which there is even a patient after hip failure fracture, prolonged hospitalization days and other issues.

Purpose/Methods
Project members analyzed the status of high incidence of falls in neurological impairment wards by means of field observation and clinical investigation. Based on the findings, the use of multifaceted preventive interventions proved to be one of the most effective and reliable prevention and fall prevention measures. Therefore, project members organized Prevent group fellowship education, nurses training held, the actual use of non-slip nanspray, the actual use of displacement aids equipment, to provide non-slip shoes to use, use of foreign language version to prevent fall health education leaflets, and the establishment of quality control monitoring.

Results
In 2016, the project successfully reduced the incidence of falls in neurological impairment wards. From January 2016 to January 2016, up 0.08% in January 2016 and 0.07% in March to maintain the effectiveness of the project. Therefore, the ad hoc group continued to promote this project to others in the hospital Ward.

Conclusions
The purpose of the project is to reduce the incidence of falls in neurological impairment wards from 0.22% to 0.07% and to maintain them sustainably to enhance inpatient safety. However, in the course of the project, it increased to 0.31% and 0.27% respectively in September and December 2015. The ad hoc group, after analyzing and discussing multiple times and using multiple tactics, conducted continuous practice exercises by all the staff and will use The program is widely publicized, adding new measures to reduce the incidence of falls in neurological ward in order to maintain the effectiveness of the project to achieve the project objectives.

Comments
Health promotion for older people and long-term patients

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Development of Digital Contents for Health Care and Health Promotion of the Elderly

PARK Dong Kyun, JUNG Eun Young, EUN Sung Jung, KIM Hak Ki

Introduction
The U.S. Census Bureau has reported that Japan will be the fastest graying country by 2050, followed by Korea. Korean society has already become an aging society of which the percentage of people over 65 years of age has reached 14%. As the sudden increase of medical expense due to aging has emerged as a social issue in Korea, it has become necessary to develop contents on health care and health promotion for the active aging of the elderly.

Purpose/Methods
For the health care of the elderly in Korea, contents on the diseases and symptoms that are prevalent in the elderly (over 65). The content was produced in a video, which is most preferred by the elderly. Two opposite characters were used to arouse interest. The characters were animated and applied to 148 elderly people. Health promotion lifestyles, stress tests, and quality of life of the elderly were conducted before and after the implementation of the health care program, including contents.

Results
The results of health care program using the digital contents developed applied to the elderly read as below. The average of health promoting lifestyle Profile was improved from 3.03 to 2.59, and it was statistically significant. The T-test value for all results for the quality of life of the elderly was 2.59 and 2.76 respectively and the result was statistically significant.

Conclusions
Digital contents to promote the health of the elderly and to reduce the medical expense of Korean society which is aging was developed in this study and applied to the elderly in Korea and this resulted in the improvement of health promoting lifestyle and quality of life as well as reduction of stress. As the society is rapidly changing towards a super-aged society, an effective digital character to facilitate the active aging of the elderly should be further developed.

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Nutritional status of elderly patients with hip fracture in an acute hospital in Singapore

HUANG Ying Xiao, CHEONG Magdalin

Introduction
The incidence of hip fracture increases with aging and this is likely to happen in Singapore due to the increase in the aging population. For the geriatric patients with hip fractures, often malnutrition appears to be prevalent and it is associated with increased risk of complications, morbidity and mortality. Thus, the aim of this study was to investigate the prevalence of malnutrition and the nutritional risk in elderly patients with hip fractures admitted to an acute hospital.

Purpose/Methods
All hip fracture patients aged 65 years and above, admitted to the hospital who were referred to the dietitian were recruited from June to August 2018. Anthropometric measurements, biochemical markers and nutritional status were evaluated using the Mini-Nutritional Assessment (MNA) tool. Nutrition intervention provided by the dietitian, length of hospital stay, 30-days mortality and hospital readmission rates were recorded.

Results
Seventy-three hip fracture patients were included in the study. Using the Mini-Nutritional Assessment (MNA) tool, 36 (49.3%) subjects were at risk of malnutrition and 12 (16.4%) were malnourished. During inpatient stay, 38 (52%) of the patients received an oral nutritional supplement while 15 (20%) of the patients received a high protein snack to meet their nutritional requirements. More than half of the patients were found to have Vitamin D deficiency. The average length of hospital stay was 13 days.

Conclusions
The study shows that hip fracture in the elderly patients admitted to the hospital are at risk of malnutrition and the use of MNA could help provide a better assessment and therefore appropriate nutritional interventions during their stay in hospital. This methodology could also be adopted for other at risk elderly patients. This also highlights the importance of nutrition intervention as part of the desired inpatient care for patients with hip fractures.

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Discussion on the factors related to the health of the service staff and the middle-aged workers

MEI-NA Liu, LAN-YING Chang, PING-ZHI Lo

Introduction
The purpose of the study is to understand the factors affecting the health of the caregiver and the middle-aged workers. (1) The basic information of the machine attendants. (2) The health of the caregiver and the health of the middle-aged health workers. (3) To discuss the counselor The correlation between health perception and the health of middle-aged workers. (4) Predicts changes in the health perception of caregivers and the factors affecting the health variability of middle-aged workers.

Purpose/Methods
The research design was a descriptive study, which was convenient for sampling. The mother group was a Taiwanese caretaker...
and interviewed 117 caregivers. The research tools include structured questionnaires, basic personal data, and tools for middle-aged and older workers’ health impact factors and needs, work ability assessment, and physical fitness. Exploring individual variables, including gender, education level, beliefs and other factors, to control the impact of the staff; to describe the descriptive data in SPSS 22.0 Chinese version.

Results
1. There are significant differences in service attitudes among different units of the service staff. There is a significant difference in the education level and cognitive inconsistency of the service staff. The health awareness of the service staff and the health of the middle-aged workers. Significant differences. 4. The health status of the wearer is significantly different from the health of the middle and senior age.

Conclusions
The results of this study suggest that when the middle-aged workers of the servant’s health problems occur, the manager should pay attention to caregivers’ efforts to promote the health of the workplace, so as to increase the willingness of the servants to achieve a win-win workplace environment. Regularly organize mental health education, innovate workplace safety, people-oriented work environment, and then explore the relevance of care workers to the health of middle-aged workers, put forward specific recommendations for promoting reference of friendly workplaces.

Comments
Factors affecting the health of the caregivers and middle-aged workers. According to the statistics of the Ministry of Health and Welfare in 2015–2018, the number of training attendants who have not been engaged in the service has dropped from 58.8 to 41.2%, indicating the importance of the problem. The caregiver is affected by the health of middle-aged and older, and the predicament and challenges of the current service staff are prompted to motivate the author to do this research.

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Identifying risk factors and FRIDs for falls in hospitalized elderly in acute care hospitals in Taiwan

HSING HUI-FEN, LI IN-FUN, CHEN SHIH-CHIA, LIN SHU-CHUAN, HUNG TA-CHUAN

Introduction
Admitted elderly patients who fall during an acute hospitalization incur increased costs, morbidity, and mortality. Risk of falls increases markedly with age. There are many risk factors for falls in elderly, including a range of drugs which are considered to be fall-risk-increasing drugs (FRIDs). The aim of this study was to identify risk factors of falls and FRIDs in older adults, to enable appropriate management of fall risk.

Purpose/Methods
Data were collected between January-June in 2018. The sample comprised 4,623 patients who were aged ≥65 years in acute hospitalization in two teaching hospitals in northern Taiwan area (68 of the 4623 falls). Multiple logistic regression analyses were used to adjust for confounders and used to evaluate the association between risk factors, FRIDs and falling. FRIDs were included: antihypertensive agents, hypoglycemic agent, diuretics, laxative, sedatives and hypnotics, antidepressants, narcotics and NSAIDs. Multiple-FRID were defined as two or more FRID.

Results
After adjustment for age, gender and health characteristics, fall history (OR 3.88, p= 0.000), frailty/dizziness (OR 3.316, p=0.000), at least one RFID (OR 3.04, p=0.034) associated with falls in elderly, highest risk FRID was hypnotics and sedatives (OR 1.82, p=0.048). No significant connections between multiple-FRID and falls (OR 1.02, p=0.93) were found. An elderly who have fall history in the past year accompanied by frailty/dizziness may lead to a higher risk of falling (OR 15.53, p=0.000). Visual impairment (OR 0.49, p=0.026) was protective factor of fall.

Conclusions
Our findings will inform clinical practice of fall prevention in elderly, it should be more focus on fall history and frailty/dizziness. Since FRIDs were a modifiable risk factor, physicians need to regularly review the drugs, regardless of one or more FRID. Visual impairment was a protective factor, the future intervention studies will seek to confirm activity limitation due to fear of falling, appropriate activities can promote elderly healthy.

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Discussion on self-management experience of elderly diabetic patients

CHEN Wen Chun, LIU Tz Jie, CHEN Mei Tsu

Introduction
Diabetes is one of the most common systemic metabolic diseases in the world. It is common in the elderly and is an important risk factor for chronic complications such as cardiovascular disease, stroke, chronic kidney disease and diabetic retinopathy. The longer course of diabetes in elderly patients, the higher serious disease risk of chronic comorbidities would be. The study pointed out that the progress of the elderly patients with diabetes can be delayed by changing lifestyles, but due to the deterioration of physical function and various physical and mental factors, it is unable to effectively regulate the care and life after the disease, and we hope to understand through the patient’s vision, through the self-management experience of elderly diabetic patients, providing a reference for medical care.

Purpose/Methods
The Qualitative Research Method, using in-depth interviews to collect data, for diabetes in a community in southern Taiwan, and having been diagnosed by a physician for at least two years, is currently receiving medical treatment, has a clear awareness, can communicate in Mandarin and Taiwan, and is willing to accept interviews. And the recording of the elderly over the age of 65 as a research object. During the study period, from May 2018 to July 2018, a total of 14 interviews were conducted.

Results
The elderly with diabetes are 8 males and 6 females with an average age of 75.4. Their self-management experience is divided
into five thematic categories: control of oral eroticism, life is meaningless, because they do not understand, so they cannot communicate, understand their body through monitoring and experience. Family and social support can affect self-management and deterioration of physical functioning affecting daily life.

Conclusions

Elderly patients with diabetes are generally affected by psychological and cultural gaps, lack of health literacy, degeneration of physiological functions and weak support systems, which influence their self-management skills. If they can successfully improve their health literacy and be supported through the successful experience of peer self-management in the past, the support network should help improve their self-efficacy and self-management behavior changes!

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Prevalence of hepatitis A IgG among babysitters in South Taiwan

YEJIH-KUEI, CHEN CHIA-HUI

Introduction

About 90% adult had been infected with hepatitis A before 1980, the rate of anti-HAV (IgG) had been increased in Taiwan. Recently, the prevalence of anti-HAV (IgG) under the age of 20 is below 10% because of socioeconomic development and improvements in public health and environment. The virus is transmitted through ingestion of contaminated food and water or through direct contact with an infectious person. Therefore, Hepatitis A virus transmission will be easy between children and babysitters in day care.

Purpose/Methods

The retrospective analysis was included individuals attending annual health examinations on babysitters from January 2017 to October 2018. This assay detects the presence of hepatitis A virus (HAV)-specific IgG antibody in serum. A negative result indicates the absence of HAV-specific IgG antibody, implying no past exposure or immunity to HAV infection. A positive result indicates the presence of HAV-specific IgG antibody from either vaccination or past exposure to hepatitis A virus.

Results

A Total of 1363 babysitters (32 male and 1331female) with ages ranging from 21 to 71 years old were attending annual health examinations on babysitters from January 2017 to October 2018. The prevalence of anti-HAV (IgG) had been increased in Taiwan. Recently, the prevalence of anti-HAV (IgG) antibody, implying no past exposure or immunity to HAV infection. A positive result indicates the presence of HAV-specific IgG antibody from either vaccination or past exposure to hepatitis A virus.

Conclusions

Baby could get infected by coming in contact with babysitter who has the infection. Our results indicate that applying the HAV vaccination in babysitter would be beneficial to decrease the prevalence of the early childhood infection and prevent HAV epidemics.

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Exploring association between regional PM2.5 concentrations and Children hospitalizations factors

PAN Hsiu-Fang, TSENG Tzu-Wei, LI Chih-Ching, WU Mei-Chuan

Introduction
Many studies have proved that PM2.5, one of the most discussed air pollutant, has direct effect on human’s health, especially focusing on chronic respiratory tract disease or asthma. Seven out of the ten leading causes of death in Taiwan are associated with air pollution, which includes pneumonia and chronic lower respiratory tract disease. Respiratory tract diseases (RTDs) are common in children. In estimate, 32.8% of children hospitalizations are respiratory tract infection related, the children with asthma are also increasing.

Purpose/Methods
This statistical collected the dataset including daily PM 2.5 concentration recorded from the Environmental Protection Administration of Changhua Air quality monitoring station, and daily admission rate of children with the age of 0 to 18 years in a local hospital from 2016 to 2017. Linear regression and pearson correlation analysis were carried to to analyze the association of PM2.5 concentration with the age, sex, spatial factor, and the reason of admission.

Results
The PM2.5 concentration will affecting hospital admission factor. During the PM2.5 concentration levels rise to unhealthy red. According to the statistics children hospitalizations are respiratory tract infection or asthma attack related 32.8% increasing more than 50%.

Conclusions
This statistical helps nursing personnel paying close attention to air pollution and more understanding the effect of regional PM2.5 on children health. This also helps government making health policies.

Purpose/Methods
During an I-Smile intervention a clown tries to make the situation noticeably easier for the child in a concrete medical treatment process. He stands on the child’s side and helps him to deal with his fear. The clown sees himself as a partner of the treating medical staff. Together they serve the treatment process and everything together serves - the child. Among others the clown creates a positive, relaxed atmosphere directs the focus from the scary process to a playful clownesque world reinterprets the treatment situation clownesque (reframing)

Results
Reactions from affected children, feedback of parents and replies of the medical personnel show, that the clown interventions in treatment processes are not only experienced as a colourful brightening, but also as a great emotional support and relief. Various scientific studies have described many positive influences such as the reduction of cortisol levels, an increase in the number of T-cells necessary for the body’s own defence system with an increase in “killer cells,” and significant influences on the respiratory system.

Conclusions
Medical institutions are invited to integrate the acquired “clownesque know-how” into their examination procedures and thus make “threatening” treatment situations easier for children. The clown sees himself as a partner of the treating medical staff. Together they serve the treatment process and everything together serves - the child.

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The proper use of pharmaceutical products to high school students from pharmacist 1-day trial

WADA Norihiro

Introduction
In Japan, the number of the people of arrest of the stimulant criminal offense by the young people has been decreasing, but the situation that drugs are abused among the young people is concerned, because minority and young people in their 20’s account for about 60% - 70% of the person of arrest of the tablet type designer drug criminal offense such as cannabis, MDMA. Therefore, in the elementary school and the junior high school of Japan, school pharmacists are placed at the elementary school and the junior high school in Japan and hold drug abuse classrooms.

Purpose/Methods
As the action of pharmacist experience in our corporation, we provided the pharmacist 1-day trial to high school students and they learn about drug abuse and the proper use of pharmaceutical products.

Results
We started our action from 2010, and many high school students participate in it every year. The number of participants from 2010 to 2018 was 292 people, and our action has 15 participants at a time by lot every time because many high school students...
apply to it. Through our action, we talk about drug abuse and the proper use of medicines to a high school student and explain the duties of the pharmacist, and they have pharmacist experience at our pharmacy.

Conclusions
At the first, we started our action for the purpose that many high school students take interest in the work of pharmacist. Through pharmacist 1-day trial program, they acquire right knowledge about pharmaceutical products by learning about the duties of pharmacist.

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The Impact of Smartphone Usage on Teenagers' Physical and Mental Development

CHEN Er-Mei, YAO Wen-Chen, LIN Yu-wen, YANG Nan-ping, LIN Ching-feng

Introduction
The development of modern Internet technologies continues to bring new features to smartphones. Young people are the most affected by the high-tech wave. According to a survey by TWNIC (2017), over 80% of those aged 15 to 19 surf the net using smartphones, and it has become essential to their lives. Exploring the current situation of smartphone usage with teenagers, and the impact on their physical and mental development.

Purpose/Methods
The subjects were high school students to whom the surveys were distributed randomly, and statistical analyses of 125 valid responses were conducted.

Results
1. The most popular feature for teenagers is multimedia (for watching videos or listening to music), which accounts for 40% of their usage. 2. Physical: 68% of the subjects had eyestrain, and pain in neck and shoulder, after using smartphones. 3. Mental: (1) Conscious stress: 64% use smartphones to escape from stress; 45% feel anxious when their smartphones are out of energy or not with them. (2) Ego-identity: 90% communicate via smartphones to gain identity from classmates; 45% use smartphones to follow the fashion. (3) Peers interaction: 90% have less face-to-face communication due to smartphone usage; 58% use smartphones to make new friends and create new communities.

Conclusions
Multimedia is most commonly used by teenagers to temporarily escape from daily stress, and this fact has been also proven in the results of the survey “Wi-Fi Usage in Taiwan in 2017” by TWNIC. However, long-term usage of smartphones causes physical problems. Teenagers use smartphones to make new friends, create new communities, and gain identity from classmates; smartphones also makes them feel more secure, but have less face-to-face communication.

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Improvement Plan for Bronchodilators in Children with Bronchiolitis

WU Chih-Wen, HSIEH Wang-Hu, CHEN Hui-Lan, LIN Yu-wen, YANG Nan-ping, LIN Ching-feng

Introduction
Improvement of modern Internet technologies continues to bringing new features to smartphones. Young people are the most affected by the high-tech wave. According to a survey by TWNIC (2017), over 80% of those aged 15 to 19 surf the net using smartphones, and it has become essential to their lives. Exploring the current situation of smartphone usage with teenagers, and the impact on their physical and mental development.

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**Introduction**
Bronchiolitis in children refers to a condition occurring in children under two years of age whose trachea development is incomplete. As for the most common clinically seen breathing wheezing sound, parents seek medical attention for asthma. As for the treatment drug, although bronchodilators can improve clinical symptoms, it has no effect on disease treatment and is prone to side effects such as palpitations, tremors, etc. This study is intended to improve the ratio of bronchodilators in clinical treatment of bronchiolitis through the intervention of pharmacists and physicians.

**Purpose/Methods**
This study adopted retrospective generation research to analyze and compare children under two years old diagnosed with bronchiolitis and administered bronchodilators for the first time from August 2016 to May 2017 and from August 2017 to May 2018, analyzing the total usage and combined diagnosis, evaluate intervention of pharmacists and physicians through education training and public health education beginning July 2017, and compare the improvement effectiveness before and after intervention.

**Results**
A total of 98 persons were included in this study, 51 persons before intervention and 47 persons after intervention. Among them, 29 persons (56.9%) had asthma related diagnoses (Group A), 19 persons (37.3%) had bacterial infection related diagnoses (Group B), 14 persons (27.5%) had bronchiolitis without relevant diagnoses (Group C); after the intervention, 23 persons (46.9%) had Group A, 20 persons (42.6%) had Group B, and two persons (4.3%) had Group C.

**Conclusions**
After the co-intervention of physicians and pharmacists, the bronchitis cases without relevant diagnoses decreased from 14 persons to two persons, but no significant increase was seen in other relevant diagnoses, indicating this method indeed reduces bronchodilator use in simple bronchiolitis.

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**An Analysis of the Current Situation of Codeine-containing Cough Syrup Used in a Regional Teaching Hospital in Northern Taiwan**

**HUANG Wei-Ting, SHIH Po-Jen, LIN Yuh-wen, YANG Nan-ping, LIN Ching-feng**

**Introduction**
People in Taiwan often go to the pharmacy to buy cough syrup when they catch a cold, which often contains Codeine. Codeine is one of the components of alkaloids in Opium. In recent years, there have been cases of Codeine use causing respiratory inhibition and even death. TFDA announced in 2017 the prohibition of Codeine-containing non-prescription drug use by children under 12 years old when there are no other suitable alternative drugs and when the clinicalbenefitsoutweigh risks. The FDA, EMA, Canada, and Japan prohibit Codeine use for children under 12 yearsold.

**Purpose/Methods**
This study is retrospective research. Descriptive statistical analysis was carried out on Codin-P (Codeine-containing cough syrup) used in the outpatient clinics of a regional teaching hospital in Northern Taiwan from January to November 2018.

**Results**
The results show that a total of 254 patients used Codin-P, 142 men and 112 women. With the average age of 57.54±23.48 years old, the eldest person was 97 years old and the youngest was 4 years old, the eldest person was 97 years old and the youngest was 4 years old.
years old. The Division of Endocrinology accounted for the highest ratio, 89 cases (35.04%) in total, followed by Neurology (20.01%). A further analysis of outpatient and ER pediatrics under 18 years of age shows a total of 54 users (21.26%), with an average age of 7.06±3.08 years old.

Conclusions
According to research results, most outpatient and ER pediatrics clinics issue Codeine-containing syrup for children under 12 years old (95.74%), which is associated with doctor’s prescriptions. Doctors are reminded that the use of cough syrup as the top treatment choice is not recommended. Parents are also reminded to note constipation, lethargy, and other adverse reactions. In the case of unconsciousness or breathing difficulty, patients may be suffering from morphine poisoning and should seek medical attention as soon as possible.

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Warm and stable pulsation— an experience of a couple of mother and premature baby adopted the kangaroo mother care method

LI Lin-Wei, LIAO Yen-Chi

Introduction
Infants born between 20th to 37th week of pregnancy still have immature organ systems and unstable physiological functions that often need additional support to survive. At this crucial moment, the attachment connection between baby and the mother has already been cut off and what they actually need is the proper medical care. However, after discharging from the hospital, due to less experience in taking care of baby, fear in mind and anxious, make the whole family under stress and thus, influence the confidence of being new mother.

Purpose/Methods
This proposal is the qualitative research, and apply the kangaroo care method to a couple of premature baby and mother. Through patiently listening and observation, we collect the information and record the interview detail to do some analysis. Also, encode the interview process and combine it with the relative papers to do further research and implications.

Results
1. Maternal attachment: mother touch baby’s body, record the sound of her voice and play it to the baby so as to increase interaction between mother and the baby and enhance the strong relationship each other. 2. Holistic health care: Babies are kept skin-to-skin contact with their mothers to get more sensory stimulation. This could not only help stabilize babies’ vital signs, make them cry less, extend their sleeping time, and also increase weight gain.

Conclusions
The kangaroo care method comprises medical care and human nature based care. Nurses give advice and suggestion to mother and support her by offering her the baby care guidance. Through kangaroo mother care, we can largely increase intimate contacts between mother and baby, relieve mother’s stress and enhance maternal attachment relationship. These all act as the stimuli that benefits for baby’s physically and mentally growth.

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Nursing Project to Decrease Admission Hypothermia in Very low birth weight premature infants

CHIA-HSIN LIN, SHU-CHEN CHIEN

Introduction
The premature infants have insufficient brown fat. Cause central nervous system is immature. Therefore, it is susceptible to excessive temperature by external environmental temperature. Hypothermia may aggravate respiratory distress and necrotic enteritis, ventricular hemorrhage in premature infants, and increase the morbidity and mortality of premature infants. The incidence of hypothermia in very low birth weight preterm infants in a neonatal intensive care unit at a medical center was 56.63% since January 1, 2017 to December 31, 2017.

Purpose/Methods
The factor of the problem was determined to be lack of a specific training program and nursing standards, inadequate monitoring of the premature infant temperature, and ineffective warming equipment. Through the prevention of in-service education related to hypothermia in premature infants, the development of standard procedures for prevention of hypothermia in premature infants, the development of regular check mechanisms, and the improvement of thermal equipment and treatment system.

Results
The incidence of hypothermia in very low birth weight preterm infants decreased about 52.63% to 33.33% since January 1, 2018 to October 30, 2018.

Conclusions
After the realization of the plan, the incidence of hypothermia in premature infants with very low body weight down to 33.33%. At the same time, the implementation rate and cognition correct rate of the nursing staff’s body temperature were advanced, and the improvement of hypothermia in premature infants was achieved. It is expected that project will be extended to other neonatal intensive care units to maintain patient safety and progress the quality of care for premature infants.

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The Experiences of Home Care Needs Among Mothers of Children with Congenital Heart Disease.

YU Ju-Min, CHENG Su-Fen, HUANG Hui-Ting
Introduction
In Taiwan, the prevalence of congenital heart diseases (CHD) in children is approximately 12.9-13.2%, which is significantly higher than the average prevalence rate of 9.3% in Asia. Only 2.4% of the live births with severe CHD need to receive surgical corrections or cardiac catheterization within one year of age. In other words, only few children with severe CHD require open heart surgeries. In most cases, children with CHD do not need surgical interventions but require home care, continuous monitoring and follow-up. However, how the mothers of this group of children taking care of their children and the care needs they are experiencing were seldom explored.

Purpose/Methods
This qualitative study used semi-structured in-depth interviews for data collection and all interviews were audio recorded. The participants include 22 mothers of CHD children (aged between 0 and 6 years). The data were analyzed using the seven steps of Colaizzi's method.

Results
The analysis revealed three themes: “focusing on the ill child’s physiological changes”, “caregiver’s perceptions and coping”, and “resources seeking to meet the care needs”.

Conclusions
The results showed that the primary caregivers for the CHD children were concerned about the ill children’s physiological changes and worried about the illness. Eventually, their experiences from providing long-term care gave rise to additional needs for care resources. The results of this study may be used to facilitate healthcare providers to intervene early by providing resources and counsel to meet the caregiver’s care needs.

Explore relationship of screen-based sedentary behaviors and cognitive ability in overweight and obese adolescents

CHEN Shu-Nuen, CHUNG Chin-Tien, TSAI Yi-Fan

Introduction
Screen-based sedentary behaviors (such as watching TV... etc.) are become the mainstream of leisure entertainment for teen-agers. The static behavior of sedentary and watching the screen has been confirmed by studies to be significantly related to obesity. It is not clear about relationship between the screen-based sedentary behaviors and the learning cognition in teenagers. The aim of this study was to investigate the association between screen-based sedentary behaviors and cognitive ability in overweight and obese adolescents.

Purpose/Methods
During study period, from February 2017 to January 2018, this study was a cross-sectional design using a purposive sampling to recruit samples from New Taipei City junior high school stu-dents. At the age of 12 to 15 years old, overweight and obese students (BMI>27) were collected, and the normal weight students of the same age were used as the control group. Research tools include screen-based behavioral surveys, stroop color and work test and digit span memory test.

Results
A total of 92 adolescents with overweight and obesity were studied, with an average of 13.6±0.72 years old and 208 normal adolescents with an average of 13.5±0.74 years old. Those who were overweight and obese had a screen-based sedentary behaviors of 368.95±266.90 minutes per day compared with 277.78±122.72 per day (P<0.01). Overweight and obese adolescents were significantly lower than the normal weight in the stroop color and work test and digit span memory test (P<0.01).

Prevention of Gestational Diabetes Policy

BOMALIYAMU Aimaiti, LEE Ji Hong, BHANDARI Ashish

Introduction
Pregnant women living in underserved communities often lack access to quality health care due to numerous social and cultural barriers such as poverty, race or ethnicity, and cultural differences (Committee Opinion, 2016). Increasing the access of prevention and postpartum care programs for underserved Asian pregnant women should be a top priority. Having quality preventive health and health care is essential in every stage of life, but especially in pregnancy since a healthy pregnancy contributes to a healthier baby. Gestational diabetes should be given high attention as it poses risks to mothers in labor and birth complications and risks to fetus in birth injuries due to large birth or hypoglycemia (Buchanan et al., 2012).

Purpose/Methods
The proposed policy aims to prevent gestational diabetes among pregnant Asian women through screening. It also aims to use educational programs to prevent unhealthy behaviors in pregnancy that could pose detrimental effects to both infants and mothers. Since language is a common barrier to health care for the Asian population, these policies will be culturally appropriate and will be delivered to the target population in their native languages.

Results
It is hypothesized that pregnant Asian women’s knowledge of gestational diabetes and its associated risks will be increased,
and they will modify their current lifestyles to prevent gestational diabetes and birth complications.

Conclusions
Screening all pregnant women for gestational diabetes in their first prenatal visit is the best option. Not only will pregnant women learn about gestational diabetes and its associated risks for themselves and the fetus, but they will also have a chance to be screened and receive early treatment when found to be at high risk. Screening all women will also increase pregnant women's awareness for gestational diabetes and may further have encouraging effects on them in terms of restricting sugar intake and having adequate physical activities (Page et al, 2012).

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The Effect of Hospital Intervention on Elementary School Health Education Program

LIN Ching-Cheng, CHEN Yi-Ching, TASI Chun-Chi, LI Wan-Chen

Introduction
"Dengue fever, flu prevention, smoking, drug abuse and food safety" have always been the health propaganda at school. In order to prevent students these threats, Hsiao-Kang Hospital cooperates with local Elementary Schools in plan health education courses to strengthen correct knowledges and back to the family.

Purpose/Methods
Selected 36 primary school students from grade 3rd. to 6th., and the hospital professionals design planning 7 courses which included the importance of hand washing, masks wearing, the general knowledge of dengue fever and influenza, the prevention of smoking and drugs and the importance of a balanced diet. Create lively educational activities and survey the effectiveness by questionnaire.

Results
From the results of questionnaires which show significant effects. The average pre-test scores was 87.76 points to post-test 98.32 points in the "Health Concept" section, the average pre-test scores was 70 points to post-test 95.54 points in the "Healthy Eating" section, the average pre-test scores was 88.32 to post-test 94.44 points in "Smoking and Drugs" section.

Conclusions
Through the hospital professionals’ guiding, its enhanced students’ healthy awareness and share correct health knowledge to their schoolmates and eventually to their family and the community.

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An Improvement Plan with Interprofessional collaborative practice(IPCP) to Increase the Achieving Rate for the 24 Hour Mother-infant Rooming-in.

CHIAO chung-fang

Introduction
In order to achieve successful breast feeding plan, the 24-hour rooming-in mother-infant is essential. It is also a goal that the World Health Organization is continuing to drive towards. Rooming-in mother-infant can establish parent-child relationship in the early stage, and increase the self-confidence and sense of accomplishment of parental child-rearing. Our hospital had a baby friendly environment, but the rate of parent-child complication in 24 hours in 2016, regardless of vaginal or caesarean section is 0%.

Purpose/Methods
The main reasons for the analysis of the current situation are: fatigue, the baby in the intensive care unit, no relevant information, and no one is worried about assistance. In order to achieve the maternal and child-friendly certification standards for the 24-hour rooming-in rate, the proposed solution for this project is: personnel re-education, improvement of care process, and hospital policy intervention.

Results
After the implementation of the program, the 24-hour rooming-in vaginal production rate increased from the original 0% to 15%; the caesarean section 24-hour rooming-in achievement rate also increased from 0% to 8%, the target achievement rate exceeded 100%, successfully assisted these mothers in breast feeding plan and increase the period of postpartum lactation. The result of the project and its related measures can provide a reference for medical centers in its promotion of mother-infant rooming in and lactation policies.

Conclusions
Postpartum mother-infant rooming-in is the key to successful breastfeeding. Maternal and infant room care must rely on the policies of the medical institution, and the ward environment, environment, maternity and their families can cooperate successfully. At present, the mother's breastfeeding rate has been increasing year by year in the Taiwan region. The implementation of maternal and child room is also important. The hospital is working hard to move towards a global maternal and child certification standard.

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“Baby Pit Stop: safely stop to breastfeed” Promoting breastfeeding protected in public places

TIRON Camelia Gaby, GRISOLIA Gianpaolo, FERRARINI Sonia, BURATO Enrico

Introduction
The recommendations encompass the contents of the EU global strategy for feeding infants and young children, adopted unanimously by the Member States of the WHO during the 55th World Health Assembly/2012. The Action Plan of the European Union is protection, promotion and support of breastfeeding in Europe, in addition and promotion terms. The protection of breastfeeding is based on strict application of the International Code, including mechanisms for empowerment and a monitoring system independent of commercial interests.

Purpose/Methods
AIMS: Set up the area Baby Pit Stop: providing a secure environment and respectful of the privacy of the mother equipped with a comfortable armchair, a changing or other surface suitable for diaper change, brochures of any institutional partners; set up a small play area for children (if the mother is accompanied by another child more); defining a "Pink Book of the BPS": the mothers who stop are asked to submit their opinions; establish a corporate policy for breastfeeding.

Results
Increasing rates of breastfeeding, not only bring health benefits for the baby, the mother and society related nutritional aspect, but are also able to promote the mother-child relationship and attachment processes, promoting the emotions and the mental health of the mother-child dyad. Moms increasingly satisfied Customer Satisfaction analysis. Health care system interested in protecting children’s health. Draw up a brochure on the Baby Pit Stop and a new corporate policy. Becoming as part of Hospitals&Community Baby Friendly by UNICEF.

Conclusions
The Baby Pit Stop (BPS) takes its name from the operation of the "tire change + full tank" which is done in a very short time during the Formula One Rally. BPS wants to mean changing the diaper and the "full" means to satiate the baby with the healthy breast milk, rich in nutrients and antibodies. According to the latest scientific research, breastfeeding in infancy can have a positive effect on the psychological well-being and prevent childhood obesity.

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Probiotics in Taiwan: beneficial effects of healthy products

YEUNG Chun-Yan, LEE Hung-Chang

Introduction
Probiotics are defined as live microorganisms that confer a health benefit on the host. The field of probiotics has evolved and progressed over past years leading to a global and diversified market today. Number of studies supporting the health benefits of feeding probiotics to infants and children has increased tremendously. A prospective cohort study on the use of probiotic supplement among young children in Taiwan showed approximately half the children received probiotic supplements before the age of 18 months.

Reduce the level of perineum severe pain after natural birth within 24 hours

PAO Wei-Chen, LAY Huey-Jen
Purpose/Methods
In the past decade, our Taiwan Society of Pediatric Gastroenterology, Hepatology and Nutrition colleagues have published quite a lot of studies on probiotics, including basic laboratory researches and clinical trials. Several in-vitro, in-vivo and animal studies tried to explore the mechanisms of certain probiotic strains in the anti-inflammation and immunomodulation effects. Our colleagues also published review articles on probiotics including gut microbiota and the development of pediatric diseases, probiotics and the mechanism of necrotizing enterocolitis in the renowned literatures.

Results
In vitro and in vivo studies include: role of Lactobacillus rhamnosus in inhibition of inflammation and enhancing barrier integrity of epithelium, amelioration of chemotherapy-induced intestinal mucositis by probiotics, effect of probiotic supplementation on glucose homeostasis, body fat accumulation and weight gain, etc. Clinical trials include: Lactobacillus casei rhamnosus in preventing cholangitis in biliary atresia after Kasai operation, effect of Lactobacillus rhamnosus on quantitative reduction of faecal rotavirus shedding in children, oral probiotics in preventing necrotizing enterocolitis in very low birth weight preterm infants, etc.

Conclusions
In conclusion, accumulating evidence of the probiotic benefits has led to greater consumption of probiotic supplements as healthy products. However, data on probiotic supplementation, especially safety issue, in the pediatric population are scant. The greatest need in the probiotic field remains well-conducted and well-reported human trials, and to better define the functionality of probiotics for different indications and populations.

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School based Childhood Obesity Prevention Program

PAN Hsiang-Ju, HUNG Li-Ju, CHEN Chieh Yu, CHENG Jin-Shiung

Introduction
Childhood obesity predisposes to adult obesity and related to some medical comorbidities, it should be managed earlier to prevent future cardiovascular complication. The aim of this study is to increase a healthy lifestyle among study group and reduce the obesity tendency.

Purpose/Methods
We organized a health promotion team with members of hospital physician, dietitian and school staff. Interventions were targeted toward fourth grade (9–10 years old) school children. About 300 students were assessed and followed for consecutive 6 semesters from September 2015 to July 2018. We had a lifestyle questionnaire to evaluate student’s diet habits and physical activity. We collected students’ weight each semester and arranged education lecture every semester, focused on healthy diet information and weight related health problem.

Results
A total of 282 students with consecutive follow up were eligible for study. The study group had a higher average BMI than national standard in both boy and girl groups in the first year. The major change was the consumption of sweetened beverage decreased after intervention (76.6% vs 59.1%, p<0.00). The percentage of overweight and obesity decreased little during the 3-year follow-up.

Conclusions
We intervened with serial health promotion activities and the BMI slope of study group showed more flat and near the national standard in 3 years. Behavior change is difficult and making a healthy choice to avoid high caloric diet in young children is more difficult. In this study, we demonstrated school-based obesity prevention strategy is effective. Children could learn health-related information via designed activities and then followed a healthier lifestyle spontaneously.

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Literature review on the efficacy of evidence-based public health education interventions on the incidence of childhood obesity

BOMALIYAMU Aimitai, LEE Ji Hong, BHANDARI Ashish

Introduction
Childhood obesity is a public health crisis affecting 13 million children and adolescents. Obesity rates for children has increased from 5% to 14% during the past 40 years. Obesity has serious physiological problems such as childhood hypertension, early-onset cardiovascular disease, and diabetes mellitus.

Purpose/Methods
This literature review will evaluate the efficacy of evidence-based public health interventions on the incidence of childhood obesity. Evidence-based research articles were selected through peer-reviewed journal database based on the type of intervention it utilized.

Results
Behavioral interventions promote life changes, such as diet and physical activity. Technological interventions use web-based and active video games to promote healthy lifestyles. Educational interventions aim to educate parents and children on the importance of healthy body weights. The results showed that educational intervention had the most effective result in preventing and reducing childhood obesity compared to behavioral and technological interventions.

Conclusions
Educational interventions include family, peer and school-based programs. Family-based programs educate parents and children on the impact of healthy lifestyle with balanced diet and adequate physical activity. In peer-based programs, children attend with peers and learn about their eating pattern and how it affects their health. School-based programs include health curriculum.
Family-based counselling was the most effective as parents controlled their children’s diet at home and played significant roles in educating about healthy eating.

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Art painting of pregnant women to promote the health of the body and soul

CHEN Yi-An, LIAO Ling-Ling, YANG Yi-Hua, CHAN Li-O, LIOU Wen-Chin

Introduction

In Taiwan, May is the month of thanks to mothers, but also St. Joseph Hospital important the month of the Mary. In this special month, we hold 2 events on art painting belly to promote the process of experiencing activities for pregnant women, with special and warm memories and experience different from previous pregnancy life.

Purpose/Methods

NET SHOW: Upload Pregnant Women Belly Bump Painting

Photo Pregnant women prepares 1 individual life photos and pregnant belly painted photos, uploaded to email. Vote for your favorite photos in 2 ways using Google forms and the hospital outpatient hall.

WALK SHOW: Pregnant Women Belly Painted Catwalk Competition

Pregnant women painted the belly on the day of the competition, and then each contestant showed her work on the runway show, and finally invited the on-site people to vote for the creative contestants.

Results

1. In NET SHOW, a total of 18 pregnant women competed. In google form a total of 1,445 people responded, voting in the outpatient hall a total of 441 votes, a total of 1886 votes to produce the winner.

2. WALK Show on May 26, 2018, a total of 6 pregnant women participated in the scene painted belly, the contestants joined hands with the family to stretch the booth catwalk Finally, about 200 people from the scene voted to produce the winner.

Conclusions

We found that pregnant mothers are very happy to paint with their families in art painting, and unlimited creation is the most beautiful and natural, through painting to make hard and boring pregnancy life to increase the fun of interaction with the family, and can promote the healthy body and mind of pregnant women, family happiness is very important for pregnancy.

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Indigenous Adolescent Health Promotion: Application of Affective Domain in Character Education

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Introduction

Adolescence is a plasticity period affect by peers, families and environment. Changes in family structure, including grand parenting, single parents, and separation, result in mood instability and deviant behavior, causing disability in learning and social adaptation for indigenous youth. Cardinal Tien Hospital team provides character education for them to shape their values and positive behavior to achieve healthy social and personal development.

Purpose/Methods

Fourteen indigenous youth participated in group learning for character education, based on David Krathwohl’s five stages of affective domain, the strategies as follows: 1. Receiving: through group games, learn the values of respect, caring, courage and gratitude. 2. Responding: through role-playing, could actively discuss the meaning of values and how to practice in daily-life. 3. Valuing: through films and stories with positive and negative examples, teens improve judgment of character and how to live by the values. 4. Organizing: through off-campus exploration, teens learn to respect each other’s differences and opinions, learn to internalize the values and develop characters. 5. Characterizing: encourage sharing what they learned and how they practiced; reward youth for reinforcement.

Results

Using structured questionnaire, practice in daily-life and course satisfaction are calculated as follows: Respect: listen attentively, 79%; Caring: empathy, 64%; Courage: reflect and admit mistakes, 43%, stick to the right thing, 76%; Gratitude: being content, 75%, pay gratitude, 86%. Course satisfaction are 92%, 93%, 86%, and 86% respectively.

Conclusions

Character education has a significant effect and it is a long process with continual teaching, demonstration, learning and practice. More practice on reflection and admitting mistakes is needed. Feedback from teachers shows students’ transformation from passive to actively helping others. With more attention, encouragement and companionship, positive values and attitude towards society and interpersonal relationship developed in these indigenous adolescents.

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Clinical Psychological Services in Child Protection Center for Abused Children/Adolescents in NTUH.

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Introduction
"Child abuse" has becoming an issue of concern in Taiwan. In 2017, about 50 thousand of suspected cases were reported to the authorities. They were not only suffered from physical harness but also long lasting psychological trauma. National Taiwan University Hospital had officially established “Child Protection Center” organizing multidisciplinary professions to provide medical services. This article reports from the perspective of clinical psychologist’s service for mistreatment cases.

Purpose/Methods
We have provided 92 times of service to 51 children and adolescents in 2018. These services can be mainly divided to three parts. First, we had outpatient evaluations and provided further suggestions. Clinical psychologist executed assessment, mainly targeted on stress coping and trauma responses. Second, we had inpatient consultation to detect highly risky family, suspected mistreated children and begin the intervention immediately and arrange feasible prevention plans. Lastly, we offered problem solving focused psychotherapy.

Results
From the effectiveness of evaluation, the assessment results and suggestions were well informed to related authorities and been taken as future direction. Our results showed that psychological evaluation could provide clearer direction and higher effectiveness for the following psychotherapy. In the end of psychotherapy, we indeed observed great improvement in parenting skills, released parenting stress and facilitated family relationship in a positive way.

Conclusions
Clinical psychologist plays an essential role in Child Protection Center. With interdisciplinary cooperation, clinical psychologist provides comprehensive, in-depth evaluation and intervention. Furthermore, clinical psychologist is able to understand the difficulties of the subjects and help them to solve the problems and provide proper care. We believe we can not only improve the psychological health of children and caregivers but also reduce the additional social cost in long term.

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Maternal Antiviral Therapy to Prevent Chronic Hepatitis B Infection in Children
YEUNG Chun-Yan, CHEN Huey-Ling, LEE Chien-Nan, CHEN Chie-Pein, HUANG Jian-Pei, NI Yen-Hsuan

Introduction
Despite the 75%-90% reduction of chronic hepatitis B viral (HBV) infection following universal infant immunization, active/passive immunoprophylaxis has not eradicated mother-to-fant HBV transmission. Approximately 10% of chronic HBV infections cannot be prevented. After new and better antiviral drugs in pregnancy category B emerged, there has been enthusiasm over using short-term antiviral agents in pregnant women for prevention of mother-to-infant transmission despite immunoprophylaxis.

Purpose/Methods
The efficacy and safety of maternal tenofovir disoproxil fumarate (TDF) in reducing mother-to-infant hepatitis B virus (HBV) transmissions is not clearly understood. We conducted this clinical trial with the aims of evaluating the efficacy of TDF administration initiated at 30-32 weeks of gestation in highly viremic pregnant mothers, assessing the efficacy in reducing mother-to-infant HBV transmission, and monitoring safety for the mothers and infants during the pregnancy and the postpartum period.

Results
We enrolled 118 HBsAg/HBeAg double-positive pregnant women with HBV DNA > 7.5 log10 IU/mL. The mothers received no medication (control group, n=556) or TDF 300 mg daily (TDF group, n=562) from 30-32 weeks of gestation until 1 month postpartum. Primary outcome was infant HBsAg at 6 months old. At delivery, the TDF group had lower maternal HBV DNA levels (P < 0.0001). Of the 121/123 newborns, the TDF group had lower rates of HBV DNA positivity at birth (6.15% versus 31.48%, P = 0.0003) and HBsAg positivity at 6 months old (1.54% versus 10.71%, P = 0.0481).

Conclusions
Our study demonstrates that short term TDF treatment leads to fast and effective reduction in HBV DNA in highly viremic HBsAg/HBeAg double-positive mothers. Such treatment resulted in decreased rates of serum HBV DNA positivity in the newborns’ peripheral blood and HBsAg positivity in the infants at 6 months of age. Additionally, this short-term treatment was well tolerated and may ameliorate maternal ALT elevations. To achieve the goal of global eradication of HBV infection, better strategies aimed at interrupting mother-to-infant transmission in this high-risk group are mandatory.

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E-Posters: Community health promotion and public health

The trend analysis of age and sex distribution in hospitalized alcohol use-related disorders

YANG Mei-Yin, CHEN Chieh-Fan, CHEN Shu-Ling, LAI Jun-Huang, CHANG Hong-Tai

Introduction
The age and sex distributions among alcohol use-related disorders (AUDs) hospitalizations were not reviewed in the recent years.

Purpose/Methods
The retrospective population-based cohort study collected information included the inpatient expenditures and registry for beneficiaries from Jan. 1st, 2001 to Dec. 31th, 2010.
Results
We identified 74,361 patients who had an inpatient diagnosis either of alcoholic abuse (group 1), dependence (group 2) or intoxication (group 3) within the studied 10 years. The middle-age had dramatic uptrend (p<0.001) and young adult had downtrend (p<0.001). Minors and elderly both had no significant change. Male had predominant proportion (p<0.001) compared with female but female had uptrend (p<0.05). Group 2 had increased proportions as increased age-subcategory. Minors had the greatest proportion (5.89%) in alcoholic intoxication compared with young adults, middle-age and elderly account for 1.18%, 1.01% and 1.63%. Male had least proportion of alcohol intoxication group. (0.94%)

Conclusions
Middle aged patients had predominantly increased hospitalized alcohol use-related disorders. Female had uptrend though male was still predominant.

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Alcohol drinking lifestyles of mountain residents and their possible health hazards
CHANG Yu-Jun, SUN Hung-Yu, WU Ju-Hsien, LIN I-Ching

Introduction
Residents in mountainous areas especially like to drink together during meals or festivals. Drinking alcohol has almost become a part of their lifestyle. However, long-term drinking may cause many chronic diseases. Therefore, this study investigated their daily drinking situation and the possible health hazards.

Purpose/Methods
In 2014, we conducted a cross-sectional survey of 224 residents (aged 30-90) in three mountain townships in Nantou County (located in the middle of Taiwan). In this survey, 224 subjects (122 females and 102 males) provided general demographic, medical history and lifestyle data via interview and underwent a physical examination.

Results
The overall prevalence of drinking was 32.6 (27% for women and 39.2% for men). There was no significant difference in the prevalence of drinking between men and women, but the lower the age, the higher the prevalence of drinking. From the results of this study, it was found that compared with those who did not drink alcohol, the odds ratio of elevated triglycerides was 3.68, the odds ratio of reduced high-density lipoprotein was 1.79, the odds ratio of elevated blood pressure was 3.67, the odds ratio of hyperglycemia was 1.89, and the odds ratio for metabolic syndrome was 2.65. Furthermore, the higher the frequency of drinking, the higher the prevalence of these symptoms.

Conclusions
Drinking alcohol is a significant part of lifestyle in mountain residents. The encouragement and pressure from others to join in the drinking is powerful. However, from this study, it was found that excessive drinking of alcohol is harmful to health, especially to significantly increase the risk of the metabolic syndrome. It is necessary to carry out a large-scale community health promotion program to change their drinking behaviours.

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Effect of Intergenerational Learning on the Community Elderly in Taiwan
CHEN Wen-chieh, LEE Hsien-ju, WANG Kuei-ying, YEN Chia-chi

Introduction
Population ageing has become an important issue around the world. Taiwan has officially become an ageing society at the end of March 2018. The Hospital has promoted intergenerational learning within the communities to facilitate healthy ageing; it is also one of the government policies in Taiwan.

Purpose/Methods
The community nurses of the Hospital worked with the elderly aged 65 or more and nursing students to implement intergenerational learning. Before implementation, they considered the abilities, interests and motivation for participation between two generations and set goals and contents. Intergenerational learning allowed the elderly to pass on the history and culture of the communities based on their experience, which increased the value of the elderly and their satisfaction with lives.

Results
According to the result of the Life Satisfaction Scale, the life satisfaction of the community elderly before and after intergenerational learning was 51% and 67%, respectively. By participating in intergenerational learning, the elderly also improved their independence, interpersonal interaction and social network as well as health.

Conclusions
Before implementing intergenerational learning, the community nurses understood the participants’ backgrounds, knowledge and abilities and integrated community resources to design planned, time-sensitive activities that could facilitate the implementation of intergenerational learning. Through interaction between two generations, the elderly gained a sense of value and started to take a positive attitude toward ageing, while young people learned traditions, transfer of values and cultures. The effect of intergenerational learning was reciprocal.

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“Community Health Promotion Train” - Going out of the hospital, deepening the community and promoting health concepts

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Introduction

Yunlin County is an agricultural county with an ageing population (17.6% for the elderly) and insufficient medical resources. Our hospital uphold the mission of “To be the guardian health for central Taiwan” and provides medical services with the strategic goal of promoting public health and strengthening social care. 2018 out of the hospital into the community to handle “train community health promotion” campaign to promote health promotion and disease prevention concepts of health to Yunlin people.

Purpose/Methods

Before the start of the project, we arranged the venue, activities and pre-departure briefings. 1. To assess the location and convenience of parking, choose Wen-chang Elementary School in Xiluo Town as the venue. 2. Due to the aging of the population, and the health examination focuses on the assessment of the elderly frailty, the detection of heart rhythm rules, and provides health education and consultation.

Results

1. We have 120 staff members and 16 physicians to provide medical services. 2. There were 202 participants from the community, and the participation rate was 0.44%. 3. Further follow-up rate of health examination: 22.8% of the assessment of the elderly frailty, 0.6% of heart rhythm rule screening, 20.4% of blood pressure test, 14.2% of blood glucose test, and 50.3% of urine test. 4. Participation rate of public health education and consultation: 91.1% of balanced diet consultation, 92.1% of tobacco prevention and control, 74.3% of anti-drug education, 95.5% of oral hygiene education, 88.1% of correct hand masks, 89.1% of medication safety, 59.4% of health management consultation.

Conclusions

Recommendations for sustainable into the community to promote the concept of preventive health care, and develop further strategies to enhance public participation activities. Implement abnormal case management and maintain public health.

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Decision Making of Low-dose Computed Tomography in Lung Cancer in Light or Never-Smoker

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Introduction

Tobacco use, family history of lung cancer, occupational exposure, and personal cancer history were the risk factors of lung cancer. National Lung Screening Trial (NLST) demonstrated that annual low-dose computed tomography (LDCT) screening can decrease lung cancer mortality up to 20% in high-risk patients (heavy smokers ≥ 30 pack-years). Thus, LDCT was recommended to be a promising screening tool for the early diagnosis of lung cancer in heavy smokers. However, some Asia studies indicated that women with light or never-smoker were found to be responsible for 30-50% of lung cancer. The evidence of the diagnostic value of LDCT for lung cancer in light or never-smoker is still lacking. A systematic review and meta-analysis was performed to include the relevant studies to determine whether LDCT screening for lung cancer is beneficial in light or never-smoker.

Purpose/Methods

Studies utilizing screening with LDCT compared to chest X-ray or no screening in patients or subgroup with light or never-smoker were included. PubMed, Embase and Cochrane CENTRAL databases were searched from inception through September 2018. Randomized control trials or observational studies were eligible for our systematic review. Individual studies were assessed the validity using U.S.Preventive Services Task Force. Pooled sensitivity and specificity were performed by MetaDisc version 14.

Results

51 studies were included for qualitative analysis and pooled sensitivity and specificity were calculated from 11 studies. Compared to chest X-ray or no screening, LDCT showed a better improvement in pooled sensitivity and specificity, 0.927 (0.864, 0.962) and 0.737 (0.632, 0.820) vs 0.661 (0.419, 0.840) and 0.923 (0.890, 0.946). However, the evidence of screening with LDCT can reduce mortality in light or never-smoker was not established.

Conclusions

LDCT showed a more diagnostic value than chest x-ray or no screening for lung cancer in light or non-smokers. However, more well-designed studies are warranted to confirm that benefit and harm of LDCT as a lung cancer screening tool in the low-risk population. An individualized shared decision making help patients to discuss the potential benefits, and harms of LDCT screening with the physicians.

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Caring Moments in the Community
An example of the practical experiences of a public regional hospital

Applying the Concept of Integrated Services Towards Caring for Minorities Within the Community and Promoting Health: in terms of elevating medical treat
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Introduction
There were 2,700 middle-low income households (6,200 people) from Keelung, making up 1.91% of the entire middle-low income sector in Taiwan. The phenomenon of “Community health dis-crepancy” is formed due to poor economics and insufficient knowledge about disease. Making good use of medical care re-sources from public hospitals and concepts of integrated medical services allows the networking of integration between health care and society care, which in turns promotes the service quali-ties and cost-effectiveness, and enables facilitations in health management of the communities’ middle-low income, minority, and other members, bringing sustainable health care to community members.

Purpose/Methods
Through a series of community health activities such as health examination, health consultations, health forums, festival activi-ties, as well as collaboration of borough chiefs with resources from the neighborhoods, health care knowledge was promoted while community members took part in the activities. From there, if there were any particular cases of minorities seeking help, upon the management staff accepting the case, and rele-vant resources regarding the case would be sought in order to establish the network of sustainable health care.

Results
Between the period of January to October in 2018, a total num-ber of 159 community health events were hosted. Among them, there were 109 community health forums with 3,124 partici-pants, 44 free health screening events with 1,845 participants, and 6 annual celebration events with 726 participants. There were a total number of 5,695 participants.

Conclusions
Through our hospital’s integration of medical knowledge with vi-brant and relaxed community health activities, strengthening of community members health knowledge and networking was able to be achieved. Our hospital has improved the percentage of minorities in the community in terms of medical treatment re-ferral and regular medical treatment rate from 24% in 2017 to 71% in 2018.

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Discussion on knowledge, attitude and overall well-being benefit of dementia in community elders' activation health promotion program

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Introduction
As the time of an aging society occurs, the population of demen-tia also increased. Epidemiologic study shows that there is one in every 13th elderly over the age of 65 who suffers from dementia, which shows the importance of preventing and postponing de-mentia. The risk factors of dementia include hypertension, hyperglycemia, hypercholesterolemia, obesity, lack of exercise, smoking and depression. The preventive factors of dementia are physical activity, healthy diet and cognitive activity. Our study uses the preventive factors to design multiple health promotion activities to promote community elders’ dementia prevention program.

Purpose/Methods
Our study’s population are the community people of Keelung. A course focused on prevention of dementia was designed lasting 7 weeks, once every week, 1.5 hours once. Contents include gymnastics, healthy diet, handicraft and board games which help cultivates a healthier lifestyle in elders, stimulating their brain and mental activity and also arranging them as volun-teers to reduce their risk of dementia.

Results
There were a total of 36 participants, average age of 70.71 years old. A survey including disease cognition, attitude, physical con-dition, logical thinking ability, emotional status and social tech-nique were investigated before and after the course. There were 31 valid questionnaires, using the paired sample t test as statistical analysis, the results show significant differences.

Conclusions
The risk factors and protective factors of dementia are not single-oriented. Preventive intervention focus must be multi-faceted like cognition, physical fitness, diet, environment etc. Through this study, we find that by using multiple health promotion pro-grams to stimulate the mental and interpersonal interactions of the elderly, we can effectively achieve the purpose of preventing dementia.

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Using the internet technology to pro-vide people with healthy diet infor-mation for health promotion.

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Introduction
With the development of internet technology, the information dissemination and reception has undergone a tremendous change. The spread of nutrition and health should also keep up with the times. Ingesting more plant-based foods could help people not only maintain health but also prevent chronic diseases and cancer, yet it still needs more publicity. Social media (such as facebook) can help us communicate correct nutrition and health messages to public in a closer-to-life way, thus achieving the goal of health promotion.
Purpose/Methods
The promotion of health information includes three parts. The first part is about the health benefits of plant-based foods; in the second and third part, we analyzed the nutrition content of healthy lunch boxes and the whole-grain bread respectively and collected some related health issues. These informations were uploaded to facebook after being transformed into e-flyers or videos to shared with people. With the above promotion of plant-based foods, it’s helpful for bringing people closer to healthy foods.

Results
With the connection of social network, we can interact with people promptly, therefore understanding their demand for healthy issues and opinion of healthy foods, and then continue to improve and promote health information. Our own fan page was created in February 2017, cumulating 55 posts so far. People reached has increased from 16 in the beginning to the maximum of 3400 through the promotion, and each post has 350 people reached on average.

Conclusions
As the times change, the use of internet community software for nutrition and health promotion is getting more popular. Health promotion could be integrated into life and implemented only if it is close to people’s lives, therefore we won’t stop moving forward. The number of people participating in the webpage is still increasing, giving us lots of encouragement, and we will constantly strive to improve our service.

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A Study on Medication Safety Cognition among the Elderly in Community

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Introduction
High rates of comorbidity and polypharmacy are common among the elderly population, thus raising the risk of adverse drug events among persons without appropriate knowledge, attitude and practice of medication safety. The purpose of the study is to examine the factors affecting the knowledge, attitude and practice of safe medication use among middle-aged and senior community dwellers.

Purpose/Methods
This cross-sectional study found its subjects in participants aged 65 year or over in the community health promotion programs in Kaohsiung City. Information was collected using a structured questionnaire.

Results
Of the 112 subjects recruited, 100 (89.3%) completed the questionnaire. Most participants were female (70.2%), elderly (29.8%), with a high school (28.6%), unemployed (63.7%), with a monthly income lower than $20,000 (78.2%), married (94.3%), and living with spouse or immediate family (69.3%). Respectively 47.3%, 68.9%, 53.5% of the participants had chronic diseases, practiced regular exercise, and ate more than 5 kinds of vegetables and fruits daily. The medication safety knowledge, attitude and practice average scores were respectively 16.4 points (64.9%) for ‘knowledge’, 13.7 points (83.6%) for ‘attitude’, 66.7 points (68.4%) for ‘practice’. 66.4% of the participants appeared to have adequate knowledge, 17.5% a positive attitude, and 59.7% proper practice of medication safety. Adequate knowledge of medication safety was significantly associated with younger age, dietary supplement use, and higher personal income. Positive attitude toward safe medication use was significantly associated with adequate knowledge and use of no Chinese/herbal remedies. Positive attitude, regular exercise, and use of no dietary supplement were independently associated with appropriate practice of medication safety.

Conclusions
With respect to safe medication use among middle-aged and elderly community dwellers, knowledge appears to be significantly associated with attitude which in turn is significantly related to practice. The study results indicate a general lack of adequate knowledge, positive attitude, and proper practice concerning medication safety in the interviewed participants. Health personnel still need to develop more effective education programs and teaching strategies to improve safe medication use in the middle-aged and elderly population.

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Research on Strengthening the Anti-fall Behavior of Community Elders by Using Social Cognitive Theory

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Introduction
Falling is the second leading cause of death in the accident of elderly people over 65 years old in Taiwan. It leads to the decline of elderly’s physical function, loss of daily life independence, psychological damage and loss of social function, showing the seriousness of falling and the need to promote anti-fall behavior of elderly in the community. This study utilizes social cognitive theory as the design framework to strengthen the behavior of community elders.

Purpose/Methods
The research object is the community elders of Yinfa Club of China Wheat Care Association, and runs a one-month, one-hour weekly anti-fall series. Using the social cognitive theory to develop a driving strategy: 1. Through the curriculum to enhance the elderly’s anti-fall awareness and behavior. 2. By changing the social environment, the attitude of elderly to anti-fall behavior is changed. 3. Visiting the home environment, so that the elderly can easily prevent falling.

Results
There were 28 participants in this study, 59% of whom had fallen in the past year. A survey of personal factors, behavioral performance and environmental impacts was done before and after
A model to improve hospital organization system

MARTINO Maria Teresa, VARALDA Emiliano

Introduction
The effort to improve organization system of hospital, can give a better answer to patients' needs. This can reduce confusion and give correct education to approach hospital system. Over the years, reservation for a medical examination has always been managed by a call center of ASST of Pavia. Recently we decided in Vigevano hospital to split the general reservation for rehabilitation visits in different addresses.

Purpose/Methods
Since two years we addressed patients usually programmed for general visit of rehabilitation into five categories of medical examination reservation (to distinguish more or less urgent): 1) prosthesys and orthoses (for disabled patients), 2) urgent medical rehabilitation examination (recent accidents, surgery operations, recent orthopedic or neurological problems, etc), 3) visit for osteoporosis, 4) geriatric examinations, 5) general visits for rehabilitation need (as it has always being).

Results
A new doctor was assigned to the rehabilitation facility in Vigevano and some more hours were dedicated to improve the weekly number of fisiatric visits (from 50 to 70 people). Family doctors were informed about new possibility to adress people more correctly to have a rehabilitation visit. Lists of reservations improved. People examined were mostly correctly addressed in the right category of medical ambulatory (about 85-90%) and the visits requested, were pertinent.

Conclusions
The system well performed and still runs. People correctly approaches to the medical visits. People usually knows that there are many possibilities to have a rehabilitation approach in hospital and they also know which kind of reservation they can use to be correctly introduced in the rehabilitation program they need. They are also well adressed by their family doctors.

Women's participation in community health screening project with Pap smear – case study of a District Teaching Hospital

CHEN Mei Chun, YANG Ting Wen, WENG Pei Yi, CHIEN Mei Hui, CHIEN Shun Tien, CHEN Li Yang

Introduction
In recent years, the incidence and mortality of cervical cancer continued to rise in Taiwan. If it can be diagnosed early, there will have an excellent cure rate. Pap smear plays an important role in early diagnosis. However, because women need to face the problems of privacy exposure, embarrassment and fear when they are taken Pap smear examination. Through the cooperation of the medical team, we provide and strengthen knowledge sources to encourage women to accept it.

Purpose/Methods
This study was taken in a county in the southern Taiwan provided by a regional specialized teaching hospital. Retrospective analysis of two community integrated screening activities done in June 2017 and April 2018 was performed. Women who were over 30 year-old who had not received Pap smear in recent years were screened by health care workers. Health education and support were provided to promote the willingness of accepting Pap smear examination.

Results
There were 84 women eligible for screening for Pap smears with an average age 58.8 year-old, including 33 (39.3%) 50-59 year-old. 55 women (65.5%) had education level higher than senior high school. There was 52 women accepted Pap smear examination with 19 (36.5%) elder than 60 year-old. Among 52 women, 38 (73.1%) had education level higher than senior high school. Variable analysis for women taken Pap smear or not showed significant differences in educational level and age (F=0.71, p<0.05).

Conclusions
Pap smear screening is an important project for health care and disease prevention for women, may effective reduce the incidence of cervical cancer. However, women with higher education level and advanced concept had higher cognition, attitude and behavior of accepting Pap smear. Combined with the use of community preventive health care services, the convenient and secure settings will enhance the acceptance of Pap smears which can improve Regular screening rate and achieve the expected goal of "prevention better than cure".
Integrated occupational health promotion services in Taiwan

LIN Wen-Yi, LI Chiu-Hui, TSAI Chun-Chi, CHANG Chiung-Fei, LEE Chia-Ling, KUO Chao-Hung, WU Ming-Tsang, HOU Ming-Feng

Introduction
Workplace is a special community with multiple hazards. Workers have more complicated health risks and problems. To implement WHO’s Global Plan of Action on Workers’ Health 2008–2017 strategy for occupational health for all, our hospital initiated an integrated occupational health promotion services program for workers and enterprises since 2011. Kaohsiung Municipal Siaogang Hospital, affiliated by Kaohsiung Medical University, organized a multidisciplinary specialist team to provide integrated services from primary prevention to tertiary health management.

Purpose/Methods
1. Identification and avoidance of hazards, 2. Advices for safe technology and industry hygiene methods to optimized working condition, 3. Workers’ health assessment before employment and medical surveillance, 4. Health promotion programs at workplace, 5. Primary healthcare and cases management for high risk workers, 6. Organized unit for comprehensive cares for occupational injury and diseases, 7. Individualized vocational rehabilitation programs to enhance return-to-work success, 8. Alliance with governance resources and insurance reimbursement to reduce economic burden for diseased workers.

Results
Total 12 enterprises and ten thousand workers from factories in field of power plant, oil refinery, chemicals, steel production, and shipbuilding, were enrolled. In addition to integrated clinical cares, we provided routine monthly on-site occupational health services, group and individual health promotion activities. With cooperation with basic occupational healthcare providers and industrial hygienists employed by industrial companies, we have decreased workplace accidents, reduced workers’ sick leave, promoted workers’ health status, improved recovery and return-to-work rate of deceased workers.

Conclusions
Our program has improved occupational health services. We should maintain this program to provide and promote sustainable comprehensive health management and occupational safety for workers. Further extending service program will achieve the WHO’s goal for occupational health for all workers.

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Combining mobile health care and existing counseling methods for community-based weight management programs

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Introduction
Recently, mobile interventions using smartphone applications are showing promising results on weight loss. The aim of this study was to analyze the efficacy of multidisciplinary approach using mobile intervention accompanied by conventional local healthcare assets including local public health center and regional hospital.

Purpose/Methods
150 overweight or obese adult participants signed-up to receive an eight-week intervention program with human coaching, through a mobile platform. Obesity was defined based on World Health Organization criteria for Asian population. The mean values with standard deviations of all variables before and after intervention program were calculated. Weight loss and BMI change were the main outcomes, evaluated by repeated measures analysis of variance, multiple regression.

Results
Compared to before and after participating program, body weight, body mass index, waist circumference, fat mass and fat percentage significantly reduced. In addition, fasting glucose, total cholesterol, triglyceride, LDL-cholesterol, AST and ALT significantly reduced while metabolic equivalent task significantly increased.

Conclusions
Multidisciplinary approach combining mobile healthcare application and offline care by healthcare providers was an effective method for weight loss. Additional studies are needed to evaluate the effectiveness of mobile health on anti-obesity program.

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The Effectiveness of Individualized Lifestyle Intervention for Diabetes Prevention and Metabolic Abnormalities

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Introduction
With the change in lifestyle, diabetes has been ranked fifth among the top ten causes of death in Taiwan. Further, hyperglycemia is frequently combined with hypertension and dyslipidemia. These metabolic abnormalities are strongly associated with cardiovascular disease. The aim of this study is to strengthen diet control and physical activity, and increase
knowledge and awareness of high-risk groups of diabetes in community, in order to promote health and reduce the burden of chronic diseases.

**Purpose/Methods**

Adults who were overweight (BMI≥24kg/m²) and had family history of diabetes were recruited. Participants with diabetes were excluded. Baseline BMI, waist, blood sugar, lipid profile, and blood pressure were evaluated. Participants were asked to fill out dietary behavior, Behavioral Risk Factor Surveillance System (BRFSS), and International Physical Activity Questionnaire (IPAQ) to identify barriers to behavior change. We offered monthly individualized counseling of diet and physical activity. A post-examination was conducted after 6 months to evaluate the effect of lifestyle intervention.

**Results**

A total of 125 participants with a mean age of 46 years were enrolled. 73.6% of the subjects were women. In baseline evaluation, 18 persons (14.4%) had elevated fasting blood glucose (≥100mg/dl), 38 persons (30.4%) had elevated HbA1c (>6%), 50 persons (40.0%) had hypercholesterolemia (≥200mg/dl), 21 persons (16.8%) had hypertriglyceridemia (≥150mg/dl), and 51 persons (40.8%) had high blood pressure (SBP≥130mmHg or DBP ≥85mmHg). The lifestyle intervention program was conducted since June 2018 and it is still in process.

**Conclusions**

In our study, high prevalence of metabolic abnormalities was found among the high-risk groups of diabetes in community. Lifestyle intervention was efficacious in managements of chronic diseases. However, poor adherence rate often hinders health outcomes. Improving health literacy with accurate education can help people follow recommendations, and enhance the effectiveness of lifestyle intervention.

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**Evaluation of life style and frailty status of above 55-aged community-dwelling adults in urban and rural areas in Taiwan.**

**CHEN Yu-Wen, LIU Bie-Ching, CHIU Ge-Lin, LEE Hsiu-Hua, HSU I-Lin**

**Introduction**

Taiwan has entered aged society, the demographic structure changed with older adults population increased. Frailty is a precursor to the disability of older people and seriously affects quality of life, and frailty is preventable and could be delayed. Understand different regions’ conditions of health status, healthy and hazard behaviors and frailty prevalence is the first step for community health care planning and promoting. The baseline information helps make proper health care plan, eventually improve the community residents’ health.

**Purpose/Methods**

This is a cross-sectional study design. The purpose of this study was to understand health situation and frailty status above 55-aged community-dwelling adults in different regions (urban and rural areas) in southern Taiwan. The research method was interviewing participants by using designed questionnaire. The contents of questionnaire included the basic data of demography, the state of health condition, health behaviors’ compliance, health hazard behaviors (including the usage of tobacco, alcohol and betel nuts), EQ-5D with VAS and SOF frailty scale.

**Results**

A total of 393 subjects included in this study (rural 53.2%). The average age in rural area is significantly higher than urban area (71.9±8.5 vs. 69.97±7.89, p=0.018). There is higher proportion of hazard behaviors in rural area. No matter in urban or rural areas, almost 20% residents had ever fallen before, and 45% worried about falling. The proportion of classified pre-frailty and frailty in rural and urban area is 20.1% and 23.9%, the SOF scores didn’t show significant difference.

**Conclusions**

Fall is a critical issue in older adults, and it could make quality of life worsen. Frailty is also a crucial issue in geriatric population. According to the results, fall and frailty present as a problem. Improve lower limbs strength to prevent fall and frailty could be another issue to discuss. Community-based programs probably could be the next step of community health promotion. And how to recruit more community-dwelling older adults is another challenge in the future.

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**Comparison of socioeconomic status between Alcohol Use Disorders and Non-Alcohol Use Disorders in Taiwan**

**YANG Mei-Yin, CHEN Chieh-Fan, CHEN Shu-Lin, LAI Jun-Huang, CHANG Hong-Tai**

**Introduction**

Alcohol Use Disorders (AUDs) patients frequently visited Emergency Departments (ED) as their healthcare entrance. Poor supportive system applied on them was found. To provide help to AUDs patients, we need to understand the socioeconomic status in AUDs patients.

**Purpose/Methods**

We conducted a retrospective population-based cohort study from the Taiwan National Health Insurance Research Database (NHIRD) Longitudinal Health Insurance Database (LHID) from 2000 to 2013.

**Results**

This study enrolled 74,361 patients with a history of alcohol use disorders (AUDs) related hospitalization and 297,444 age, gender, CCI score matched comparison patients. The demographic characteristics of the study population show mean age 44.46±12.41 years, predominant male proportion (90.2%) as well as CCI score 0, 1, 2 as 70.01%, 19.35% and 10.64%. We found significant proportion of less than median insurance premium (29.04% vs 14.26%, P<0.001) and low income household (3.65% vs 1.05%, P<0.001) in the AUDs cohort.
Conclusions
AUDs had higher proportion of low socioeconomic status. The associated social and economic supports should be involved with healthcare system.

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A Study of Colorectal Cancer Screening Behaviors of Community Residents Based on Health Belief Model

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Introduction
Colorectal cancer is the third common cause of cancer death in Taiwan. The results of fecal occult blood test can directly affect the incidence and mortality of colorectal cancer. Many people in Taiwan refuse to participate in colorectal cancer fecal screening. The health belief model can be used to predict the participation in cancer screening. The purpose of this study is to understand the relationship between the health belief models of local residents and their participation in colorectal cancer fecal screening.

Purpose/Methods
The cross-sectional study was adopted and data were collected using a structured questionnaire. The subjects were 187 people, aged 50 to 74 years old, who participated in colorectal cancer fecal screening in a regional hospital from December 11 to December 31, 2017. Data were analyzed using SPSS 22.0 software package. The statistical methods included descriptive statistics, chi-square and t-test, one-way analysis of variance and binary logistic regression.

Results
The average age of the respondents was 64.41 years old (SD=6.33). This study found that gender, education level, place of residence, colorectal cancer screening knowledge, colorectal disease medical experience, other cancer screening experience and family cancer experience affected Perceived Susceptibility, Perceived Benefits of Taking Action, Barriers to Taking Action and Self-Efficacy in Health Belief Model respectively. The experience in other cancer screenings, Perceived Severity, and Barriers to Taking Action are three important predictors of regular participation in colorectal cancer fecal screening.

Conclusions
People with more experience in cancer screening have higher Perceived Severity and lower the Barriers to Taking Action, and are more willing to take regular screening. The promotional means, including showing health education videos, professional education, setting up cancer screening consultation platform, and improving strategies for specimen collection barriers, can enhance people's willingness to participate in the colorectal cancer fecal screening regularly.

Comments
none

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Development of health promotion model in working-group for control body mass index (BMI by norm

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Introduction
The prevalence rate of obesity is higher. It is important to increase the risk of chronic disease. The trend of new diabetes rate is now increasing too. These caused by food consumption and exercise habits. Purposes was to study obesity situation and best practice of health promotion model in working-age by using norm that can reduced new diabetic cases. Target group was local government, community leaders, health volunteers, people, public health officer. Study in 4 provinces in Thailand.

Purpose/Methods
1. Study obesity situation. Select the best practice area that can reduced new case diabetes rate. Take lesson learned to be regional health promotion model in working-age for control BMI. 2. Study the regional health model by using norm, pattern of developing. 3. Develop regional health promotion model to be provincial model for control BMI and operation. Collecting data by group discussion, in-depth interview, take lesson learned from the study area.

Results
1. The obese people who BMI is more than normal is 56.5%, and waist circumference rate (>80,90cm.) is 44.2%. Best practice model that select is Rongkum subdistrict, Kalasin province. It is the regional model of health promotion model in working-age for control BMI. 2. Developing regional model to be provincial model of health promotion for control BMI in working-age by using norm.

Conclusions
Norm or 6 main activities: 1) monitoring body-weigh and waist-circumference once a month 2) community agreement 3) follow up risk group once a month and consult DPAC (Diet -Physical Activity Clinic) 4) set place and exercise 5 days a week 5) search for health model and exchange lifestyle practice 6) improve activity and project plan. Best practice model was developed by community. The participation of every sectors was very important.

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Relevant factors and impact of delaying further colonoscopy diagnosis for those with a positive fecal occult blood test on colorectal cancer staging

LEE Po-Chang, KUNG Pei-Tseng, TSAI Wen-Chen
Introduction
Background: In Taiwan, the incidence of colorectal cancer and death rates have risen significantly. Many people with a positive fecal occult blood test (FOBT) in colorectal cancer screening did not complete follow-up colonoscopy diagnosis and delayed diagnosis under a universal National Health Insurance coverage in Taiwan. The study objectives were to analyze the factors associated with delaying subsequent colonoscopy diagnosis for positive FOBT cases and to explore the impact of delayed colonoscopy surveillance on colorectal cancer staging.

Purpose/Methods
Methods: This study used a retrospective and nationwide cohort study. People aged 50 to 69 years with positive FOBT from 2010 to 2013 were the study population. Positive cases receiving further colonoscopy diagnosis within three months were seen as without delayed colonoscopy diagnosis. The logistic regression model was used to explore the factors associated with a delay in further diagnosis. An ordinal logistic regression model was used to examine the impact of delayed colonoscopy diagnosis on cancer staging.

Results
Results: There were 282,211 positive FOBT cases and 48.12% of them had a delayed colonoscopy diagnosis. Factors affecting delayed colonoscopy diagnosis included marital status, aboriginality, income, education, residence area, comorbidity, experiences in FOBT, and ownership of diagnosing hospital (P<0.05). Participants with a delayed further diagnosis at risk of developing advanced cancer were 1.41 times higher than those without delaying. Those having an experience in FOBT had a 0.82-fold lower risk of developing advanced colorectal cancer than those without experiences.

Conclusions
Conclusions: Many factors influenced the delayed colonoscopy diagnosis for FOBT positive cases. Delaying further diagnosis increased the severity of colorectal cancer staging. We should pay more attention to these factors to improve the follow-up rate for those with a positive FOBT in colorectal cancer screening.

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Implementing the Medical Referral System and Linking Cooperation Partner to Community Healthcare Group in Taiwan
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Introduction
In Taiwan, medical integration is very important, because budget of health insurance. Especially medical center and regional hospital all will be aggressive to set up referral system for mild diseases patient to near community hospital or local clinic. In this way, major hospital could be sustain more critical patients.

Purpose/Methods
For health promotion and prevention in primary health services, we doing the medical referral system project of National Health Insurance, and providing resources to local clinic or community hospital include arranging doctors, linking medical information and register system. The goal of project that patients were got prevention health in advance. And equal treatment and services even though they would be transfer to local clinic or community hospital.

Results
Since June 2016, the model we started to cooperate with community hospital and local clinic, and refer to 475 patients, it was a successful model for patient, and decrease patient waiting time to be health education, diagnose or exam at medical center and regional hospital.
Conclusions
In a word, if the process of referral system would be smooth that help patients be treated, prevention health, also made medical center and regional hospital’s medical resources reduce to utilization.

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A gap in health

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Introduction
Health promotion has become a matter of course and importance for modern people. There is also a gap in health just as there is a gap between the rich and the poor. Health workers should always be interested in what is a health gap problem.

Purpose/Methods
We asked a total of 80 patients, carers, hospital staff and nursing staff from Jan. to Oct. 2018, 1. When you feel unhealthy? 2. The health you want 3. What is the health promotion you can’t do alone?

Results
answer is 1. A chronic fatigue, lifelong medication diagnosis, lack of hospital expenses, depression, and inactivity. 2. No medication, no pain, normal medical examination, and restful mind. 3. Cancer, smoking interruption, alcohol discontinuation, dementia prevention, child health management, skeletal muscle disease, in order.

Conclusions
Without your own judgment, your ability to move, and your ability to pay, the gap in health can grow. At least anyone can discuss the task of solving the gap with the health service provider. Before establishing the activity policy, Health promotion agencies must feel the health gap of the target. Hospitals are places where people’s expectations, realization, hope and disappointment coexist even though they have to pay.

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Community based integrated medical home care in Taipei: A two-year follow-up study.

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Introduction
Taiwan has been an “aged society” since 2018, and will be a “super aged society” in 2026. The expected population of disabled will be more than one million in 2026, and which will place huge burden on the health care system. Providing medical services to aged or disabled who had difficulties visiting out patient departments has been launched since 2014, the potential effects on health promotion in terms of reduction of hospital admission rates has been focused in this study.

Purpose/Methods
Patients who were eligible for integrated medical home care (age≥65 y/o and disabled, or those who had substantial medical demand but had difficulties visiting hospitals) and registered in Taipei City Hospital, Zhong-Xing branch in 2016-2017 were enrolled. Patients with tracheostomy, Foley catheter and nasogastric tube indwelling or in hospice status were excluded. Physicians of various specialty or sub-specialty will provide medical services to patients in-needs at home, including physical examinations, medicine prescriptions, blood tests and diagnostic ultrasound imaging.

Results
Total 139 patients of average age of 80 were enrolled in our study group, the control group consisted 53 patients with average age of 81, who had similar medical demands or disabilities but refused this medical home care program. Total 720 medical home visits were provided in two years, a tendency of reduced admission rates was noted in the study group (18% vs 28%), however, the odds ratio was 0.5556 (95% CI: 0.2656 to 1.1620), which didn’t met statistical significance.

Conclusions
Medical home care eliminates the gaps of patient’s home and doctor’s office, medical services were given by specialists of hospital rather than general practitioners of the clinics in our study, debates existed concerning man-power consuming and efficiencies of such medical services. In our preliminary data, a trend of reducing the admission rates for home care patients is noted, more cases may be required to reach statistical significance, which may encourage the government and hospital executives to keep the policy going.

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Best Partner: Narrative Inquiry of Treatment Supporters of Directly Observed Treatment Short-course for patients with Tuberculosis

HO WEI-CHE

Introduction
DOTS (Directly Observed Treatment, Short-course) is an important strategy developed by WHO to fight against tuberculosis. The execution of DOTS is by direct supervisor of the treatment supporters. The successful employment of DOTS are not only technically watching patients taking his or her medicine, but to offer patient-centered care. Not every patient with tuberculosis is friendly to the treatment supporters. The purpose of this article was to investigate multiple challenges and achievements that treatment supporters have encountered and achieved.
Purpose/Methods
This study is a qualitative survey. Data collection was done by observation, interview and field notes. We coded and analyzed the data. And we proceed discourse and explanation of the meaning of our data.

Results
1. Stigma of tuberculosis and confined soul: patients with tuberculosis were reluctant to adhere due to fear of labeling. Treatment supporters were often rejected or refused. 2. For professional care to tender love care: differed from delivering medicine routinely, but to support and accompany patient case by case. Therefore, having a mutual beneficial alliance with each other by supporting their life.

Conclusions
Although tuberculosis is a treatable and curable disease, it remains a significant challenge to global public health. DOTS is a method strongly recommended by WHO. It can be adjusted according to patient's life style. Privacy and many problems like comorbidity, treatment supporter must face a lot of ordeals. At the mean time to demand capability of treatment supporters, we need to think about the fortunes of the treatment supporters. When it comes to the success of DOTS, they are unignorable and deserved respect.

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The difficulties of implementing home medical care and two-way referrals in Taiwan
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Introduction
The "National Health Insurance Home Medical Care Integrated Program" announced in Taiwan in 2016 hopes to improve the accessibility of medical care for patients who are the disability. However, it has been learned that so far there are a lot of institutions that have joined the program and have not yet received the case. The purpose of this research is to explore the difficulties and needs of the implementation of the home medical care and two-way referral at clinics.

Purpose/Methods
Physicians from the clinics which have the partnership with Kaohsiung Veteran General Hospital as the research object, using the research team's questionnaire to investigate. The content of the questionnaire includes basic information; whether the institutions have received the case and the reason for not; whether there are a team referral experience and the reason for no referral; the course content and cooperation they wish to obtain in the future.

Results
The age of the physicians was the highest (81.8%) for those aged 41-60. The ratio of males and females was 81.8% and 18.2% respectively. For the physicians who did not successfully receive the case (46.2%), the most important reason is that the official login electronic platform is unfamiliar (51.7%). For the physicians who have no team referral experience (46.2%), the most important reason being the unfamiliarity of the team's referral system (45.7%).

Conclusions
According to the research results, the main difficulty for home medical and two-way referrals for community physicians is the unfamiliarity with the system and the electronic platform. Besides, the most desirable course is to introduce the two-way referral system and electronic platform. The project that most wants to cooperate with the hospital is to assist in arranging hospitalization. The results of this questionnaire can be used as a basis for future policies, courses, and publicity.

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Use embrace project to improve the quality of home care - An example from the home care center of a teaching hospital in northern Taiwan.

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Introduction
The literature points out that "embrace" has positive therapeutic effects on both physiology and psychology. We expect to convey the warmth of care to the patients and their family by respecting the effects of "embrace", and to improve the quality of home care.

Purpose/Methods
The purpose of this study was to investigate that after the "embrace project (EMBRACE)" applied to home care patients and family members, the effectiveness for the vital signs, the brief symptom rating scale and service satisfaction. This research is a Quasi-Experimental design, using purposive sampling to collect 35 patients and primary care givers who’s willing to anticipate the study. Three home care nurses implement the Embrace program (EMBRACE) at each home visit which includes: E(Embrace): An A-frame hug. M(Massage): Passive exercise. B(Bright): Ac-company the patient or the primary caregiver to have sunbathe. R(Review): Talk to the patient review an important photo of their life. A(Accompany): Build up the feeling of accompanying. C(Clap): To give feedback. E(Enjoy): Wish that every home care is a companionship to enjoy the life. The collected data is ana-lyzed by SPSS 24.0 version statistical software.

Results
1. The average systolic blood pressure was decreased from pre-test 133.77mmHg to post-test 127.46mmHg (p< 0.005), made significant differences. 2. The average heart rates decreased from pre-test 82.94 bpm to 80.06 bpm (p<0.005), made significant differences. 3. The percentage of patients who has emotional disorders tested by the brief symptom rating scale de-
creased from 28.6% to 2.9% (P< 0.005), made significant differences. 4. The total satisfaction score of home care increased from 96.2 points to 97.9 points.

Conclusions
The result of the study showed that when the "EMBRACE project" applied to home care patients and their family, can effectively lower the systolic blood pressure and heart rate, and reduce the occurrence of emotional disorders. It can also effectively improve the satisfaction of home care.

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YEH Yi-Hei

Introduction
1. Background With the arrival of an aged society, the Taipei city Shilin District Health service center has recorded that the elderly living alone has a 423 population and 233 of them have chronic diseases. With only 21 public nurses, each nurse has to take care of 31 elderly with chronic diseases, on average. 2. Purpose Improve satisfaction of the public for health care and chronic disease cases in the Shilin district.

Purpose/Methods
Public health care service records have been kept in writing. In order to improve the effectiveness of home care, family satisfaction, and care for chronic disease patients, the new Mobile Health App - mHealth has been introduced in 2016. mHealth is the first "Public Health info data system" mobile application developed in Taiwan for the elderly living alone and for chronic disease case management.

Results
In 2017, the level of satisfaction by the public for health care and chronic disease case management in the Shilin district is 92.93. Compare to 91.24 in 2016, it shows an increase of 1.69 points.

Conclusions
When public nurses visit the elderly living alone and chronic disease patients, the user’s health data can be inspected right away with the mHealth database. The cloud data includes any self-reviewed health data, and may provide feedback immediately during the visit regarding changes in health statistics. The public nurse may also learn from the innovative education with multimedia to improve their knowledge and ability in order to provide services with higher satisfaction levels.

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A Weight-loss Competition Program with a Two-stage Walking Competition among Employees and Community Residents in a Regional Hospital of Central Taiwan

KUO Chien-Hung, TSAI Ru-Ying

Introduction
An annual weight-loss competition program has been executed from 2013 to 2017 in Tungs’ Taichung MetroHarbor Hospital. Owing to the persistently high prevalence of overweight and
obesity, an add-on intervention program was needed for current weight-loss programs. Walking 10,000 per day is one of the recommended activities for fitness and weight loss.

Purpose/Methods
The purpose of our program is to evaluate the effect after adding a two-stage 900,000 steps competition into our weight-loss competition program in healthy hospital. We encouraged the staff to invite their friends and relatives, out-patients in the hospital, and community residents to participate the weight-loss competition program together. We also invited the employees in our program to take part in the two-stage 900,000-steps walking competition with walking at least 10,000 steps every day for 3 months at both stages.

Results
A total of 2,015 participants, including 1,029 employees and 986 community residents, participated the weight-loss competition program. Forty-two employees of our hospital also attended the two-stage 900,000-steps walking competition. A total of weight loss was 2,822 Kg, with an average weight loss for 1.4 Kg for each participant. The average steps by each participant in walking competition were 452,832 steps per month.

Conclusions
After adding the walking competition into our program in healthy hospital, the participants increased from 1,250 in 2016 to 2,015 in 2017. The weight-loss competition and walking competition program could enhance the cognition of healthy lifestyle for healthy eating, frequent physical activity, and weight maintenance among employees of hospital and community residents.

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Multi-intervention method for experience sharing of weight-loss program- Take the Taiwan Longci District as an example

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Introduction
According to the data of Tainan Public Health Bureau, the prevalence of overweight and obesity in 18-64 aged men and women are 62.5% and 45.1% in Longci District. Studies show that obesity related to metabolic diseases, cardiovascular diseases, joint bones and cancer, if combined comorbidities, the risk of death will increase. To echo Taiwan government’s health issue of “obesity prevention ”, National Cheng Kung University Hospital (NCKUH) worked with local Public Health Center to promote obesity prevention in Longci District.

Purpose/Methods
11 members with BMI=>24 in a multi-interventional weight-loss program in Longci District, the program consists 10 weeks of weight-loss education, positive thinking courses, exercise lessons and a variety of interesting diet courses. The content of exercise courses filmed as teaching materials, help members keep exercise at home. In addition, the members in this program used communication software to establish a communication channel in order to solve the problem of weight loss problems and give positive support to each other.

Results
The data showed there were significant differences in body weight, BMI, waist circumference and body fat between pretest and post-test(p<0.05). The results showed that multi-interven-tional health weight-loss program can effectively improve weight-loss of people. Before the program, only one people (9.1%) exercised regularly. After the program, there were 7 peo-ple(63.6%) had exercised regularly. Total 11 people successfully lost 35.5 kg, and the weight loss champion and the second place respectively lost 6.5 kg and 3.7 kg.

Conclusions
Healthy diet, regular exercise habits and positive support can achieve healthy weight-loss goal. Through implemented multi-interven-tional program, which including the use of group health education, healthy diet, physical fitness, recording sports course videos and using communication software to solve problems and providing positive support, confirming the effectiveness of weight-loss program. This successful experience can provide some directions to healthy weight-loss in the future.

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The Effect of Karaoke group activities on the social and health status in the community-dwelling people.

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Introduction
We conduct health improvement in the community with the aim of creating opportunities for connections between participants. Twenty-two groups held “Karaoke Group Meeting” for 201 times or over in 2017 with 2368 participants. Both the number of meeting and the number of participants had been increasing. Also, the “Karaoke Exchange Meeting” was held simultaneously, mainly for the persons who wanted to exchange each other, and 3,000 members joined the "Karaoke Group Meeting" and "Karaoke Exchange Meetings."

Purpose/Methods
We investigated the effect of Karaoke group activities on the social and health status in community-dwelling people. A questionnaire survey was conducted for 82 participants (22 males, 60 females, age 76.4±6) of Karaoke group participants and we revealed the situation of song practices related with "social network," “cooperation,” and “health promotion” among participants. Our survey included: What is the motivation to start Karaoke, Practice times, Whether they participated in the Karaoke exchange party,” Whether they became healthy.
Results

① 89% of enrolled members enjoyed Karaoke over 2 to 3 times a month. ② The proportion of people practicing Karaoke was 76%. ③ About 51% of them wanted to interact with friends about the motive of starting Karaoke. ④ Regarding the question of the "Whether they became healthy," 94% replied "slightly healthy" or "I think very healthy." Especially, people who joined in the Karaoke Exchange Party, 73% answered: "I think healthy."

Conclusions

The activity of participants, such as connecting with society and the regular singing practices, was improved by the Karaoke Group Meeting. Participants in the "Karaoke Exchange Meetings" seemed to have a higher level of self-reported health, and they are developing positive feelings toward the performance on the stage. It suggests that the meetings contribute the improvement not only in song skills but also in human relations. Investigation will be required to show the difference between Karaoke participants and non-participants.

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Necessity and opportunity of care: Project for evaluation of the criteria for access to care for people with inability of entry in the national health system

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Introduction

There are patients, italians and immigrants even less than 18 years old, with difficulty in accessing the National Health Service due to administrative and/or economic problems: indigence, loss of work, absence of health insurance, waiting for family reunification, etc. These subjects may need treatment for individual (cancer, diabetes, pregnancy etc.) but also for public health (tuberculosis, HIV, hepatitis, etc.) problems, with risk for the community. The legislation can be contradictory and not exhaustive for all types.

Purpose/Methods

The Local Health Unit of Reggio Emilia is developing a project with the aim to share and standardize the criteria of access to prevention, treatment and rehabilitation programs by patients not enrolled in the national health system. The goal is to avoid non-homogeneous access to services, to address the ethical issues of guaranteeing care and to decrease the level of conflict between operators and users. A provincial multidisciplinary working group has been created.

Results

The multidisciplinary group, composed by staff from health and social services in integration, is proceeding: - to examine the critical cases that are prevalent or have the greater impact on health - to examine the existing legislation at national, regional and local levels - to propose the criteria and the administrative paths for access to healthcare in problematic cases. A sub-group is handling emergency situations. All the decisions are and will be in line with the regional guidelines.

Conclusions

The project is increasing the integration between social, health and administrative services of the province, since it is composed by health managers, administrative staff, advocates, social workers, doctors and nurses. The project is also improving the communication between operators and users and guaranteeing the access to health care for particularly fragile and vulnerable sub-populations.

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Prediction models of postoperative anxiety and depression in breast cancer surgery patients

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Introduction

Breast cancer is the most common form of cancer among women, and nearly 50% of early breast cancer patients have either depression or anxiety. Anxiety and depression are associated with other physiological conditions to increase mortality. Therefore, this study will identify the best important factors for postoperative anxiety and depression in patients after breast cancer surgery by following three data mining techniques, such as Artificial Neural Network (ANN), Support Vector Machine (SVM) and Multi Linear Regression (MLR) predictive models.

Purpose/Methods

This study adopted a prospective study design, selected three medical centers, breast cancer patients, respectively, in patients before surgery, one year, two years and five years after surgery, between uses three type questionnaires. The total sample number is 357 bits, by using ANN, SVM and MLR predictive model, the accuracy of prediction model is discussed by residual analyses and global sensitivity analysis in order to find out the important predictors of postoperative anxiety and depression in patients after breast cancer.

Results

The results show that ANN predictive model is better than that of SVM and MLR. Prediction of postoperative anxiety and depression in patients with breast cancer surgery, in the residual analysis of anxiety (BAI scale), ANN, SVM and MLR were 0.15, 0.17 and 0.32 respectively, 0.20, 0.23 and 0.40 in the residual analysis of worry (BDI scale). Overall, ANN performs better than SVM and MLR models.

Conclusions

The results show that Neural Network (ANN) predictive model is better than Support Vector Machine (SVM) and linear complex...
regression (MLR) Prediction model. Therefore, predictive model can be used as a reference for future clinical decision making, to find out the best important predictor, to intervene in the best time, to prevent postoperative anxiety and depression of patients with breast cancer surgery, and to take care of the patient’s physical and mental state and the quality of the family.

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Preliminary Research of the Psychiatric Patient Holistic Health Care in Home Care Service in Southern Taiwan

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Introduction
The purpose of this study was to explore the health and comorbidity distribution of psychiatric home care patient, as a reference for future care.

Purpose/Methods
Subjects were the psychiatric home care patient; blood examination was conducted to understand the physical condition of psychiatric patient at home during the period of January-November 2018. The examination result report was applied excel statistics for data analysis, included descriptive analysis, ratio of gender, diagnosis, age, and physical illness.

Results
Total 181 psychiatric home care patient participated blood examination, the statistical analysis showed that males accounted for 51%, females accounted for 49%, and the average age was 53 years. The youngest case was 25 years old and the oldest was 92 years old. The main psychiatric diagnosis of schizophrenia accounted for 80%, schizoaffective disorder was 5.4%, bipolar disorder was 6.3%, and other mental illnesses were 8.3%. The initial screening rate of mental and physical diseases was 34.7%, including 11% of hypertension, 16% of diabetes, 7.7% of hyperlipidemia, and 3.86% of two chronic physiological diseases.

Conclusions
Preliminary results showed that the comorbid illness was dominated by three-hypers series (hyperglycemia, hyperlipidemia and hypertension), and there were many cases of diabetes. In the future, it is recommended to strengthen the educational elements of comorbid diseases and improve the quality of life of psychiatric home care patient, which will help provide reference for physicians’ treatment. Further examinations can be conducted in the future to enhance the early detection of early treatment.

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Training the facilitators of the BHC-5L for suicide prevention in six counties with higher suicide rates in Taiwan

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Introduction
The BHC-5L (being happiness catchers- looking, listening, learning, loving, and living) has been developed in New Taipei City since 2010 not only for suicide prevention but also for mental health promotion. The Ministry of Health and Welfare decided to promote the BHC-5L for suicide prevention in the other areas since 2017. In 2017, there were 154 facilitators in four counties. The report presents the training programs of the BHC-5L in the other 4 counties and 2 cities in 2018.

Purpose/Methods
MacKay Suicide Prevention Center were authorized by the Ministry of Health and Welfare to organize and practice the training programs of the BHC-5L. There were 4 counties and 2 cities. The programs included 2-day basic lectures and 2-day workshops. After the basic lectures, all trainee had to attend the written examination. Only who passed the examination could attend the following 2-day workshops as the candidates. After the workshops, all candidates had to attend the oral examination. Passing the final oral examination, they would be the facilitators.

Results
The training programs were practice from July to December 2018. There were 185 trainees attending the 2-day basic lectures in all 4 counties and 2 cities, and 176 (95.1%) passed the written examination becoming the candidates. There were 176 candidates attending the 2-day workshops, and 146 (83.0%) passed the final oral examination becoming the facilitators. The final pass rates were 66.7% in Kinmen county, 94.4% in Penghu county, 100% in Hsinchu city, 83.1% in Taoyuan city, 100% in Lienchiang county, & 62.5% in Yilan County.

Conclusions
The BHC-5L was a successful project to reduce suicide rates in New Taipei City. The facilitators played important roles to facilitate the health promotion and suicide prevention. From 2017 to 2018, new facilitators were trained in 10 new counties or cities. The public health officials have to arrange the trained facilitators to lecture the BHC-5L in communities, schools, and workplaces.

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Integrated system for TB control: Communication, empowerment and integration as key points of the strategy

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Introduction
Tuberculosis (TB) is still a major public health problem with high social impact and requires a coordinated management of case index, contacts and community. In some cases (elderly subjects, homeless etc.) an integrated social-assistance system is required. It is important to ensure adherence to therapy and follow-up and to carry out screening of contacts, in order to avoid the onset of drug resistance and to stop the transmission in the community.

Purpose/Methods
The Local health Unit of Reggio Emilia implemented an integrated system of hospital-territory care, multidisciplinary and interdepartmental. Nurses dedicated to TB had the objectives to actively monitor patients’ adherence to follow-up, to communicate effectively the importance of completing treatment (health education and patient empowerment) and to act as a link between medical staff and patients. TB cases were followed-up in dedicated outpatient clinics, located throughout the Province to improve accessibility, until the end of treatment with direct delivery of drugs.

Results
From 2004 to 2016, 89% of the 455 cases of pulmonary TB successfully completed treatment (WHO’s objective ≥ 85%). Contacts were quickly identified and proposed for treatment of latent TB infection if positive. In 2014-2016, 1121 contacts at risk were identified; the 93% completed the entire diagnostic-therapeutic pathway (objective ≥ 85%). The 87% of positive contacts successfully completed treatment for latent tuberculosis infection (objective ≥ 75%).

Conclusions
Tangible results can be achieved through coordinated activities and specifically trained professionals for TB control. The promotion of clinical-organizational models that improve continuity of care and the definition of multidisciplinary diagnostic-therapeutic pathways ensure the optimization of disease surveillance.

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Current healthy status of Oil Disease survivors in Taiwan, A 14-years Study of 575 Cases in Taiwan

TSENG Yuan-Tsung, WANG Heng-Horng

Introduction
In 1978, there was an unfortunate replication of poisoning caused by ingestion of rice oil contaminated with PCB's in central Taiwan. Although about 2000 persons registered with health agencies as being exposed after each episode, the exact number of victims is unknown. To compare the long-term risk in 575 Taiwanese survivors who had been exposed to polychlorinated biphenyls (PCBs) with comparison cohort who were exposed to background levels by Matched-pair cohort study.

Purpose/Methods
We followed the exposed persons and compared their risk factor of disease with the matching cohort 40 years after the accident in central Taiwan. To identified 575 survivors born before June 1978 and after their mothers' consumption of contaminated rice oil; 575 survivors matched for sex, age, before the poisoning. To analyze the incidence of chronic, physical and major injuries with the three million health care and major injuries database sampled by National Health Insurance.

Results
Overall, most were male (53.6%), with a median age 48.7±22.3 years. The Oil Disease cohorts and other non-Oil Disease cohorts had a significantly higher COPD ([RR]: 1.65 ; 95% confidence interval [CI]: 1.29-2.11), Dermatitis ([RR]: 1.57 [CI]: 1.31-1.89), Hyperthyroidism ([RR]: 2.03 [CI]: 1.16-3.56), Hypothyroidism ([RR]: 2.65 [CI]: 1.37-5.12), Hypothyroidism ([RR]: 2.65 [CI]: 1.37-5.12), Goiter ([RR]: 1.14 [CI]: 0.64-2.03), Thyroiditis ([RR]: 2.16 [CI]: 1.19-3.92), Thyroid cancer ([RR]: 8.02 [CI]: 0.73-88.65), Renal failure ([RR]: 1.57 [CI]: 0.95-2.58).

Conclusions
The Oil Disease survivors exposed to heat-degraded PCBs had a significant risk in skin and thyroid than their matched comparison. The exposure of PCBs has long-term adverse effects on skin and chronic disease development in humans. Besides, the current health care policy pays insufficient attention to Oil disease survivors. It's is necessary to ensure that systemic and organizational factors giving rise to people neglect are addressed, while knowledge sharing and healthy promote are enhanced.

Comments
We confirm that this abstract has not been submitted elsewhere and all authors have approved the abstract and agree with submission to HPH.

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Using resource integration to promote health community—Experience in Taiwan

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Introduction
The population of Gandau community was 11,901 in 2017, and 15.9% of them are elderly above 65, making it an aging community. We hope by integrating and linking the community resource, the concept of health promotion can be introduced to lower the disability rate, decrease medical expense, increase the quality of life and realize the goal of aging healthily.

Purpose/Methods
1. Hold the health promotion committee to make elderly friendly policies. 2. Set up “community elderly care center” to introduce multiple health promoting events in addition to health management, health seminar, group meal plan and visitation. 3. Train volunteers to participate in the visitation to send health related message and cultivate health behavior. 4. To encourage the elder to do social participation and live their life.

Results
1. To intervene with rehabilitation exercise: Using Kihon checklist to do the disability pre-test and post-test (N=652) on the elderly and the result shows a decrease from 9.8 to 7.6 while the fitness test (N=53) shows 94.3% of them has good lower limbs muscular endurance. 2. Life satisfactory assessment (N=123): 95.9% of them feel happy while 95.1% of them believe they’re living a meaningful life and 96.7% of them show their concern toward their family and friends.

Conclusions
The health promotion in community is an endless task. The hospital can bring in the professional teams and actively integrate the community resources to introduce multiple health promotion projects that satisfied the physical, mental and spiritual needs of the elderly. The result from both Kihon checklist and life satisfactory assessment show that it’s effective in delaying disability and dementia for elderly by doing resource integration, making it worth promotion.

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Using Ecological Systems Theory in Community Health Assessment

YI-LIN Su, MEI-HUA Zhong, CHAO-CHIN Hu

Introduction
With the gradual deterioration of the global ecology, extreme changes in the climate, the general economic depression, and changes in the demographic structure (such as: aging, single, low birthrate, and new immigrants), the health of the community is more important.

Purpose/Methods
The project uses a full range of ecological theories, from the personal health, the presentation of each role structure in the family and the interaction between individuals and the environment, to get a complete assessment of community health issues, and then put forward concrete and feasible health promotion programs. The data collection methods include: (1) Observing methods; (2) In-depth interviews; (3) Questionnaire Survey; (4) Document inspection methods to collect data for review, description, classification and interpretation.

Results
Through the four major ecosystem theories for community health assessment, the above-mentioned findings reveal that the main health problems in the community are: (1) The general lack of capacity and action for residents to promote health; (2) Inadequate supportive environmental management.

Conclusions
In this study, the four major systems of ecological theory were used to assess the health status of the community in endangered areas. Compared with the previous domestic community health assessments, in addition to the assessment of external systems and macroscopic systems, special emphasis was also placed on the interaction between ecosystems for individual residents and households. The resulting impact can therefore be found to be different from previous community assessments of health issues.

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Are Thai working-aged population in Regional Health Area 9 active and sleeping well enough?

SUMONNOK Suchitra, LOTHAWEE-MONGKOL Piyamaporn

Introduction
Background: Physical inactivity, sedentary behavior and sleep deprivation increased risks of non-communicable diseases. According to the National Health and Welfare Survey in 2015 showed that 42.4% of Thai adults aged 18 and above met the recommendation of physical activity and 33.8% had high level of physical inactivity. In addition, Its results showed national physical activity data are available while there is a lack of the regional data on physical activity.

Purpose/Methods
This study aimed to determine the physical activity, sedentary behavior and sleep patterns of 404 working-aged population (aged 18-59) in 4 provinces of Regional Health Area 9, Thailand. All samples were randomly stratified at provincial, and district levels in urban and rural areas. Data were collected by face to face questionnaires based on WHO Global Physical Activity in June, 2017. Descriptive parameters (percentage, mean, standard deviation and t-test) were applied.

Results
The working-aged met the physical activity at high level (15%), and moderate level (35%) and by walking (68.1%) according to
the recommendation by WHO. The average of sedentary behavior was 4.1 hours on a working day more in female than male (p<0.05) and was 3.6 hours on weekend. Sleep on a working day was 7.7 hours more in rural than urban areas (p<0.05) and was 8.1 hours on weekend. Moreover, the result showed that the quality sleep was 53.9%.

Conclusions
Policy makers of Regional Health Area 9 in Thailand should focus on promoting physical activity, reducing sedentary behavior and promoting quality sleep in working-age population especially women who were the vulnerable group. Walking could be promoted as it was appropriate to daily life of Thai people.

Comments
Impact of critical trends on public health and health care – the role of health promotion

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Lifestyle Change after 6 month health coaching among hypertension patients at public health center branches in rural area of Korea

LEE Heylean, KIM Jung Min, MOON Ji Young, CHO Eun-Hee, HER Ae-young, KIM Yong Hoon, BAEG Yeonheui, CHOI Danbi, LEE Jihye,GWON Hyeoknyeo,LEE Hyunhee

Introduction
Health coaching became effective tool for chronic diseases. Gangwondo launched a pilot program called ‘9988(its meaning is live lively till 99 years old)’ to empower community health worker and to promote lifestyle modification through health coaching. This study investigated the effects of coaching program on awareness and lifestyle modification with hypertension patients in rural area.

Purpose/Methods
Community health workers practiced the program at public health center branches for 6 months. This program was consisted of monthly face to face counseling and weekly telephone counseling. We asked questionnaire about the knowledge, practice of disease management, self-efficacy, health status, and lifestyle. We checked blood pressure, body mass index. We analyzed 6-month follow-up data of 489 patients.

Results
Knowledge, medication compliance, and low salt diet improved. Self-efficacy and health status also significantly increased. Number of smoker, amount of cigarettes decreased. Number of alcohol drinker, frequency of dinking, and monthly amount of drinking decreased. Number of physically active patients, frequency of exercise, and amount of exercise significantly increased. Number of patients with adequately controlled blood pressure increased from 322(65.8%) to 416(85.1%). Mean systolic pressure(132.9 to 125.7mmHg) and diastolic pressure(78.1 to 74.7mmHg) decreased.

Conclusions
6 month health coaching program resulted in great improvements of knowledge, disease management, lifestyle modification and blood pressure control. We showed health coaching program can be implemented in rural area through public health center branches and helpful to hypertension management.

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E-Posters: Digitalization in health care and health promotion

Comparison of The Effects between Physician Reputation and Medical Equipment on The Willingness to Seek Medical Care - A Study of Patients with Urinary Calculi in Taiwan

CHANG Chih-Ming, YEN Chia-Chi

Introduction
Under National Health Insurance, medical expenses are no longer the main factor to consider medical treatment. The relevant studies indicated “distance,” “physician reputation,” “medical equipment,” “service attitude,” and “hospital environment” can all affect the people’s willingness to seek medical care in different regions. This study explored the effects that “physician reputation” and “medical equipment” have on the willingness of patients with urinary calculi to seek medical care.

Purpose/Methods
Telephone interviews were conducted for patients with urinary calculi who didn’t have a follow-up visit for over six months. The patients were randomly assigned to inform of the newly enlisted physician from the medical center or the newly purchasing holmium-YAG laser. The numbers of follow-up visits for the next three months were tracked, and the Pearson chi-square test was used to analyze whether there is a significant difference between these two return-visit rates.

Results
84 telephone interviews were conducted. Among them, 8 from 42 patients informed the newly enlisted physician from medical center returned, and the return-visit rate was 19.04%. 1 from 42 patients informed the newly purchasing holmium-YAG laser returned, and the return-visit rate was 2.38%. The Pearson chi-square value was .015<.05, indicating there is a significant difference between these two return-visit rates.

Conclusions
The study result showed that patients informed of the newly enlisted physician have a significantly higher return-visit rate than those informed of the newly purchasing laser equipment, and indicated that “physician reputation” has stronger impact than
Technical development of a wearable device to assist facial identity recognition for people with memory cognitive impairment

HUNG Li-Ju, CHEN Jiann-Lin, LIN Yih-Lon, CHEN Chi-Chia, CHENG Jin-Shuang

Introduction
It is embarrassing not instantly calling the name of the familiar people we encounter. Therefore, this study develops a wearable device that provides memory support to help such persons to engage activities of daily life with confidence and dignity. The wearer can use the device to recognize the face and identity as whom the wearer is facing, and immediately to inform the wearer of the profile of the person by recorded speech, exempting the wearer from the awkward situation.

Purpose/Methods
A cap is integrated by earphones, digital camera and data processor as the wearable device with AI technology. At the beginning, face and identity tag database is created for each participant by performing about 20 face feature trainings. The device uses the Mobile Net pre-training model and SVM classification in the cloud server to perform the participant’s identification. As the facial identity is verified, the voice response will be activated to provide the profile of the participant to the wearer.

Results
We have used computer-aided engineering to complete the prototype design of this device and have demonstrated the feasibility of implementing AI technology in the laboratory. We created a face and identity tag database for 10 participants, then used the device to perform identification of the participant and activated the prompt voice response to this identity. The results of the experiment showed 10 participants’ facial identities and the recognition rate reached over 90% according to our experiments in the laboratory.

Conclusions
We have developed the design and completed the prototype of the wearable device by integrating the techniques of computer-aided engineering, artificial intelligence and smart manufacturing. In the near future, we will use the MMSE scale to perform user cognitive screening and the SF-12 scale to evaluate quality of life for pre- and post-test of wearing the device. It is anticipated that this wearable device can assist the memory of people with cognitive impairment.

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Intelligent health education, good health – “easy go”

LIU Tsai Er, LAY Huey-Jen

Introduction
If the medical team can provide the patient’s and their families care preparation before discharge, and provide appropriate individual medical guidance, so that the caregiver can be familiar with the care skills, the psychological stress can be reduced.

Purpose/Methods
1. Establish a customized intelligent education information system: Fully electronic engineering to produce a customized guideline list and evaluate the learning results. 2. Establish a broadcast channel of residential health care education video and a primary caregiver shift mode to enhance the care knowledge of the main caregiver. 3. Building a home care information sharing platform: Patients and primary caregivers can obtain health care information at any time during or after discharge to enhance the caregiver’s ability to care. Our goal is to improve the health care knowledge of the main caregiver.

Results
2018.8.1-8.31 the number of inpatients’ health care education guidance was 4,548. The inpatients accounted for 53.3%. The correct rate of the health care knowledge of these subjects is 71.7% for full understanding. The rate of full understanding increased from 62.4%, investigated in April 2018, to 71.7%; 2018.8.1-8.31 after the discharge, the total number of using health care videos was 286 and the correct rate of answering the cognitive questionnaire was 96.0% by using the home care information sharing platform or watching health care videos.

Conclusions
Through interventions such as customized intelligent health care education information system and home care information sharing platform. The main caregiver can make plans to learn and acquire care information to improve health care knowledge and promote patient’s satisfaction with care services.

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Build a diverse health promotion information platform in LINE@

LIN Ren-Yi, LAY Huey-Jen

Introduction
The information on preventive medicine and health promotion has never been equal to the popularity of all kinds of mobile devices and the rapid development of communication software. Whether the company or people have their own communication account. Isn’t it worth paying attention to the fact that the information is correct? Under the leadership of the head of the hospital, the hospital created the LINE@official page and management team through the community health center of the hospital, and published the correct health messages, photos and exclusive drop-down menus through the content and the homepage and then shared the praises and interactions through the
people. To promote people’s health information and hospital attention, to achieve the purpose of community health promotion and preventive medicine.

Purpose/Methods
1. Purpose: (1) increase the number of fans and increase the attention of content. (2) A variety of homepage submission types to enhance people’s interest and browsing. (3) Content setting graphic menu to increase mutual convenience and interaction. 2. Methods: (1) Publish the content of the text according to current events, and increase the people’s feelings. (2) Using the network concatenation of LINE@ homepage, cross-team integration and sharing various health promotion activities and information to attract people to share and leave messages, and improve attention.

Results
The event has achieved the goals which are: (1) 4,119 fans, the rate of blockade only 10%. (2) Average number of praises per article, 14.8 people. (3) Rate of Feng-Yuan Hospital web page usage from 1.9% to 13.8%. It has grown significantly.

Conclusions
According to this result to building a diverse health promotion information platform must have function and high popularity rate, promote the values of public health and hospital information of concern.

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The System of Digitization of Images and Data by the ENT Division


Introduction
Patient-centered healthcare (PCH) is one of the health-promoting topics. The aim of PCH is to keep medical records information sharing by using the electronic patient record for implementation. Therefore, a translation of traditional report toward electronic report is required to maintain. The Eats, Nose and Throat (ENT) Division provides a full range of examinations such as general checkup, ultrasound guidance, nasopharyngoscopy… etc. Otolaryngologists printed out the examination data and wrote examination results in traditional report after complete examination. This process requires considerable time and effort. Therefore, we program screen capture switching platform equipment and upload through the server. Digitization of images and data can be shared between the general practitioners and the specialists. The program will make health care to provide a more comprehensive evaluation and enhances the overall health medical quality.

Purpose/Methods
The system of digitization of images and data involve capture, store, upload, and display, with the integration of Hospital Information Systems (HIS) and Picture Archiving and Communication Systems (PACS). Otolaryngologists output the images by examination instrument after examining patients, and upload the images to the switching platform, at the same time transform the images into Digital Imaging and Communications in Medicine (DICOM) files, storing in the PACS systems. In addition, the system of digitization of images can be used on the smartphone, which solve problem without using the computer.

Results
The system of digitization of images and data started in 2018, there are many benefits of the use of digitization of images and data, such as the general practitioners can get access to the patient’s condition in an easier way. However, there are some internal resistances and the period of adaptation in the initial.

Conclusions
This system is able to use on the smartphone it means that it can solve the problems of dated instrument is unable to upload images and data instantly. Although there are still some issues to be improved for example, the quality of the pictures. Digitizing data will becoming the mainstream of tendency.

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Utilizing information systems to enhance the application of medical information in cloud system

CHANG Yu-Ju, WU Jia-Min, YANG Yao-Shan, HONG Chun-Lai, YEN Chen-Jung, CHENG Bor-Wen

Introduction
Integration and application of digital medical records are the foundation of personalized health care. There are risks of repeated medication, repeated examination, and inappropriate intervention to seek medical care in different hospitals. Since 2013, the National Health Insurance Administration has built a cloud-based electronic health records system. The purpose of this project was to effectively apply patients’ medical information in the cloud system to improve patient care quality and health promotion.

Purpose/Methods
After reviewing the workflows, developing an integration mechanism and internal security audits, we have also implemented the following strategies: 1. Established an examination within prescription and medication history in the cloud system, especially anti-hypertensive, hypoglycemic agent, anti-depressant, and so on. 2. Pharmacists could detect suspected medication problems and communicate with physicians on the integration platform. 3. The system automatically popped up the prompt message when the patient received the specific examination within 28 days repeatedly. 4. Monitoring and recording the history of allergy drugs.

Results
After integration through internal and external data, the implemented strategy successfully increased the willingness of medical staffs to query health records in the cloud. The cloud data
query rate was 94% in 2017. The health records in the cloud included not only the history of medication and examinations but also surgery, dental treatment, inspection results, discharge records, rehabilitation training and so on.

Conclusions
The National Health Insurance Cloud Health System covered the patient's medical records in each hospital. The integrating information system could reduce the risk of medication overlap, the number of unnecessary medicines, and drug interaction. In the future, early warning systems can be designed based on personalized medical records.

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The Innovative Nutrition Education Method for Targeting Overweight Hospital Staff

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Introduction
The prevalence of obesity is increasing year by year and it is highly associated with metabolic syndrome. Our hospital's prevalence of overweight and obesity staff is 35.5% in 2016-2017. Face-to-face model is the most common methods in nutrition education; however, it's not convenient to be used in workplace.

Purpose/Methods
Several nutrition education lectures (include body weight control diet, diabetic diet, hypertension diet, hyperlipidemia diet etc.) were edited by dietitians. All education lessons were digitalized, upload to the internet and convert to QR codes. Then, set the target population to those BMI over 24 in staff health examination. For staff BMI over 24 and having risk of metabolic syndrome, their health examination reports will be printed with nutrition lesson QR codes after their regular health check.

Results
Different from the traditional nutrition education, digitalized nutrition education material is flexible and can take the lesson at any time and any places by using mobile phone. The length of every nutrition lesson is limited in 10 minutes. In addition, the repeatable of the online nutrition education material can also provide the staff to review the course if necessary.

Conclusions
Through the Internet, digitalized nutrition education lessons combining with QR code can provide nutritional information directly and effectively to the overweight hospital staff.

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Master the nursing pulse of the whole hospital: Nurse Executive Support System.

WENG Ling-tzu, TAI Ju-chun, CHEN Mei-jung, LI Shu-yen, KANG Chih-yun

Introduction
Our hospital is a military medical institution. Be confronted with major disasters or major accidents, it is necessary to keep abreast of the dynamics and mobilization of relevant manpower so that medical support tasks can proceed smoothly. In order to strengthen patient safety, improve the quality of care and take care of the duty nurses. The duty supervisor has three shifts per day, to lead the whole team to achieve deployment tasks from the establishment of self-confidence.

Purpose/Methods
The department invited relevant units to cooperate, use information systems to improve and simplify the cumbersome duty process, integrate manpower deployment, to enhance system functions, and to directly and horizontally report feedback to relevant information. Such as, the information assistance system provides the event decision engine mode, assists the nursing supervisor to perform the deployment of the mobile personnel of each unit and the related strains when major disasters occur, etc.

Results
First, shorten the collection of patient data statistics time. Second, shorten the event message delivery time: the relevant information is transmitted by email and SMS in the web/APP mode. Third, increase the automatic abnormal event notification. Fourth, with a number of innovative features: including real-time interactive feedback, event rule engine, operational intelligence big data analysis manpower, automated monitoring and warning, etc.

Conclusions
The system fully integrates various systems, uses intelligent big data analysis, and develops interactive APP, which makes the manpower instant feedback and manpower estimation more perfect, and in the delivery function planning part, in addition to the current nursing unit can provide immediate feedback to promote The communication of the ward is open, the respect and cooperation between the members are increased, and the patient-centered safety care is practiced.

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Defending the medical care of the military and civilians - Emergency nursing Information System

LAI Hui-wen, WENG Ling-tzu, CHEN Mei-jung
Introduction
In the ER, the caregiver must quickly and efficiently evaluate the patient, execute the medical order, give the most appropriate care measures and complete the medical record. Our hospital self-developed the emergency care information system, besides shortening the record written time by the nurse and the shift time. Provide emergency cross-disciplinary common care platform through information technology, establish quality indicators and warning functions, improve emergency care efficiency and patient safety.

Purpose/Methods
The system includes intelligent patient triage operation mode, and also provides systematic nursing evaluation, and has a reminding function for the disposal to assist the medical team to deal with it quickly; at the same time, it simplifies the related operations when the patient is hospitalized or discharged, and saves the nursing staff’s working time.

Results
More than 33% of paperwork time is saved, and patient care time is increased by 90–120 minutes; the integrity of nursing records is improved, the satisfaction of ER and ward handover is improved, the abnormal events related to nursing are reduced, and the satisfaction of patients/families on service quality is improved, and the personnel cost per year savings of approximately $200,000.

Conclusions
The system provides intuitive operation interface and multi-platform information link, reducing paperwork time, increasing patient care time, improving the completeness of emergency care records, improving the satisfaction of emergency patients/families on the quality of care services, saving personnel costs and material costs, and shortening the time for collecting quality indicators, increasing the convenience of clinical care, and effectively improving patient safety and emergency care Efficiency and quality.

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Applying QR code Technology in the Nursing Instruction

CHEN Chu-Nien, CHENG Hsing-Jung, LIAO Min-Chi

Introduction
While electronic devices have become the norm, the service sequences of current medical institutions are developing towards informatization form. It can not only enhance the quality of healthcare, but also reduce the cost. Nursing instruction is a clinically common nursing operation. Each inpatient would normally receive 2-5 nursing instructions. Typical nursing instruction utilizes paper as their tool, but their deficiencies are: easily get lost, lack reading accessibility and consume a huge amount of paper.

Purpose/Methods
Generate a QR code for every nursing instruction in our hospital. Post the QR codes of common illness care on the billboards of every nursing station. Patients and people can scan the QR codes using their own devices anytime, depending on their personal needs. Moreover, the content can be stored in their phones and be checked at any time.

Results
1. Satisfaction: Both the nursing staff and the patients show a very high satisfaction. 2. Environmental benefits: Taking a hospital with 2500 inpatients per month for instance, traditional nursing instruction mode requires 4 pieces of A4 paper for each patient. After transforming to QR codes, we could save up to 120000 pieces of A4 paper a year. 3. Space-efficient: We could save the space to store the paper.

Conclusions
Convenience, efficient, low cost and ubiquity are the superiority of nursing instruction in QR code form. Therefore, we highly recommend all medical units to modify their nursing instruction hard copies by generating a QR code for them. Not only can the goal of patient care be achieved, we also anticipate it to benefit the health of the people.

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Patient Education for Radiation Therapy by Virtual Reality Reduces Anxiety

LIN Ya-Lin, TSAI Tsuen-Chiua, TANG Jen-Yang

Introduction
Radiotherapy (RT) is often part of multi-discipline cancer treatment. Patients not only worry about the outcomes but complications from a single use of radiation or combined treatments by surgery, chemotherapy, immunotherapy and hormone therapy. Patient education prior to radiotherapy has been part of our standard procedures to reduce patients’ anxiety and treatment-related complications. However, the technology of radiation therapy advances rapidly with time and it is sometimes difficult for the patients to understand how the high-tech treatment influences their bodies.

Purpose/Methods
Since modern radiotherapy is delivered in a multi-dimensional fashion, Virtual Reality (VR) can be helpful for the patient to understand how RT works and differences in RT options? This study used two methods for patient education: the experimental group utilized Virtual Environment for Radiotherapy Training (VERT) and the control group used PowerPoint for education sessions. The VERT aimed at a better understanding of how radiation therapy works and the importance of treatment position alignment through image-guided techniques.

Results
Ten head and neck cancer patients and eight breast cancer patients who receive combined RT and chemotherapy were enrolled in this study. Participants would complete a questionnaire at 3 time points: before and after the education prior to RT and after RT. The results shows that the experimental group was significant less anxious, partly from a clearer picture of how RT
Dialogues Between Breast Surgeons and Radiation Oncologists Start from Skin Dose measurements in Intraoperative Radiotherapy of Breast Cancer

KAO YU-YUN, HUANG MING-CHI, CHEN HUAN-CHUN, LIN YA-LIN, LEE KUN-HAN, CHEN FANG-MING, TANG JEN-YANG

Introduction

Intraoperative Radiotherapy (IORT) by portable low energy x-ray machine is used for tumour bed irradiation after surgical resection of breast tumour in the operation room. It is a team work of breast surgeons and radiation oncologists. Proper tumour control, cosmetics and soft tissue complications are the main concern and thus echocardiogram in the operation room is critical. However, with the advance of surgical techniques such as oncoplasty, additional objective measurement is necessary for critical decision making in this scenario.

Purpose/Methods

Oncoplastic reconstruction of breast surgery involves volume displacement procedures of local flaps and reduction mammoplasty/mastectomy. There is no consensus concerning the best approach and the decision making is on-site after margin-free tumour resection. To assist surgical planning with concurrent IORT, in vivo irradiation dose measurements help to reduce the risk of developing skin toxicities (IRB: KMUHIRB-F(I1)-20180076). During IORT, EBT-3 films were wrapped in a sterile Tegaderm Film by the surgeon and placed on skin surface supervised by the radiation oncologist.

Results

Ninety-one measurements of skin doses were collected from Feb 2018 to Oct in Kaohsiung Municipal Ta-Tung Hospital in Taiwan. The patients attended regular follow-up at departments of breast surgery and radiation oncology. Cosmetic results were documented and were later compared with the measurements. Influencing factors such as oncoplastic techniques and IORT irradiation volumes were discussed by the two specialties. Subcutaneous blood supplies after skin-sparing effects have great impact of skin toxicities even with abundant soft tissue volume from IORT balloon.

Conclusions

A successful High-Tech cancer treatment such as breast cancer IORT program requires careful planning, involving coordination of tasks with timely and efficient communication among several departments. In a busy operation room, the surgeon monitors the on-site echoes and only have one-off dialogue with the radiation department. It’s barely possible to improve outcomes with limited cross-department talks. With irradiation dose measurements, crosstalk communication is persistent. Options of surgical and radiological approach to reduce complications and improve patients’ satisfactions can be developed.

Using Computerized Health Counseling System for Diabetes Prevention Program in a Health Promoting Hospital of Korea

CHU Jieun, NAH Eun-Hee, CHO Seon, CHAI Jong-Yil

Introduction

Diabetes is the public health problem which needs to be resolved worldwide because of its great negative impact on health. Prediabetes is a strong risk factor of developing type 2 diabetes mellitus (T2DM). Many researches have shown that lifestyle changes could be prevented the progression of T2DM and lifestyle intervention was the safest way. However, intervention requires a large amount of effort and regular follow-up monitoring to sustain the effect. Accordingly, We needed a computerized system for effective intervention programs.

Purpose/Methods

This project was to develop the computer-based system for effective counseling and management of intervention program in the health promotion centers of Korea Association of Health Promotion(KAHP). From February 2016, KAHP developed ‘Computerized Health Counseling system(CHCS)’ and have performed an intervention program for high-risk individuals with prediabetes 30-70years old. Based on the results of a computerized survey and evaluation of participants’ lifestyle, consultation conducted.

Results

This system is combined with survey and input at the same time and allows assessment outcomes to be immediately printed and used for consultation. In this system, we can obtain integrated result paper by entering the results of surveyed diet, drinking, and physical activities habits. The integrated outcome sheet provides an assessment of the level of lifestyle, as well as an appropriate intake of nutrients, and may include a consultant’s opinion. Through this process, we were able to offer personalized counseling effectively. Both the consultants and participants were highly satisfied with using CHCS.
**Conclusions**

Using a computer-based system for lifestyle intervention program was able to provide efficient personalized 1:1 counseling services. The use of appropriate computer systems and the balance of human resources are essential in the health-promoting hospital (HPH). We will continue to use this system in patient care and counseling.

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**Project to Improve the Patients in a "Pay-for-Performance Program for Diabetes"**

**SHIH Shu-Ling, TENG Hsiu-Chin, CHEN Chen Hung-Ya, LIN Ching-Li, CHUNG Kuei-Yu**

**Introduction**

Diabetes is a chronic disease with high prevalence and cost. It causes multiple complications that incur large financial burden. The government is forced to adopt active tactics to reduce the threat to personal health of diabetes patients, and to lessen the social burden. According to a World Health Organization report on diabetes demonstrates that the number of adults living with diabetes has almost quadrupled since 1980 to 422 million adults. The prevalence of diabetes in Taiwan was 12.3%, and their medical cost increases every year. The Bureau of the National Health Insurance implemented ‘Pay for Performance Program for Diabetes’ in 2001, combining ‘shared care’ and ‘pay for performance’ mechanism that had positively impact on the quality of diabetic care in Taiwan. However, only 439 patients enrolled in the program of the study hospital from 2011 to 2017.

**Purpose/Methods**

The purpose of this project is to improve patients participate in the Pay-for-Performance Program of National Health Insurance Payment for Diabetes Medical Treatment. To increase the enrollment number, the project team has conducted several trans-disciplinary team meetings and shared communication that included revising the standard operating procedures for enrollment, adding the number of certified diabetes educators, establishing a computer alert system, and expanding outpatient space for health education.

**Results**

After 11-month intervention, results have showed that enrolled patients have increased to 1779, recorded from January to November 2018. The diabetes patients receive integrated care from physicians, diabetes educators and dietitians and receive nursing and nutritional education four times per year under The Bureau of the National Health Insurance.

**Conclusions**

This project can serve as a reference for administrators in other medical institutions whether have or have not implemented the Pay-for-Performance Program of for Diabetes and helps save financial expenditure on healthcare and improves the quality of diabetic care.

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**Constructing a national integrated platform for preventive health services in Taiwan**

**CHIU Te-Hsun, CHIANG Shih-Min, TING Hao-Yuan, LEE Chia-Hui, WANG Ying-Wei**

**Introduction**

Taiwan has provided preventive health screening programs and built several information systems to manage the data and processes of these screening programs. However, it is inconvenient for users to re-entering passwords for the same identity and operate in individual systems. To enhance the efficiency of operations and improve the integration of data across systems, Taiwan Health Promotion Administration (HPA) developed a national integrated platform to help the execution of preventive health services include maternal, children, adult preventive health and cancer screening and others.

**Purpose/Methods**

1. Develop system functions and services according to different needs from various levels of hospitals. 2. The heterogeneous systems are integrated into one single sign-on platform. Moreover, patient data and test results from medical institutions are uploaded by API automatically and protected by the best technologies.

**Results**

1. Integration effectiveness: The system not only integrates 7 individual systems but also connects third-party Health Information System (HIS) to make data verification more efficient. 2. Promotion effectiveness: The platform is now promoting in New Taipei City, Taiwan. The Health Bureau, all health centers of New Taipei City and some hospitals have participated in the pilot run. As a result, more than 70% of users are satisfied with the new system, and the system will be promoted to the whole country in 2019.

**Conclusions**

The advantages of the platform are listed as follows: 1. For medical institutions: Reduce the complexity of operations to make administrative procedures easy and fast. 2. For administration: Reduce resource duplication and standardize workflows. Future works: The cross-system data collected by the platform will be analyzed to support the government to formulate preventive health policies.

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Artificial Intelligence Assisted OSCE Training for Medical Students

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Introduction
In the High-Tech world, health professionals process patient-related information efficiently and cost-effectively but not necessarily communicate with High-Touch. Juvenile doctors may focus more on the lab data and medical signs from the monitors and easily distracted from the fact that the patients need to be understood. It takes some time for them to learn that. However, technology can be helpful and we utilize Artificial Intelligence (AI) to train medical students to have a better dialogue with the patients.

Purpose/Methods
An objective structured clinical examination (OSCE) is a clinical skill performance test on communication, clinical examination...etc. During the process of medical serious thinking, the students need to master the skill the interact with the patients properly. We use AI-assisted serious simulation game (IRB: KMUHIRBE(EII)-20170062) with natural language processing developed by professor Tsai. Students interact with virtual patients in a problem-based learning (PBL) scenario based on OSCE setting. Key feature examination and satisfaction questionnaire are assessed after the simulation game.

Results
We conducted seven virtual scenario with 62 medical students within two months. Weight loss and abdominal pain were set as the key features for study group after interacting with virtual patients and for control group without participating the serious game. Crohn’s disease and cirrhosis were used as control features for the same study group without AI. Statistical differences in the scores are on patient care, bedside teaching and PBL cases. Satisfaction for critical thinking and interaction is above 72%.

Conclusions
The interaction between the virtual patient and the students gives the students an entirely different perspective on the process of the diagnosis and the outcome of the nursing care the patient might receive. Technology can enhance the student’s ability to be more efficient in learning either on social skills or professional medical knowledge. Fun in the serious game leads to active learning for students to understand ethics and values in the delivery of care.

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Using LINE groups to increase the enrollment rate for diabetes care

SU Ching, CHEN Huei-Min, KAO Li-Chueh, HWANG Wei-Ren, TSAI Chia-Hua, WEI Yang-Hua

Introduction
Our hospital is a district community hospital certified. According to the Department of Health of the Taipei City Government health management assessment indicators, the enrollment rate for patients with diabetes into the care program must be 55%; this rate was 37.89% at our hospital. After a task force discussion, we referred to the health management assessment indicators by the Department of Health of the Taipei City Government and proposed to increase the care rate for diabetes patients in 2017 to 60%.

Purpose/Methods
We regularly discussed the monthly enrollment rate for patients with diabetes who are provided with care. A multi-health education model was employed to improve the health literacy of patients with diabetes and included seminars on diabetes prevention and treatment for outpatients, community advocacy on prevention. We used the communication software LINE to establish the “Diabetes Academy (Tang Tai Tsung Shu Yuan)” so as to provide immediate, effective, feasible, simple, and easy-to-understand health education messages in a poster format.

Results
The enrollment rates of patients with diabetes into the care program were 52.13% and 61.89% in 2016 and 2017. Promotion of the Diabetes Academy LINE group: 493 patients joined the group in 2016 and 657 patients joined in 2017, an increase of 164 patients. Two health education messages were sent every week, and a total of 5,256 messages were delivered every month (657 patients x 8 messages/month). Ninety percent of the patients were extremely satisfied with the LINE group.

Conclusions
Providing health literacy care for more patients with diabetes and performed effective self-management. This increased the rates of enrollment for diabetes care. To protect the rights of patients with diabetes to receive comprehensive medical care. We hope that further monitoring of glycated hemoglobin rates and incidence of related complication can be performed in the future while simultaneously improving care rates. This will provide comprehensive, continuous, professional, integrated, and quality medical care for the patients.

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Exploring the Effects of Adept® on Laparoscopic Surgeries

HSIEN ChiaFen, CHOU HsuenChing, LIN ShuFen, HUNG YiHua

Introduction
This study aimed to explore the effects of Adept® on gynecologic laparoscopic surgeries beyond the effect of adhesion prevention.

Purpose/Methods
This study was conducted in the Department of Obstetrics & Gynecology of a regional teaching hospital in Southern Taiwan. Patients undergoing gynecologic laparoscopic surgery were enrolled in this observational study by using convenience sampling. The self-administered questionnaire survey was designed for
data collections and analyses through observational investigations and direct inquiries to the patients.

Results
The average time of first flatulence (time to pass flatus) after surgery was 15.0±5.10 hours. We found that the earlier the patients mobilized on the bed, the faster to pass flatus can be achieved. Mobilization one hour earlier after the surgery can significantly promote flatus by 0.709 hours (P=0.010). In our study, the rate of the postoperative upper abdominal and shoulder pain caused by CO2 retention (1.4%) was lower with compared to other study (90.2%)[3]. Moreover, with compared to the study of Tsai et al., the measures of postoperative wound pain using Visual Analog Scale (VAS) were also significantly lower (operation day: 6.55±3.53 versus 4.28±1.30, the day after surgery: 5.30±2.89 vs 1.94±0.85).

Conclusions
This study found that the use of Adept® in the surgery not only prevented adhesions, but also improve CO2 emission after surgery, thereby reducing the incidence of postoperative shoulder and upper abdominal pain caused by CO2 retention. Besides, the measures of VAS for wound pain and the time to first flatus were also improved after the use of Adept®.

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The Medical Outcome of Multiple Myeloma Patient with Treatment: A Single Institute Analysis

YEH ShuTing, LEE KingTeh, CHO Shih-Feng

Introduction
Multiple Myeloma (MM) is the third most common hematologic malignancy in Taiwan, with an upward trend year by year. Globally, the number of people suffering from the disease increased by 1.26 times from 1990 to 2016. In 2016, there were about 138,509 patients diagnosed with MM, with an incidence of 2.1 per 100,000. Additionally, the number of deaths was about 98,437, with a mortality rate of 1.5 per 100,000 (Cowan et al., 2018). In Taiwan, the incidence rate of MM in males was 2.72 per 100,000 and 2.42 per 100,000 for females. It increased by 4.25 times from 0.64 per 100,000 in 1996 to 2.72 per 100,000 in 2015. (Taiwan Cancer Registry, 2017; Huang et al, 2006) The purpose of this study was to investigate the demographic and clinical prognostic factors in MM patients.

Purpose/Methods
This retrospective study collected clinical data of patients diagnosed with MM from January 1, 2010 to December 31, 2018 in a medical center. Statistical and Analysis Methods 1. Descriptive statistics: the distribution of continuous variables was described by mean (Mean) and standard deviation (SD). 2. Inferential statistics: (1). Chi-square Test (2). Log-rank test: analysis of overall survival. (3). COX Regression: Investigation of prognostic factors.

Results
A total of 140 patients with median diagnosed age of 64.89 ± 11.60 were involved in this research, including 80 males (57.1%) and 60 females (42.9%). There were 89.29% (n= 125) of patients received anti-MM treatments. The median overall survival was 41.6 months (1- year: 72.86%; 3-year:48.75%; 5-year:30.79%). We next analyzed factors that affected overall survival. In term of demographic data, we observed that younger age (<60 years) and patients with higher education level had better overall survival (Table 1). In the analysis of clinical data, more comorbidities, poorer performance status (higher CCI), advanced IPSS stage, low albumin level, anemia, and poorer kidney were associated with shorter overall survival (Table 2).

Conclusions
As the average lifespan of males and females in Taiwan was 76.87 years and 82.84 years, respectively, MM significantly affect the survival of these patients. We hope this preliminary data can provide reference for future research.

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Using communication software LINE groups to increase the enrollment rate for diabetes care～Taiwan experience

SU CHING, CHEN HUEI-MIN, KAO LI-CHUEH, HWANG WEI-REN, TSAI CHIA-HUA, WEI YANG-HUA

Introduction
Our hospital is a district community hospital certified. According to the Department of Health of the Taipei City Government health management assessment indicators, the enrollment rate for patients with diabetes into the care program must be 55%; this rate was 37.89% at our hospital. After a task force discussion, we referred to the health management assessment indicators by the Department of Health and proposed to increase the care rate for diabetes patients in 2017 to 60%.

Purpose/Methods
We regularly discussed the monthly enrollment rate for patients with diabetes who are provided with care. A multi-health education model was employed to improve the health literacy of patients with diabetes and included seminars on diabetes prevention and treatment for outpatients, community advocacy on prevention. We used the communication software LINE to establish the “Diabetes Academy (Tang Tai Tsung Shu Yuan)” so as to provide immediate, effective, feasible, simple, and easy-to-understand health education messages in a poster format.

Results
The enrollment rates of patients with diabetes into the care program were 52.13% and 61.89% in 2016 and 2017 Promotion of the Diabetes Academy LINE group: 493 patients joined the group in 2016 and 657 patients joined in 2017, an increase of 164 patients. Two health education messages were sent every week, and a total of 5,256 messages were delivered every month (657 patients × 8 messages/month). Ninety percent of the patients were extremely satisfied with the LINE group.
Electronic evidence of medication in Military University Hospital

GUTOVA Lenka, VANHOVA Monika

Introduction
This project addresses the electronic evidence system used during drug administration. The main purpose is to decrease the risk for the patient. Goals: Safe drug administration Safe flow of medications throughout the hospital Optimal flow of medications Financial efficiency

Purpose/Methods
Medication prescription Doctor prescribes medication for inpatients using the hospital information system AMIS H. Prescription is written in given structure. The doctor must follow particular rules when selecting the drug for the patient. The first priority is to select medication which is available on stock within the department. If not on stock the doctor considers the list of hospital approved medications (positive list). The last option is to select the medication from the global list of the State Institute of Drug Control. Listing the specific reason for this choice is required (patient’s allergy, etc.) Medication administration A nurse administering medication in a hospital department is using a scanner where the doctor prescription is transmitted from information system. When using the scanner the nurse must identify herself/himself scanning her/his ID bar code or using personal ID number. In the second step the patient is identified by scanning his/her wristband. Scanner displays patient’s name and prescribed medications. During the next step the nurse is scanning individual packages of medication which are labeled with a hospital internal bar code. The nurse confirms on scanner the administration of drug and amount. In this moment any potential discrepancy is noted. Concurrently the drug is written off the unit warehouse. Record of activity is saved in the program and everything can be tracked including the system time of administration.

Results
The electronic evidence provides information about who administered medication, who received the medication, name of medication, amount and time. The system also checks date of expiration of drugs. Information about store supplies is available throughout the hospital. If certain medication is not available in one unit the system provides overview of where else within the hospital it is available. Transfer from one unit to another can be made and stock supplies are adjusted.

Conclusions
Providing health literacy care for more patients with diabetes and performed effective self-management. This increased the rates of enrollment for diabetes care. To protect the rights of patients with diabetes to receive comprehensive medical care, we hope that further monitoring of glycated hemoglobin rates and incidence of related complication can be performed in the future while simultaneously improving care rates. This will provide comprehensive, continuous, professional, integrated, and quality medical care for the patients.

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Improve the completion rate of oral mucosal screening in patients in the hospital ~Taiwan experience

CHEN HUEI-MIN, DAN-MO PEIR, SU CHING

Introduction
Our hospital is a community hospital. We have joined the “Cancer Quality Improvement Program” to promote the cancer screening combined with smoking cessation control. Through system we have identified 3,800 people who are in high risk of oral cancer per year. However, the oral mucosal screening was not working effectively, average of 155 people. we set up the goal to increase the the completion rate of oral mucosal screening in the hospital increased from 2.8% to 4%.

Purpose/Methods
Report of monthly screening completion rates in the meeting.Identify the high-risk group of oral cancer through the notification system, strengthen the doctors’ publicity to help the outpatients to smoking cessation and oral mucosal screening, focusing on the the importance of the oral mucosal screening by the quit smoking health instructors.Encourage non-dental or otolaryngology specialists who meet the oral mucosal screening training provide the inpatients’ oral screening rates. Increase the health lectures of oral mucosal screening for the outpatients.

Results
In the hospital were identified through the notification system, 186 of them completed the oral mucosal screening tests. The completion rate was 4.9% (from 2.8%), and the target achievement rate was 1.75%, and the progress rate was 75%. health lectures of oral mucosal screening. A health lectures of oral mucosal screening, and a total of 25 lectures combining with cardiovascular, diabetes, smoking cessation prevention and other promotion were carried out.

Conclusions
We have the experiences of cancer prevention and smoke-free projects for many years, and realize that the impact of tobacco damage is systemic. We emphasize the importance of oral mucosal examination by the lectures of quitting betel nut and smoking. Such publicity can be accepted by people with high health knowledge, and even makes them participate actively. The information combined with alert system, and cross-team cooperation and promote the oral cancer prevention and treatment more effectively.

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Transforming Patient Engagement in Active Breathing Coordination Radiotherapy with Portal Technology at Linac Table

CHEN HUAN-CHUN, LEE KUN-HAN, KAO YU-YUN, HUANG MING-CHI, LIN YA-LIN, TANG JEN-YANG

Introduction

Active Breathing Coordination (ABC) is an advanced radiation therapy technique which provides patients with protections to minimize radiation injury to lung and normal tissues. ABC is a non-invasive advanced technology that reduces the displacement errors in the body by allowing the patient to regulate breathing upon instructions. During the deep-breath hold, the radiation therapist administered irradiation. After some rest, the cycle will be repeated until full irradiation. It is tedious treatment and can take up to one hour each day.

Purpose/Methods

The irradiation room is isolated for radiation protection. During ABC, the patient can only hear the guidance from the outside radiologist while managing to hold the breadth. Frustration and anxiety will happen. To provide both High-Tech and High-Touch interventions, we utilize a portal breathing monitor aside the Linac table where the patient can see his own respiratory patterns. When the patient is ready, he can push a button to inform the radiation therapist and beam on the treatment.

Results

Three lung cancer patients with pulmonary lesions smaller 3 cm and without mediastinal lymph node metastasis in Kaohsiung Municipal Ta-Tung Hospital in 2018 has been enrolled. Patients’ perceptions of the process was studied. The overall treatment time each day can be shortened up to 15% after the active engagement of the patient to regulate his breadth and the anxiety score has been reduced from Grade III to Grade II.

Conclusions

The breadth monitoring portal is meant to be in the Linac control room where the radiation therapist can give orders to the patient either to relax or hold the breadth. By adding pre-treatment education prior to ABC and allow active participation from self-awareness of the breathing signs, confidence is built from the self-management and breathing discomfort can be reduced. The care delivery has been transformed to 2-way dialogue with High-Tech.

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Using Information System that collects Customer Opinions to Support Decision Making and Improve Timeliness and Customer Satisfaction

LIEN ChiHsun, LIN SinChiou

Development "Intelligent Nursing Care System" to Improve Health care communication and satisfaction

LEE Shuyen, WANG TsaeJyy

Introduction

Current clinical nurses heavy workload and tend to be too busy to immediately deal with patients’ problems, resulting in damaged rights and interests of patients and decline in service satisfaction. Therefore, this study intends to develop integrate information on patients, and meet the need for smart cross-team cooperation for joint care of patients nurses’ work efficiency and improve patients’ care quality and satisfaction.

Purpose/Methods

This quasi-experimental single group pretest-posttest study used convenience sampling to develop intervention measures for surgical wards of a certain medical center. This study used Kotter,
the 8 step change model as the theoretical basis. The research process includes: developing crisis awareness, establishing leadership teams, proposing visions, communicating about visions for change, authorizing employees’ participation, creating short-range results, solidifying achievements and making continuous efforts, embedding new approaches into organizational culture.

**Results**
1. A major innovation of change information: (1) automatic upload of physiological measurements; (2) automatic positioning of patients; (3) integration of nurse calling system with in-hospital communication network. 2. Improving the communication and reducing patient waiting time by as many as 70 seconds. The patients’ satisfaction core increased from 75 to 90 points. 3. That of system usefulness regarding improvement of work environment was 4.19, and that of overall system satisfaction was as high as 4.26 points.

**Conclusions**
Information integration medical care is an inevitable trend in the era of globalization. 2 keys to the success of promotion of this nursing information system are: Firstly, able to profoundly understand employees’ feelings and aggressively get involved to successfully convert resistance to driving force; secondly, should be able to grasp the trends of future development of nursing information and guide leadership teams to create substantial benefits to clinical care from the perspective of innovative change.

**Comments**
Digitalization in health care and health promotion

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The efficacy of post-stroke patients receiving acupuncture combining with rehabilitation treatment in a local community hospital of South Taiwan.

**WANG Yuh Wei, CHEN Chien Min, HO Yu Chun, CHANG Yu Cheng, LEE Hua Kuei**

**Introduction**
Background: Stroke sequela leaves not only disability but a heavy burden to patients and society. This study aimed to observe the recovery of post-stroke patients’ Activities of Daily Living (ADLs) and limbs function of whom receiving additional acupuncture treatment under conventional rehabilitation. Objectives: To observe the effect of acupuncture combining with rehabilitation on the recovery of post-stroke patients’ ADLs and limbs function.

**Purpose/Methods**
Methods: Post-stroke stable patients were evaluated with National Institute of Health Stroke Scale (NIHSS) and Barthel Index (BI) during 1/1/2016-9/30/2018. They were separated into two groups by their will. Non acupuncture group (NAG) consisted of 13 patients and practiced the same as NAG, and received additional acupuncture treatment. BI and NIHSS were measured for pre and post-test data. Statistics was using software SPSS 22 and analyzed with Chi-square test, Independent Sample t-test and paired t-test.

**Results**
Results: NIHSS and BI of the two groups presented significant difference (p<0.001) after treatment; Patients’ BI < 40 scores, the BI after treatment or limbs function of NIHSS of the two had significant difference (p<0.001). BI > 40 scores, the two showed no significant difference. NIHSS in the AG was average 7.18 to 4.18 (p<0.002). NIHSS in the NAG was average 7.1 to 5.2, the difference was less than AG.

**Conclusions**
Conclusion: In this study, stroke patients receiving additional acupuncture treatment presented good progress in neurologic function and ADLs. It is recommended that acupuncture treatment can intervene as soon as stroke getting stable.

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Outpatient Diabetes Care Rate Improvement Project

**CHIA-JUNG Tsay, YU-PEI Lin, SHU-YI Wei, MING-REN Huang, CHIA-CHI Yen**

**Introduction**
Diabetes is a common chronic disease in Taiwan. However, this hospital’s the Diabetes Shared Care rate only reached 40.57% in 2016 and cannot meet the 65% target established by the Department of Health, Kaohsiung City Government. Hence, the hospital director has proposed a project for improvement to improve the rate and quality of the Diabetes Shared Care rate.

**Purpose/Methods**
1. Encourage the doctors to participate in the Diabetes Shared Care Network certification exam. The doctor members have enhanced to 15. 2. Establish a diabetes case acceptance Computer Information HIS System so automatically suggest patients who qualify for diabetes case acceptance. 3. Increasing health educated members to 5 people, improve the medical consultation health education process. 4. Report the care rate during the Director’s office conference, discuss the implementation difficulties, develop a solution strategy.

**Results**
1. In 2017, this hospital has treated a total of 1844 diabetic patients, provided care to a total of 1289 people. The number of people in 2018 is 1998. As of October, a total of 1673 people have received care. 2. In 2018, the diabetic care rate was 44.2% in October 2017, which increased to 81.88% in October 2018.

**Conclusions**
After the implementation of the project, the hospital’s diabetes care rate has gradually increased and reached the 65% target set by this city’s Department of Health. The diabetes health improvement and agency care quality promotional plan held at the
E-Posters: Environment-friendly and sustainable health care

Green Earth Action Plan to Reduce Pharmaceutical Pollution

CHEN Hsiu Shan, CHANG CHIEN Li chen, WU Hsiao chia

Introduction
Taiwan has the best universal health insurance system in the world. This system has the advantages of low health insurance rate, low administrative cost, wide payment items, and accessibility for medical treatment. However, conventional medical services may result in repeated visits by the public. That leads to an increase in unused medications. In order to avoid environmental pollution caused by the arbitrarily discarded unneeded medicines, the hospital promotes the Green Earth Action Project based on corporate social responsibility.

Purpose/Methods
Action strategies include: 1. Education and Advocacy Program. In hospital waiting areas and community centers, pharmacists educate people to properly dispose of unused medicines. 2. Set up the pharmaceuticals take-back box in the hospital to collect unused pharmaceuticals from our hospital and community clinics. 3. Add a matter needing attention” Please take back your unused medicines to our pharmacy” on the medicine bag of our hospital. Those include hormone preparations, antibiotics, antineoplastics, controlled substances, and immunosuppressants.

Results
This project has been operating for six years since 2013. The educational advocacy activities were held 145 times. A total of 1316 kg of medicines were collected, of which 644 kg (49%) were from our hospitals and 672 kg (51%) from the community. In terms of total annual collection weight, it grew by 241% in 2018 compared to 2013. All collected drugs are delivered to medical waste disposal company for destruction to reduce environmental hazards.

Conclusions
The results of this project show that it takes a long time to change the habits of the people. In the first three years did not see obvious results but we got that in the fourth year and a substantial increase in the sixth year. Reducing drug pollution is an environmentally friendly action. Even if it takes a lot of manpower and financial resources, we still insist on doing the right thing and will continue to do it in the future.

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Improving the accuracy rate of Multiple Sensory Stimulation(MSS) for ICU nurses

HUICHUM LEE , SU YUYUAN SU, HUILIN LEE

Introduction
The aim of this paper is to understand how to enhance accuracy of Multiple Sensory Stimulation(MSS) care for Intensive Care Unit (ICU) nurse in a regional hospital of southern Taiwan. The major cause of death and disability throughout the world is Traumatic Brain Injury(TBI). The survivors usually suffer from the disorder of consciousness. The situations include neuropsychological impairment, psychological status, executive functions, cognitive and physical activity limitations, social role participation and perceived health-related quality of life. Although there is no standard of treatment for the patients, the MSS is considered as an acceptable method. The investigation pointed out the nurses did not have the correct knowledge of MSS, and lack equipment for using. Improving the accuracy rate of MSS for ICU nurses, and increasing the quality of nursing care for TBI patients.

Purpose/Methods
In order to enhance the knowledge of MSS for nurses and improve the ability of nursing, we setup the regular educational programs of MSS for medical personnel. We also develop the clinical practice guidelines, design and build the information system of nursing quality and organize the enough equipment for MSS.

Results
This project showed that the correct rate of MSS increased from 50% to 100%. There are 30 patients suffered from TBI in the ICU of Kaohsiung Municipal Xiaogang Hospital. The patients received Health-related Quality of Life (GCS) of the patients is less than eight points. Through the medical treatment of MSS, the patients start to recover. The experience of this project could be served as a reference for promoting quality in nursing care of ICU.

Conclusions
The application of the early MSS by families and Intensive Care Unit (ICU) nurses could help the TBI patients to recover quickly. The medical treatment of MSS could increase the quality of nursing care for TBI patients.

Comments
The result of the project could serve as a reference for promoting quality in nursing care of intensive care units and Monitoring quality, patient safety and health promotion objectives.

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A Study on the Relationship Between Employee Negative Emotions and Pharmacy Manpower

SHIH Po-Jen, LIN Yu-wen, YANG Nan-ping, LIN Ching-feng

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Introduction
A healthy workplace is an important foundation for health promoting hospitals. For the Department of Pharmacy to conduct pharmacy services, in addition to the need for sufficient manpower, pharmacists should display mature coping skills. Most people have never learned how to cope with negative emotions. Negative emotions can even become a fatal blow, directly affecting employees’ cohesion and values.

Purpose/Methods
This study adopted the supervisor performance assessments from July to December 2016, the pharmacists with the lowest scores in moral integrity and team spirit clearly displayed negative emotions that spread during their period of service before August 2017. The statistics of whether pharmacy manpower from January 2017 to October 2018 produced a correlation were obtained to carry out analysis and discussion.

Results
The results show that the statistics of pharmacist manpower before and after August 2017 show that the highest were 24 and 35 persons respectively, indicating the impact of employees’ negative emotions on pharmacy manpower, both showing a negative correlation. In terms of turnover rates, the pharmacists’ turnover rate from January to September 2017 was 28.6%, and from January to June 2018 was 5.5%, indicating the impact of employees’ negative emotions on pharmacists’ turnover rates showed a positive correlation between the two.

Conclusions
Emotional intelligence is very important to team effectiveness. If a team has more members using emotional intelligence, it will be easier for the team to establish some norms to build trust and team identity. Emotional intelligence can effectively manage human resources, maximize manpower benefits, enhance teamwork, and create a magnetic attraction toward a positive atmosphere.

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Using special ice packs to increase postoperative satisfaction of patients with nasal surgery

JHUANG Jia-Ci, LIN Chin-Ju

Introduction
After receiving nasal surgery, ice compress can slow swelling, bleeding, and reduce pain, but the general use of ice bag is more bulky, not fixed, need to assist help, resulting in patients inconvenient to reduce use, in order to achieve patient comfort, reduce postoperative side effects, its special ice bags treasure can be reused, Reduce consumables loss and waste, in addition to humanized service, look forward to creating a friendly medical environment, improve medical quality and care satisfaction.

Purpose/Methods
The use of PP bags, anionic agglutination agent can be designed in different sizes and shapes, in line with the patient’s face parts, and the use of chemical materials, increase water preservation, light easy to use, temperature has ice compress effect, but will not cause skin discomfort, its practicality is high.

Results
The postoperative satisfaction of patients with nasal surgery was 92%, and the patients indicated that the ice bags was lightweight, malleable, coated with ice, practical and receptive, and did not need to be assisted by the caregiver.

Conclusions
Special ice bags treasure, considering that the old ice bag is more bulky, and not enough to paste, the use of often need to help the caregiver, the overall use of the inconvenience, most patients often feel troublesome, and reduce the number of use, resulting in more obvious pain, increased bleeding situation, improved, and the use of chemical materials, increase moisture preservation, The temperature has the effect of ice bags, but does not cause skin discomfort.

Comments
Under the same material use, can be designed in different sizes and shapes, using any part of the human body, its high practicality. And it is promotional, and the teaching method is simple, easy to use, can increase the number of patients used, reduce the pain of patients. Discomfort, reduce the workload of nursing staff, increase patients’ postoperative comfort, and expect to establish a medical friendly environment.

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The association between particulate matter air pollution and risk for lung cancer.

CHEN Mei-Wen, HUANG Shu-Hua

Introduction
The Ministry of Health and Welfare announced statistics data from 2001 to 2017 the lung cancer has been the first among the top ten leading causes of death in Taiwan. We summarize all available evidence to evaluate particulate matter air pollution should be considered for lung cancer.

Purpose/Methods
Base the guidance of the evidence base medicine, the population of the lung cancer (P) were intervened (I) by the ambient air pollution. The outcome (O) of the association between particulate matter air pollution and the risk of lung cancer was analyzed. It is searched from the English-version of literature in the databases of Cochrane Library, PubMed, Ovid were based on the meta-analysis of the effectiveness made by the intervention way.

Results
(Hamra et al.,2014) The meta-analysis that focused on PM2.5 and PM10 and lung cancer mortality results from 19 cohort studies that results indicated that: the PM2.5 and PM10 were RR 1.09, 95% CI:1.06–1.11; I2= 18.3%, P = 0.26 and RR 1.05, 95% CI:1.03–1.07; I2= 41.9%, P = 0.11, respectively. The 18 cohort studies that provided estimates of the lung cancer risk associated with PM2.5 and PM10 were RR 1.09, 95% CI:1.04–1.14 and RR 1.08, 95% CI: 1.00–1.17, respectively.
Improving the efficiency and value of healthcare through resource allocation and artistic contributions

LI Wan Chen, CHEN Shih Chin, TSAI Chun Chi, LIN Ching Cheng

Introduction
Since the hospital opened in 1988, the number of outpatient services has increased from 23,000 per month to 38,000 in 2017. However, due to the limited space in the hospital, the outpatient service volume cannot be improved. After the analysis of the use of the clinic, it was found that the space between the clinics was idle at some time. Therefore, it is expected to use the existing clinics flexibly and increase the number of clinics to provide outpatient services.

Purpose/Methods
Since November 2018, the clinics marked with the department have been changed to numbers. Use the electronic kanban to display different clinics, so that the same clinic can be used in different departments at different time periods to improve space utilization. In addition, there is an artistic corridor located in the outpatient area, which is expected to provide medical benefits to patients and enhance the concept of health care for patients.

Results
By integrating the outpatient space, the hospital added 20 clinics in a week. Outpatients from November to December 2018 increased by 6,423 (an increase of 8%) over the same period last year. As well as the satisfaction of outpatient environmental facilities increased to 84.24%.

Conclusions
In the future, we will continue to monitor the use of each clinic to improve overall utilization. Under the current limit of space expansion, the existing resources will be consolidated to improve the availability, provide more quality medical services in South Kaohsiung, Taiwan, and continue to protect the health of the people.

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An Investigation on the Effects of SDM (Shared Decision Making) in Success Rate of Transition to Community for Discharged Psychiatric Inpatients

LI Pei-Shan, OUYANG Wen-Chen, LU Huei-Lan, CHENG Ching-Ming

Introduction
The purpose of the study is to enhance medical quality via the employment of SDM in transition to community for discharged psychiatric inpatients.

Purpose/Methods
A psychiatric center located in southern Taiwan adopted SDM for the inpatients of the chronic rehabilitation wards, and this study was conducted to explore its effects in success rate of transition to community. The medical team first talked about the core values of SDM, which is patient-centered and helps patients make a decision based on their needs. Then, the medical team explained how SDM worked. In this process, PDA (patient decision aid) was designed. After that, the five steps of SDM were carried out. First, actively invite patients’ participation. Second, help patients compare different choices. Third, evaluate patients’ values and preferences. Fourth, reach an agreement with patients. Finally, access patients’ decision. In this process, the patients were transferred to different professional teams. Also, the follow-up treatments and conditions of the patients were constantly kept track of and discussed in the meeting. The medical record was analyzed in order to modify the patients’ treatment plan. In this way the medical quality was enhanced.

Results
After one-year execution of SDM (from April 2017 to April 2018), the preliminary analyses show the following: 1. Health literacy of patients rose from 43% to 92%. 2. The success rate of transition from hospital to community is 100% and the 33 patients discharged from the hospital are able to adapt themselves in the community over a month. 3. The satisfaction rate toward medical treatment reaches 95%, providing qualitative feedbacks like, “It’s great to make a decision of my own.” “After I make a decision, I will cooperate with the medical team.” “It’s nice to discuss my decision with others, for I am not alone.” The medical team also feels the positive effects of SDM, which not only boosts patients’ confidence but also raises medical satisfaction and quality. The appreciation and achievements received by the medical team reveal that SDM can make improvement to clinical psychiatric medical care.

Conclusions
The introduction and employment of SDM in psychiatric rehabilitation wards enable patients to be the master of their lives, and to decide for their own treatment goals under medical team’s assistance. Meanwhile, the interaction among patients, medical team members, and patient decision aid can boost the success rate of community transition, confidence, health literacy, and so on. SDM is expected to enhance psychiatric medical quality so that patients and medical team members alike can reach a win-win situation.

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E-Posters: Governance and leadership for HPH

A Study of Hospital Pharmaceutical Ethics and Doctor-patient Relationships

SHIH Po-Jen, LIN Yu-wen, YANG Nan-ping, LIN Ching-feng

Introduction
In the life process of human beings, pharmacists play an indispensable role. In addition to pharmacists providing patients with safe medication and drug consultation, professional pharmacy service quality must be combined with sound social pharmacy foundation and social ethics to improve medication safety and medical quality.

Purpose/Methods
This study aims to analyze personal data protection laws and public opinion related cases based on reported patient safety and consultation cases from January to September 2018, thereby gaining an insight into the correlation between pharmaceutical ethics and doctor-patient relationships.

Results
The research results show the average number of suspected prescriptions was 51 cases (accounting for 26.6% of the reported cases). When pharmacists provide medical recommendations, based on honesty to patients, how to reduce patients’ sense of distrust and reduce the harm of negligent personnel remain the most important issues. Among the reported patient telephone inquiry cases, the ratio of patients’ disease inquiries of the relationship between disease and medication and the side effects of drugs was high (about 40%). Pharmaceutical professional related replies must come from adequate patient information. However, the regulation of the personal data protection law remains a major drug consultation challenge facing pharmacists.

Conclusions
Sharing decision-making is a patient-centered clinical medical implementation process that combines knowledge, communication, respect, and other elements intended to reach the goal of achieving the best feasible treatment plan. Pharmacists should respect the values and abilities of colleagues and improve prescriptions safety assessment and counseling skills, to reduce patient misunderstandings and medical personnel inquiries.

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Establish a patient-focused audit in hospital care

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Introduction
Hospital evaluation using Patient-focused Method was implanted by Ministry of Health and Welfare and Joint Commission of Taiwan in 2015. It was to track the process of medical care on-site to confirm it meets the standard operating procedures. It also found that the defect could help to process the continuous quality improvement. Consequently, the hospital set up an audit team to find the defect by using PFM to check the patient flow of medical care and environmental safety systematically.

Purpose/Methods
We organized an internal audit team in May 2018. It included (1) develop an audit map and audit form on the subject of medical care and management; (2) practically perform audits and records to establish an auditing routine; (3) analyze audit results to find systemic vulnerability and have it improved; (4) the audit results were fed back, and which was stratified to verify its improvement.

Results
The audit team designed 12 systematic verification topics. A total of seventeen systemic vulnerabilities were found, including implementation of equipment and maintenance, electricity safety, fire safety, patient autonomy, inform consent for invasive procedure, critical value notification, and consultation execution, patient transfer, nursing care process, and quality management of intensive care units, good appeal channel, promotion and implementation of SDM, management of ambulance drugs, management of pharmaceutical refrigerators, management of high-risk drugs, reporting process for adverse drug reactions, and management of controlled drugs.

Conclusions
PFM can understand the actual experience of patients undergoing medical care and the implementation of standardization. Through the establishment of an audit system, hospital can find the problems the system and the unit can improve. Furthermore, following the action for improvement will contribute to the overall quality of medical care and patient safety.

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Impact of Leadership Behavior of Employee Care on Job Satisfaction and Retention

SHU-HUI Wu, CHIA-CHI Yen

Introduction
In response to the changes in the overall medical environment in Taiwan, the primary countermeasure for maintaining the operation of a hospital is to reduce costs. As the nursing department is the largest department in terms of manpower, nurses account for more than 50% of the total staff in a hospital, making them the target for reducing personnel costs; therefore, contracted nurses are recruited. How to maintain medical quality and control costs and appoint contracted nurses at the same time is a topic worthy of further study for hospitals in terms of personnel appointment policies in recent years. The purpose of the study is to explore the following: the difference in job satisfaction
tween nurses with different backgrounds, the difference in willingness to remain in office between nurses with different backgrounds, the relevance between leadership behavior and job satisfaction, the relevance between leadership behavior and willingness to remain in office, nurses with different backgrounds, and the possibility of predicting job satisfaction and willingness to remain in office by leadership behavior.

**Purpose/Methods**

As a cross-sectional study, the study adopts purposive sampling. In 110 valid questionnaires retrieved, there were regular 12 nurses and 94 contracted nurses. SPSS for windows 19 was used to analyze the collected data. The analytical methods included: descriptive statistics, frequency distribution and Chi-squared test.

**Results**

According to the results of the analysis, there was a significant difference in job satisfaction of nurses in terms of retention system, age, seniority, advanced ability and religion, and there was some significant difference in willingness of nurses to remain in office in terms of marriage. The overall leadership behavior (r=0.575, p<0.0005) and job satisfaction had a moderate positive correlation, and the overall leadership behavior (r=0.299, p<0.0005) and willingness to remain in office had a low positive correlation. The leadership development and salaries and benefits had positive impacts on leadership behavior; that is, the higher the scores of “leadership development” and “salaries and benefits”, the higher the score of leadership behavior. If leadership behavior is better managed, job satisfaction and willingness to remain in office will be higher.

**Conclusions**

The study is to explore the relevance between the leadership behavior of caring for grassroots nurses and their job satisfaction and willingness to remain in office. Based on the results of the study, the study expects to call related departments’ attention to this issue to improve the nursing environment and further improve nurses’ willingness to remain in office.

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**E-Posts: Health literacy and communication**

**Factor Analysis of Patient Satisfaction Using Logistic Regression Analysis at an HPH Pharmacy**

**HIROTA Noritake, INAGAKI Mayumi, HASHIMOTO Kazuyo, MATSUMURA Naomi, HOJO Yuya, SHIMANOUCHI Norio**

**Introduction**

Modern Japanese pharmacy is located in community but access is limited to patients with prescription and not as open to public as Europe. Aozora pharmacy strives daily to envision ISO9001 and HPH standards using PDCA cycle to provide better access for the users. This time, logistic regression was used on its annual survey of patient satisfaction to analyze the factors for improvement of accessibility to pharmacy.

**Purpose/Methods**

The survey was conducted in September 2018 for 500 repeater patients excluding the first-time user. Factor “Highly Satisfied” as overall evaluation of the pharmacy was set as the objective variable to run logistic regression analysis on the influence by other factors such as 1-Staff’s greeting, 2-Staff’s attitude, 3-Pharmacist’s explanation, 4-Easy language use, 5-Waiting time, and 6-Waiting room environment. EZR was used for statistics and it was considered to be significant if risk factor (P) was less than 5 percent.

**Results**

Among all responses, 422 with markings on “Overall Evaluation” were considered as effective. By 5 point rating, “Overall Satisfaction” was 3.90 plus minus 0.70 and 95 percent CI was 3.88 to 3.92. Against “Highly Satisfactory”, “Staff’s Greeting”, “Pharmacist’s Explanation”, “Waiting Time” had significant effect.

**Conclusions**

Although many pharmacies run customer satisfaction survey, no one has ever tried a multi-variable factor analysis. In this first trial of logistics regression analysis, it became clear that statistically, staff greetings, pharmacist’s explanation and waiting time have significant effect on high satisfaction. In future, we shall focus on the factors with significance or the factors without significance but had more than 2 OR to bring about better improvement.

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The effectiveness of physician-patient communication meeting duration on the Hospital Length of Stay, medical expenses, and 14-day readmission rate.

**CHOU Yi-Chang, LIEN Hsin-Yi, LIN Yu-Chun, FENG Rung-Cuang, HUANG Sheng-Jean**

**Introduction**

Physician–patient communication is crucial for enabling patients and their families to participate in care decision-making. Since 2015, a community-based hospital in Taipei, Taiwan has been requesting that all of its inpatients participate in physician–patient communication meetings. Approximately 60,000 physician–patient meetings have been held annually since that time, and the meetings last 34 min on average. However, how to effectively and efficiently host these meetings has not been quantitatively assessed or supported by relevant literature.

**Purpose/Methods**

Minutes of the physician–patient communication meetings are entered into the hospital medical information system. The research period was January through August of 2018, during which time 36,238 meetings were held. This study selected only inpatients who had been hospitalized for more than 3 days (27,055 meetings) as participants. A stratified analysis was conducted to
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Determine the effect of meeting duration [i.e., ≤ 30 min vs. ≥ 30 min] on the number of days of patient hospitalization, medical expenses incurred, and 14-day readmission rate for similar symptoms.

Results
Patients who attended meetings lasting less than or equal to 30 min significantly outperformed those who attended meetings lasting longer than 30 min and those who did not attend meetings in terms of hospitalization length (9.1 d, 11.5 d, and 15.6 d, respectively; p < .001), medical expenses incurred (NT$64,130, NT$67,608, and NT$113,275, respectively; p < .001), and 14-day readmission rate (2.0%, 5.3%, and 3.6%, respectively; p < .001).

Conclusions
Physician–patient communication meetings can reduce the length of hospitalization, medical expenses incurred, and 14-day readmission rate; moreover, meeting duration should be no more than 30 min. Such a practice can prevent medical personnel from investing considerable time in the meetings and produce optimal results.

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The impact of physician-patient communication meeting in a community-based hospital.

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FENG Rung-Chuang, HUANG Sheng-Jean

Introduction
Physician–patient communication is crucial when promoting patient safety culture in hospitals today. Since 2015, a community-based hospital in Taipei, Taiwan has been requesting that all of its inpatients participate in physician–patient communication meetings. Approximately 60,000 physician–patient meetings have been held annually since that time. However, the effectiveness of these meetings has not been quantitatively assessed or supported by relevant literature.

Purpose/Methods
Minutes of the physician–patient communication meetings are entered into the hospital medical information system. The research period was January through August of 2018, during which time 36,238 meetings were held. To minimize the effect of inpatients with mild symptoms on the analysis results, this study selected only inpatients who had been hospitalized for more than 3 days (27,055 meetings) as its participants. A stratified analysis was conducted using the two dependent variables: “Attend the meeting or not?” and “Attend the meeting within 3 days of being hospitalized?” The effects of these two factors on the number of days of patient hospitalization, medical expenses incurred, and 14-day readmission rate for similar symptoms were investigated.

Results
The 14-day readmission rate was significantly lower for patients who attended meetings (2.5%) than for those who did not attend (5.4%; p < .001). For patients who attended a meeting within 3 days of hospitalization, the number of days they were hospitalized (10.91 d) and their medical expenses (NT$78,421) were significantly lower (p < .001) compared with those who attended a meeting after 3 days of hospitalization (days of hospitalization = 17.26 d; expenses = NT$111,933).

Conclusions
Physician–patient communication meetings had a significant effect on patients’ 14-day readmission rates. This result confirmed that when hospitals hold these meetings promptly with patients, length of hospital stay and medical expenses for patients can be significantly reduced.

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“Talk about colonoscopy” comic book to bring doctors closer to patients

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Introduction
St. Joseph Hospital actively promoted “Shared decision making”, or SDM. It is a collaborative process in which patients work with healthcare providers to make medical program decisions. In order to achieve good implementation results, it is necessary to specify design auxiliary tools for patients to assist in decision-making. To help patients understand the significance of disease, clinical process, treatment choices, and to put forward their own care considerations and expectations, the use of graphical instructions and interactive tools.

Purpose/Methods
Comic books are communication tools that transcend age and are loved by the vast majority of people. We chose “colonoscopy” as the theme of comics, using the style of live comics. The content describes situations similar to their own disease problems, in order to attract attention. Orchestration plot, follow the real scene shooting, with a grid of comics plus dialog box rendering. Finally, make colored comic books and upload them to the Internet at the same time.

Results
In order to publicize this innovative complementary communication tool, a formal new book publishing press conference was held in the hospital Hall one day in the “Patient Safety promotion Week”, inviting journalists to attend. The day did attract many media interviews. In addition, the “Talk about colonoscopy” comic book Magnified 20 times times, upright placed in the scene, and the comics in the people also attended. This makes the patients at the scene feel novel and interesting.

Conclusions
The comic plot into the “Shared decision making” three steps: 1. Ask questions 2. Say considerations 3. make a decision. It is important to make specific target groups, such as: patients have fecal occult blood reaction, understand the need for colonoscopy. These demands, the use of real video images and comic communicate with SDM decision support tool table and Colonoscopy defender before teaching matters, let colonoscopy advance preparation procedures illustrate more clearly understandable.
Using multimedia nursing guidance to improve the self-care effectiveness of patients after cataract surgery

HUANG Hsiao-Ling, CHEN Yu-Min, YANG Shih-Fang, TSAI Yi-Fan

Introduction
Our unit is an operating room of a regional hospital in Taipei, Taiwan. The average number of patients received cataract surgery per month is 150, with an average age of 66.5 years. From April to June 2018, 505 patients received cataract surgery. Most complaints were unclear about home care after cataract surgery. We also found the cognitive rate of the patients after cataract surgery was only 47%. We hope to construct postoperative cataract home care guidance could be improving health literacy.

Purpose/Methods
Implementation during the study period from August to October 2018: 1. Establish standardization of the postoperative care guidance process for cataracts and unify the content of the guidance. 2. Recording national and Taiwanese nursing instructional teaching CDs. 3. The “cataract care instruction manual”, which is designed with the text enlarged and illustrated, strengthens the concept of knowledge cognition. 4. Made poster and posted on the outdoor corridor of the surgery

Results
A total of 410 cataract patients were collected, and after receiving the nursing guide multimedia CD and viewing the nursing instruction manual, the self-care cognition rate of patients after cataract surgery was increased from 47% to 87%; the average satisfaction score of postoperative care guidance was 4.5 (satisfaction score highest is 5 points) and no dislocation of crystalline lens.

Conclusions
This project uses the multimedia recording country, Taiwanese language care guide CD, revised the nursing instruction manual and the standardization of the postoperative cataract nursing guidance process, effectively improve the self-care cognitive effect of patients after cataract surgery and increase the patient satisfaction with nursing guidance. The self-care health knowledge does help to improve the value of patient-centered care.

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“Mom and Dad Upgrade Academy” prepares parenting magic for newborn parents

LIAO Ling-Ling, CHAN Li-O, LIU Wen-Chin

Introduction
The problem of trend towards fewer children in Taiwan is serious. Government units or private institutions want to provide a better parenting environment to encourage production. St. Joseph Postpartum Nursing Care Center is the most different from other competitors, with excellent hospitals, kindergartens and public babysitting centers within the same SMIC sisters’ system. Able to combine different professional resources, to provide novice parents or infant care providers more diverse health literacy, to meet more individualized needs.

Purpose/Methods
A planning team composed of staff from different professional backgrounds to design a variety of learning courses and experience activities. The participants were not only newly produced women, but also parents of 0-3-year-olds or grandparents, nannies, etc., who helped take care of their children. The main focus of communication is to enhance parents’ health literacy and skills in educating their children, as well as to solve their parents’ physical and mental stress problems.

Results
"Mom and Dad Upgrade Academy "first to do market research on the interest needs of pregnant women who go to the hospital for prenatal check-up. 4 major themes are planned, including: 1. Parenting magic 2. Mummy magic 3. Joy Magic 4. Happy magic. The first quarter includes: "Neonatal preventive care", "My Baby is Gifted", "Understand whether infant development is normal scale", "Breastfeeding is not bothered", "Obstetricians teach You postpartum recovery", "Music Rhythm", "Mother busy how to get support and respite" and so on.

Conclusions
Each class uses a small class system of 5-12 people, increasing the frequency of communication, a total of 101 people to participate. Among them, there are 69 parents, 23 trainee students, in the parent-child activities of 9 kids with parents to participate. After the class completed 63 satisfaction questionnaire, learned that 91% participants for the newborn parents, in the "lecturer arrangement" the highest level of satisfaction, "Music Rhythm" course received the highest evaluation.

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A study on health literacy among type 2 diabetic patients in a public hospital in Taiwan

WANG Yuh Wei, CHENG Yating, HUANG Li Lan

Introduction
Inadequate health literacy creates negative impacts on patient safety and healthcare quality. A survey of type 2 diabetes patients in a public hospital in Taiwan showed that even if the type 2 diabetic patients join in health promotion activities by the hospital, most of the patients the sugar control is problematic.
The influence of image teaching on the health diet awareness in the community

TSAI YI-TING, LI YU-CHING, LIN HUI-CHING, WANG SHU-LING, HUNG CHIA-TENG, LIU YA-MIN, LAI CHIA-WEN

Introduction
The general traditional teaching is used to explain in words, but it’s difficult for the people to remember the content of the class in a short time. This image teaching is different from the traditional teaching, adding multiple creative education, using images to replace words and interacting with people, in order to enhance the proportion of people's health knowledge and level. In addition to the work of disease prevention and education, it also be entertaining and learning.

Purpose/Methods
This course replace the traditional text teaching with the image teaching mode. At the same time, the professional dietitian used the image interactive teaching in the community, and conducted a dietary awareness questionnaire before and after class. The scene uses image feedback teaching methods to enhance the audience's daily awareness of correct and healthy diet.

Results
Total of 60 valid questionnaires in the image teaching mode were included. The health food image education intervention has significant differences in the perception of the audience before and after the healthy diet intervention. The image interactive teaching enhances the recognition of the correct diet concept of the people by 80%, and the people of the community receive 85% satisfaction with the image teaching method.

Conclusions
Can an appropriate use of basic electronic devices ameliorates communication between health services and citizens?

BAGNULO Alberto, MACCABRUNI Veleria, ZOBOLI Alessandra, GASPARINI Ivanna, CHIARENZA Antonio

Introduction
In recent years, the daily work of hospital doctors also includes the use of emails, text messages and telephone calls in communication/relationship with patients and their families. The purpose of this study is to describe their use and the advantages and disadvantages in real life of an Internal Medicine Department.

Purpose/Methods
In the last year (2018) we collected emails, telephone contacts and text messages received and/or sent to patients/families for every doctor of the team. The team then analyzed the content of the contacts and defined the advantages and disadvantages of the individual experiences.

Results
The analysis of the contacts shows that the greatest use is by patients/families and the most used means is the telephone (90%) and email (9%); however, the cell phone number is rarely provided by doctors (5% of the team doctors). The most frequent recipient of emails turns out to be the director. Contact topics are: test results, therapeutic advice, follow-up and appointments.

Conclusions
Patients and doctors have different perceptions on the use of “indirect” contacts. The main advantages observed are a reduction in hospital re-entry, an improvement in the follow-up and the perceived quality of care, as well as benefits in terms of health promotion and empowerment/engagement. The main disadvantages...
advantages are an abuse of contacts, possible communication misunderstandings, a threat to the privacy of both doctors and patients.

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Exploring the development of renal replacement therapy decision-supporting interactive e-books to improve the health literacy patients with end-stage renal disease

LEE shuyen, WANG TsaeJyy

Introduction
CKD patient face complex choices for renal replacement therapy, patients are often not sure which one is the best choice and is very challenging for patients. Patient need more clearer communication to understand the impact of different treatment options on quality of life. This study purpose was to explore the effectiveness of the development of a kidney-replacement therapy decision-supporting interactive e-book that is consistent with Chinese national culture for the health knowledge and knowledge of patients with unexplained kidney disease.

Purpose/Methods
This study uses the SimMAGIC eBook e-book development software to create a digital e-book for medical decision-making aids. The decision-assisted interactive e-book content includes three parts: (1) Introduction to renal replacement therapy. (2) Experience of kidney friends. (3) Assistant decision-making steps: including comparing the advantages, disadvantages, risks, side effects (complications), possible costs of each option; personal choice of medical methods preference and preference; how much awareness of treatment is known.

Results
The development of interactive e-books refers to the advantages and disadvantages of kidney replacement therapy. The 30-minute film is used to illustrate the patient's personal experience and visualize according to the results of empirical medical science research. Comparing the results of each treatment. This pilot study collecting 20 patients with end-stage renal disease. The study results can be understood by interactive e-books. Health literacy and knowledge increased significantly after intervention in decision-making e-books (the score increased from 60 to 90).

Conclusions
Using evidence-based medical research in conjunction with information technology to develop decision-making aids for kidney replacement therapy options to help increase the health and knowledge of patients and their families, while making choices that are more sensible and more patient-friendly for treatment options, promote more effective communication between patients and medical staff.

Comments
Health literacy and communication.

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A preliminary study on the effectiveness of using multi-language triage information sheet to communicate with foreign patients in emergency department

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Introduction
Emergency department (ED) in a regional hospital in Taipei City, Taiwan, we observed that a total of 252 foreigners went to the hospital for emergency treatment, including 210 American-speaking communicators and 42 Japanese-language communicators from January to July 2018. When patient uses foreign language, the nurses and other coworkers usually do not know how to communicate with them. According to our data analysis the foreigner's triage average time is 13 minutes, which is higher than the average 6 minutes.

Purpose/Methods
Tools for assisted foreign patient communication were designed in August 2018. Interventions are follow below: 1. Translation in American and Japanese of the injury detection information, provided to the ED triage nurses for the patient's injury assessment. 2. Produced the American and Japanese language education training video for ED triage nurses. 3. Set up courses about American and Japanese language education training and situational simulation for ED triage nurses. 4. Conduct a survey on the satisfaction of triage time.

Results
In October 2018, a total of 34 foreigners investigated the patient's communication satisfaction with the nursing staff after using the written information in American and Japanese. The satisfaction rate was 82.6%. The foreigner’s triage average time was reduced from 13 minutes to 7.5 minutes, decrease about 5.5 minutes.

Conclusions
Our study effectively improves the language barriers between ED triage nurses and foreign patients by provide translation American and Japanese information pages, ensuring that patient data are collected correctly, and thus improving patient satisfaction.

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Preliminary study of using puzzle therapeutic games to improve clinical caring and communication effectiveness among 1-5 years old sick children

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Introduction
The unit is a pediatric ward of a regional teaching hospital in Taipei, and 62.65% of sick children aged 1-5 years old. Pulmonary diseases accounted for 50.6% of children’s diseases. Clinically found that 71.16% did not cooperate with medication, 85.58% crying and 74.04% were unwilling to cooperate with steam inhalation and chest physical therapy. The medical team intends to intervene in the use of cartoon characters to make puzzles, thereby improving the treatment of sick children with clinical treatment.

Purpose/Methods
Study period is from July to October 2018, collected cartoon characters images that children like. First, we used cardboard as the base, and then the soft magnet and magnetic whiteboard combined to complete the puzzle. The puzzle content includes health education leaflets and lung diseases or clinical care issues. The theme uses Chinese and phonetic symbols to improve the reading ability of children. Combined with the internet QR code, it is convenient for children or their families easy to read.

Results
During the study period, collected 45 1-5-year-old children, of which did not cooperate with medication from 71.16% reduced to 15.55%, and crying behavior from 85.58% decreased to 24.44%. Unwilling to cooperate with steam inhalation and chest physical therapy from 74.04% reduced to 20%. The family members of sick children and the caregivers are 100% satisfied with the communication method of the puzzle therapeutic game.

Conclusions
Using of children’s puzzles to interact with sick children in therapeutic games significantly improves the quality of care and clinical care. Final improves the value of medical care centered on sick children.

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Effectiveness of using Shared Decision Making model for treatment method selection after failure of removal endotracheal tube in patients with respiratory failure

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Introduction
Our unit is a comprehensive intensive care unit (ICU) in a regional hospital in Taipei city, Taiwan. In 2017, the success rate of weaning from ventilator is about 60%. We found that 40% of patients will face the failure of extubation and the risk of re-intubation. Through the Shared Decision Making (SDM) model, we can enhance the choice of treatment methods and increase the satisfaction of decision-making.
Purpose/Methods
During the study period, from July to September in 2018, our strategies are (1) Provided positive treatment (such as re-intubation of the tracheal tube, use of non-invasive respirators and tracheostomy surgery) and consider hospice palliative care and use the QR Code link to website to get the information. (2) Using SDM to explain treatment options by interactive evaluation form. (3) Understand satisfaction by the questionnaire.

Results
During the study, there were 8 patients who failed weaning from ventilator. One of them chose the palliative treatment. Seven patients decided to re-insert the endotracheal tube after they accepted the respiration training, and finally all 7 patients successful removed the endotracheal tube. Patients and their families are very satisfied with their decision-making method. The satisfaction rate is 98%.

Conclusions
Through SDM model, patients and their families could discuss and autonomy choose the most suitable treatment plan to achieve the maximum effectiveness of medical communication, and thus improve the satisfaction of treatment decision-making.

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The performance of promoting the “Health Literacy and Communication Index” in medical institutions in Taiwan

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Introduction
At the end of 2016, Taiwan became the first health promotion hospital network in the world. As hospitals function to provide medical services and promote health, the “Health Literacy and Communication Index” in medical institutions was implemented to provide people with accurate, approachable and executable health information, regarded as one of the major tasks of HPA.

Purpose/Methods
1. Apply “Health Literacy and Communication Index”, which covers 6 dimensions and 21 items, as references for production and review. 2. Sponsor health materials contests and invite submissions from medical institutions. Material review indicators will be provided for their reference. 3. Produce “Health Literacy and Communication Index” online tutorial to expand and deepen the effects of learning.

Results
1. Between 2017-2018, the HPA received 466 submissions from medical institutions, including 143 2-D materials (30.7%) and audio-visual contents 323 (69.3%). Most of the themes were “active aging”. 2. After the “Health Literacy and Communication Index” review, 47.4% (221) of the submissions passed, including 82 entries from primary care clinics and 81 entries from regional hospitals appropriate for health literacy. 3. In 2018, it grew to 253 entries, at the rate of 261%.

Conclusions
1. Resource sharing: Sponsoring health materials contest, the suitable health literacy friendly platform was uploaded to the first “Health Education Materials Integrated Platform” in Taiwan for download. 2. Rolling revision indicators: Such as organization and editing skills: (1) suitable division of learning zones, and (2) suitable listing of items were not totally applicable on audio-visual materials. Therefore, these indicators were regarded as basic
Utilizing SDM to Raise Life Literacy for Nursing Facility Residents and Their Families

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Introduction
The quality of life and the end-of-life care of residents in nursing facilities is highly concerned by the people. The sudden exacerbation of the residents requiring resuscitation, the families have conflicts and contradictions, which led to the signing of the do not resuscitate (DNR). However, this causes suffering by the patient, and regret and remorse for the families. The team reflected on past data and discovered that only 25.5% of DNR signings of the residents are of the project’s intentions.

Purpose/Methods
The team distributed 40 (35 residents and family members, and 5 colleagues) anonymous semi-structuralized questionnaires in January 2017, with 100% return rate. After statistical analysis, there was no tool and standard operation for terminal evaluation, the team’s lack of hospice care awareness, and imbalanced information on hospice care, which are major factors causing low signing rate. The team uses SDM to formulate improvement measures. The addition of terminal assessment tools, standard operations and education are the best strategies.

Results
The project team utilized SDM to raise the life literacy for residents and family members. Residents and family members uniformly expressed positive affirmation, and inquiries for signing the DNR consent form increased, achieving the project’s objective, and the signing rate rose from 25.5% to 76.9%.

Conclusions
After intervention with SDM, the team achieved consensus on the timing for DNR signing, could more clearly understand the residents’ attitude and desire towards medical treatment when facing the end-of-life, raised quality of care, and decreased ineffective medical treatments and dilemmas of the families when facing life decisions. It is the team’s future expectation to explore the thoughts of residents and their families when signing for DNR, to achieve consensus is through family meetings, and to reach a good ending.

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The affordances of information technology for health communication: The perspectives from patients.

CHING-WEN Yao, DR. JOYCE Lee, HOU-CHAUNG Chen

Introduction
As medical quality changes and medical concepts improve, patient-centered care models respect and respond to patient preferences and needs in clinical decision making and ensure patient values (Breen et al. 2009; Zhou et al. 2017). One of the key elements in achieving patient-centred care is the patient’s self-education and information acquisition, and the ability to express one’s own condition and preferred treatment so that caregivers can reasonably respect the patient’s wishes.

Purpose/Methods
This study, based on the role of patients and caregivers, is based on the Technology Affordance Theory, which explores patient-centered care and how IT can be used to promote medical communication. This study used a number of cases to observe and interview a number of cases requiring long-term visits and rehabilitation in an anonymous manner to understand how they can obtain medical information or knowledge through information technology assistance during their visits and rehabilitation.

Results
Patients or caregivers use social media to obtain information, such as using a web search engine to find images of disease names, increasing awareness of the disease, or searching for videos of the care process through online videos to increase patient self-care knowledge. And when the case is getting information, it also expects emotional support, for example, searching for sites similar to diseases, sharing information with patients so that patients can feel not alone, or communicating through the interactive nature of instant messaging software.

Conclusions
In the case of patients or caregivers, the health information transmission is more static (eg, web search) before medical treatment, while the health knowledge and emotional support in medical treatment are more dynamic (eg, film, photo, animation), after medical treatment. For health information transmission, health knowledge and emotional support are also dynamic requirements (eg, YouTube, LINE), this result can provide future hospitalization process planning and application, using the characteristics of various social media, patient-centered The doctoral communication model to provide the most appropriate medical services.

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The Correlation Between Health Literacy And Stigma For Patients with Tuberculosis

HUNG I-Chun, WANG Jye, HUI-SHAN Chen

Introduction
Tuberculosis is a chronic disease that causes significant morbidities and mortality in Taiwan annually. Because of its long history and unique disease characteristics, it often causes stigma in different societies, which in turn affected the willingness of patients to seek timely diagnosis and treatments. At present, patient education for tuberculosis usually emphasizes disease knowledge but rarely focus on patients’ health literacy and coping mechanisms for stigma associated with tuberculosis. Few studies have examined the relationship between health literacy and stigma for patients with tuberculosis. This study is one of the first to explore this relationship.

Purpose/Methods
Data for this cross-sectional study was collected from a regional hospital and a specialized chest hospital in southern Taiwan between January 1st, 2016 and December 31th, 2016. We used the short-form Mandarin Health Literacy Scale and Tuberculosis-related Stigma Scales to collect data. Multivariate linear regression models were used for analysis.

Results
One hundred and forty patients with tuberculosis participated in this study. On average they scored 9.09 on the Health Literacy Scale and 30.07 on the Stigma Scales respectively. Those who had previous history of tuberculosis infection had lower stigma associated with it. But health literacy was not significantly associated with stigma.

Conclusions
Stigma associated with tuberculosis is one of the challenges faced by health care professionals who care for patients with tuberculosis. To promote health literacy about tuberculosis and to help patients cope with stigma, well-developed stigma scale, health literacy scale, and educational tools are required.

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Local education network programs aimed at improving health literacy and promoting community health

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Introduction
Hiroshima Kyoritsu Hospital, which caters to a community of more than 250,000 people by providing services ranging from acute care to rehabilitation programs, have been actively collaborating with the local public administration to support health literacy since 2011. By partnering with other neighboring institutions, we established an education network that regularly provides seminars and other resources on various health topics.

Purpose/Methods
In this presentation, we aim to give an update on the progress of our health education network. Using questionnaire surveys, we also review public feedback towards the activities carried out through this network.

Results
From April 2012 to November 2018, we conducted a total of 69 seminars for a total of 1571 participants. Programs included current health issues such as cardiovascular disease prevention, diabetes, tobacco & health, dementia and advance care planning. The seminars were conducted by healthcare professionals with active Q&A sessions. Partnerships were established with different institutions to maintain our education network. From questionnaires collected, feedback has been overall positive with more than 80% of attendees reporting satisfaction with the programs provided.

Conclusions
To push for behavioral changes that are important to achieve a healthy community, public education to promote health literacy is indispensable. Health promoting hospitals need to actively promote health literacy to improve the health status of the communities they serve. The education network we established received positive feedback from the public and we believe it contributes to nurturing a healthy community.

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The motivation of senior citizens to participate in smart phone courses and the behavior of Hospital Online Appointments System

CHENG Chin-Chia, TSAI Ming-Chi

Introduction
Due to the development of the Internet, it is more convenient for medical practitioners to develop Online Appointments System. However, elderly people often have many frustrations because they are not familiar with the operation. To promote the use of Hospital Online Appointments System and medical convenience for senior citizens, we hold smart phone courses.

Purpose/Methods
The purpose of the study is to explore the motivations of senior citizens to participate in smart phone courses and the use of Hospital Online Appointments System software. The survey consisted of 49 students over the age of 65 who participated in the mobile class. Survey content includes gender, age, occupation, education level, APP and Hospital online appointments system usage.

Results
The survey results show that men are 41%, 65~69 years old up to 47%.64% of the elderly have experience using smartphones to
Preliminary study on the effectiveness of using the flashcards to improve the cognitive of inpatients' assistive device process and reduce the time of teaching

CHIEN Yu-Shan, CHANG Chia-Chi, HOU Chun-Mei, TSAI Yi-Fan

Introduction
The purpose of this article is to understand inpatients receive the flashcards description could learn how to apply for assistive device and shorten the explain process for nursing staff.

Purpose/Methods
A regional hospital in northern Taiwan, A total of 30 patients were randomly assigned from August to September 2017, and they were divided into two groups, experimental group were used the flashcards and control group did not use the flashcards. The evaluator applying the flashcards to explain and recording the time, and using cognitive questionnaires to understand the degree of knowledge absorption. We also choose the same evaluators to reduce the record bias.

Results
We found that experimental group with an average explanation time of 10 minutes; control group with an average explanation time of 30 minutes. It were confirmed that use of the flashcards can effectively shorten the explain process for nurses. The experimental group patient or family members' awareness of how to apply for the assistive device was increased from 40% to 88%, significantly higher score than control group (88% vs. 65%, p=0.032) and satisfaction was better than control group(93% vs. 75%).

Conclusions
“Vision” is very important concept for human learning. Through graphics, it can help people to transfer or conceptually understand and remember knowledge. Through the flashcards not only reducing the time of clinical explanation but also helping patients and their families learn about the assistive device process more quickly. Our result provided to clinical care as a reference.

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Shared Decision Making and Its Associated Factors to Patients with Total Joint Replacement Surgery

LIN yahui, YANG liyu

Introduction
The study aims to investigate shared decision making (SDM) and its associated factors to patients with total joint replacement surgery, including: (1) Patients’ demographics, family support and their preferred roles in decision making; (2) Patients’ involvement in SDM; (3) The relationship between patient demographics, family support and their preferred roles in decision making.

Purpose/Methods
This is a cross-sectional study design with convenience sampling. A structured questionnaire (containing demographic data survey, CPS and SDM-Q-9) is applied to investigate total of 95 aged 20 or above patients with first-time total joint replacement surgery from orthopedic wards of a medical center or two regional teaching hospitals located in Southern Taiwan.

Results
Our results showed that (1) For control preference, 40% of patients intend to play a passive role in decision making, followed by a collaborative role (30.5%), and an active role (29.5%); (2) For family support, family member’s involvement in decision making has significant impacts on patient’s control preference (p< .05); (3) For SDM-Q-9, the average score is 88.03, indicating above-average active attitude toward SDM; and thus (4) Gender, educational level, marital status and control preference in decision making are the contributing factors to SDM (p< .05).

Conclusions
The percentage of patient’s active participation in SDM is relatively low in Taiwan than in other countries. For patients with family members of control preference, patients intend to play passive roles in decision making. In our study, male gender, higher educational level, married and cooperative personality are contributing factors to higher involvement in SDM.

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Preliminary study on the experience of sharing decision-making for the choice of latent tuberculosis treatment

HUANG Yu-Hui, LIAO Yen-Chi

Introduction
In patriarchal medical environment dominated by physicians, medical treatment will vary depending on the preferences of the physician. The concept of SDM combines the three elements of knowledge, communication and respect, allowing medical staff and patients to share the existing empirical medical results. SDM contributes medical staff and patients to enjoy the existing empirical medical results, taking into account the patient’s own preferences and values, providing patients with all the options to consider. This article aims to explore the experience of medical personnel and patients in the selection of SDM for the treatment of latent tuberculosis infection.

Purpose/Methods
This paper uses qualitative research to collect data with semi-structured questionnaires and participation observations. The study included 20 cases of nurses, patients and physicians. After interviews were compiled and analyzed, the meanings and interpretations were carried out.

Results
1.Empowerment: When patients have to learn to think about the pros and cons of various options, organize their ideas and ask questions, and recognize that they must make a decision, they will inevitably hesitate. 2.Create a new medical culture: Although it is necessary to graphically map medical data and promote medical vernacular movements, it is undoubtedly a new challenge, but it can enhance the basic medical literacy of the people. 3.Companionship is a value in itself Medical personnel must fully understand the minds of patients who have not spoken out, and help them to clarify the value of the decision and make the patient fully understand the decision made, so as to avoid future medical disputes.

Conclusions
Although medical staff agree and are willing to share SDM peers, patients have different ideas. Even with patient-centered communication and high-quality empirical data for medical decisions, it may be in vain. These conditions are normal, because we are making peace of power transfer - turning medical patriarchy into case empowerment.

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Correlation between smoking and smoking cessation in different ethnic groups and quality of life - Taking cohort data as an example

CHEN Sheng-Pyng, HUS Shih-Tien, LIOU Huoy-in

Introduction
Through cohort research, study whether the changes in the behaviors related to the different ethnic groups and healthy related quality of life. Does behavior change will change the quality of life and increasing the motivation to quit smoking?

Purpose/Methods
The research data was selected from the “Li-Shin Outreaching Neighborhood Screening (LIONS)” cohort database of the Pingzhen District city and which was designed using a longitudinal study. We used the Taiwan version of Medical Outcomes Study’s short-form 36-item questionnaire (SF-36-TW) to assess the conscious physical and mental health of respondents.
Impact of magnet hospitals on intention to stay for new nursing staff

LIU YA-MIN, TSENG SU-FEN, LIN HUA-YU, HSIEH YU-HO, LEE MING-TSUNG

Introduction
With the increase of the elderly population, the demand for medical care will grow substantially. However, due to the pressure of nursing workplace, three shifts in rotation, the clinical workload is too large, and the new generation is reluctant to invest in the workplace, the nursing manpower is continuously lost, resulting in a gap in nursing staff.

Purpose/Methods
Two senior nursing colleagues were assigned to mentor the profession and adaptation for each newcomer. In the 1st, 3rd, 6th, and 12th months of arrival, dinner vouchers were provided by the HR division of the Nursing Department to the newcomers and the mentors. This activity facilitates the understanding of each other, introduction of the welfare system, experience sharing and discussion, and caring about living, family, and career planning.

Results
A total of 82 newcomers arrived at this large teaching hospital in 2016. Of them, 18 left the hospital with a rate of stay of 78%. The activity of dinner with senior colleagues reached a completion rate of 94.1% in 2017. Through this activity, 16 in 86 newcomers left the hospital in 2017, with a rate of stay of 81.4%. Satisfaction rate of 94.1% in 2017. Through this activity, 16 in 86 newcomers

Conclusions
Magnet hospital is oriented from the USA which indicating a hospital attracts nursing staff to stay. The American Nurses Association suggests hospitals adopt effective measures to keep a high level of satisfaction from the nursing staff. It expected to fill the gap of manpower of nursing and to elevate the quality of cares.

Increasing Public Participation in Self-funded Health Examination - Case Study of a Regional Hospital in South Taiwan

MING-FEN Cheng, YU-TING Chiu, YU-PEI Lin, MING-JEN Huang

Introduction
With advanced medicine, the life expectancy continues to increase. In 2016, the life expectancy of males and females in Taiwan was 76.8 and 83.4, respectively. As chronic diseases have become prominent, medical care has shifted from treatment to prevention and health promotion. How to identify potential health problems through early screening becomes more important.

Purpose/Methods
In Taiwan, the government provides free health examinations for people aged 40~64 every three years and for people aged 65 or above every year. But many advanced examinations are self-funded. With limited resources, Kaohsiung Municipal Min-Sheng Hospital achieved limited results in self-funded health examinations. Since 2016, the project team has set up an independent health examination center on 7F, enhanced medical equipment and hired medical professionals to offer tailored health examination plans in the hope of improving service and revenue.

Results
After overall improvement in the environment, equipment and manpower, the number of people undergoing self-funded health examinations was 347, 692 and 1798 in 2016, 2017 and 2018, respectively, with the total number of people undergoing health examinations increasing by 99% and 418%. Revenue from self-funded health examinations was NT$1,315,900, NT$3,078,387 and NT$6,720,000 in 2016, 2017 and 2018, respectively, showing an overall increase of 134% and 411%.

Conclusions
We have improved various medical measures one by one, we have not only effectively increased the number of health check-ups in hospitals, but also increased the hospital’s self-funded revenue. Further, the examinee who is inspected will be educated and cared for after the health checkup, and provide abnormal return registration service, which not only improves patient satisfaction, but also enhances the hospital’s image and enhances medical service reputation and customer loyalty.

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The effectiveness of situated simulation teaching on the care of incontinence associated dermatitis among nurses

LIU YA-MIN, HWU YUEH-JUEN

Introduction
Incontinence Associated Dermatitis care is a challenge for the intensive care unit care staff to quickly and correctly identify the type of skin damage, improve incontinence, early effective prevention and management measures and education programs to help reduce the patient’s discomfort and pain. Improve the health of critically ill patients can reduce complications and medical costs.

Purpose/Methods
The nursing staff of the Intensive care unit, and the quasi-experimental design Incontinence dermatitis care immersive situational teaching as an interventional program, taking two groups for pre- and post-test design, a total of 55 subjects, The ineffectiveness of incontinence dermatitis care was measured before and during the six weeks after the incontinence dermatitis was measured. Data analysis was performed by paired t test, independent sample t test, and covariate analysis (ANCOVA).

Results
The results showed that the total score of the experimental group after incontinence dermatitis care knowledge, attitude and skill was higher than the previous test (p<.05), there was a significant difference between the two groups (p<.05).

Conclusions
Through the analysis of the effectiveness of this study, can provide reference for the in-service education plan related to incontinence dermatitis in the future.

Comments
We recommended to adopt a multi-disciplinary teaching strategy to improve the ability of nursing staff to respond to incontinence dermatitis and the quality of medical care.

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E-Posters: Health promotion and prevention in primary health services

To improve the muscle strength of lower limbs in patients with cirrhosis

LEE Ya Ting, HSU Wen Chuan

Introduction
Exercise in patients with cirrhosis under medical supervision can promote the lower limb circulation and muscle strength, reduce the incidence of falls as well as the possibility of fall injury due to muscle weakness of lower limb, increase medical expense, and prolonged hospitalization.

Purpose/Methods
Therefore, this project aims to improve the muscle strength of lower limbs in patients with cirrhosis. Current scale of lower limb muscle strength of cirrhosis patient is 3.5, and the reason for low performance analyzed include lack of standard patient instructions for lower limb exercise and tools in the assessment of patients’ muscle strength, the patients don’t know how to exercise, do not exercise because of feeling fatigue, and lack of exercise cause further fatigue.

Results
From November 2015 to March 2016, we improved the implementation of patient exercise during hospitalization via the establishment of instructions for lower limb exercise in cirrhosis patients, as well as improved the quadriceps femoris manual muscle testing procedure, and effective application of the assessment tools.

Conclusions
Through this project, the scale of lower limb muscle strength increased from 3.5 to 4.25 after exercise; the patient’s satisfaction of exercise was also improved from 3.8 points (76%) to 4.7 points (94%). This project has achieved desired results and deserved further promotion.

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Research on heart rate variability, health promotion lifestyle and sleep quality of employees at the workplace

HSU Wen Chuan, LIN Jui Hsiang

Introduction
It is important to provide and plan individual workforce health promotion program, as it can prevent disease and help the employees pursue their physical, mental and social health. The main purpose of this study is to explore the health promotion and its associated factors among company employees to provide suggestions on employee health management.

Purpose/Methods
We analyze the heart rate variability, health promotion lifestyle and sleep quality in a particular workplace. Based on a correlation design, the questionnaire include simplified Chinese scale of health promoting lifestyle profile, scale of sleep quality, basic attributes of the caregivers, and heart rate variability performed by the heart rate variability analyzer. Data analysis was carried out with descriptive and inferential statistics (independent sample t-test, one-way ANOVA). A survey total 96 taxi drivers and employees in a company was conducted.

Results
The results showed that the overall averaged scale of health promotion pattern was 52.9, with the highest ranking of 10.4±3.1 in self-fulfillment, followed by interpersonal support of 10.2±2.7.
The overall sleep quality pattern averaged 6.33 points, with good and bad sleep quality accounting for 38.5% and 61.5%, respectively. There was no difference in the comparison of sleep quality with health promotion style and heart rate variability.

Conclusions
Comparison among three groups of employees, i.e., telephone customer service, administrative staff, and taxi drivers, revealed no difference in the sleep quality and health promotion style, but a significant difference in heart rate analysis SI between groups (P<0.05). The difference of heart rate variability analysis SI found in telephone customer service and taxi drivers probably because both are sedentary workers.

Comments
The study findings can be used as suggestions that how to monitor employees’ health status and to promote health improve- ment plan to the health management employee in this workplace, including multiple aspects related to health, time, and participating health action activity.

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The liver function survey of community people-A Hepatitis Screening in a Community of Southern Taiwan

CHEN Mei Tsu, LIU Tz Jie, CHEN Wen Chun, CHUNG Jui Jung

Introduction
Liver Cancer ranked the second of cancer mortality in Taiwan, the patients are mostly over 40, 50 years old, and mostly are males. The research in Taiwan shows that about 60 to 70 percent of liver cancer patients are caused by Hepatitis B, and 20 percent by Hepatitis C. The common point of malignant tumor and chronic disease is that patients rarely feel the abnormalities of body at the initial of disease, it’s not until the condition become deteriorated that they seek for the medical assistances actively. It’s not only postpones the prognosis of the disease but affects the effectiveness of the treatments and the quality of life. Therefore, preventive screening is particularly important.

Purpose/Methods
The study was conducted with 451 people of a Community of Southern Taiwan, providing with free Hepatitis Screening, the main screen projects including HBsAg, Anti-HBs, HCVab, GOT, GPT etc.

Results
The results show that the participant of the screening is composed of 147 males (51.04%), and 141 females (48.96%). In the age distribution, 32 (7.09%) of age 10 to 39, 206 (45.68%) of age 40 to 69, and 213 (47.23%) of more than 70. The positive rates of HBsAg and HCVab are 8.8%, 9.48%, and the abnormal rates of AFP, GOT and GPT are 4.87%, 9.21% and 8.37%.

Conclusions
Recently, the treatment of liver cancer has made significant progress, and the survival rate also has dramatically improved. However, if we can cure the Hepatitis C before the trilogy of liver disease happens, i.e. cirrhosis, liver cancer, it can significantly reduce or even prevent the occurrence of liver cancer. People can realize whether they are infected with Hepatitis B or C through hepatitis screening, and receive treatments, and abdominal ultrasound tracing regularly, to achieve the purpose of preventive screening: early detection and early treatment.

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To explore the abnormal rate of Liver Function, Renal Function, Blood Sugar and Cholesterol between different ages - A case study of the customers implementing Preventive Health Service in a Regional Teaching Hospital.

LIU Tz Jie, CHEN Mei Tsu, CHEN Wen Chun, CHUNG Jui Jung

Introduction
To protect public health, Taiwan Health Promotion Administration implements the early detection, early treatment and intervention of chronic diseases, provides the adult health examination to people ages 40-65 every three years, the aborigines ages over 55 every year, and the poliomyelitis patients ages 35-65 every year. The purpose of the study is to find out the differences of the abnormal rate of liver function, renal function, blood sugar and cholesterol between different ages from the test results of people participating in preventive health service, and remind people to be aware of the disease incidence among different ages.

Purpose/Methods
The study was conducted with the customers implementing preventive health service in a regional teaching hospital, providing with the test of cholesterol, liver function, renal function, and blood sugar, a total of 1771 people participated.

Results
The results show that the participant of the screening is composed of 635 males (36%), and 1136 females (64%). In the age distribution, 678 (38%) of age below 65, and 1093 (62%) of more than 65. The normal and abnormal people of cholesterol 1089 (61%) and 682 (39%), renal function 1574 (89%) and 197 (11%), liver function 1639 (93%) and 132 (7%), and blood sugar 821 (46%) and 950 (54%). And the results showed that the abnormal rate of cholesterol between age 50 to 59 had significant differences compared with other ages. In addition, the abnormal renal function rate of age 50-59, the abnormal liver function rate of age 40-49 and the abnormal blood sugar rate of age above 60 also showed the same result.
Adopt IS Success Model to Evaluate Health Bank Performance: People’s Perspective

WEN-YI Li, I-CHUN Lin, CHIEH-WEN Tsai, HSIN-SHIU Chen

Introduction
National Health Insurance Administration, Ministry of Health and Welfare of Taiwan launched personal cloud-based service on September 2014 – Health Bank system. As revealed in the EU eHealth Task Force Report, the goal is that in 2020, the medical record of advanced countries will return to the individual, allowing the people to take care of themselves and achieve healthy health.

Purpose/Methods
This study based on the information management science famous DeLone & McLean (1992, 2003) Information Systems Success Model, develops research structures and structured questionnaires, and evaluation of Health Bank from the perspective of quality. Approved by the research ethics committee of the national taiwan university hospital, and collects the evaluation data of the people by the Likert 5 equal method. Data analysis and pattern validation using the adopted SmartPLS3.0.

Results
In the potential variation of the model fit index, the composition reliability (CR) is above 0.9, average variation extraction (AVE) was above 0.6, and the factor loading was also above 0.7. This study proved the convergence validity and discriminant validity. Information quality and system quality significantly significantly affect the people’s satisfaction (R square=0.701), system quality significantly positively affects the public’s intention to use the health passbook (R square=0.395), the model is ultimately based on the variable as a net benefit, and the overall explanatory power is 45.1%.

Conclusions
The empirical results, the information system success model is used to explore the people’s use of the Health Bank system evaluation to obtain a good interpretation ability, but also verify the causal relationship between facet and are positive. On the whole, people have positive feelings about the information quality, system quality and service quality of Health Bank, which enhances people’s satisfaction with Health Bank and is willing to use it. The mastery of health information will enhance the enthusiasm of the people for healthy management.

Comments
Implement and establish a personalized health record diary to achieve the goal of disease prevention and self-health management.

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Evaluating estimated dietary salt intake using spot urine samples for low salt lifestyle; for the “Sukoshio®” movement.

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Introduction
The Japanese Health and Welfare Co-Operative recommends a salt intake reducing movement of 6 g or less a day with a registered trademark of “Sukoshio®,” but changing eating habits for many years is not easy. It is one of the important activities of health promotion to aim for salt intake reduction by a collaboration of medical experts and people. Estimation of daily salt intake during a day using spot urine samples can be an objective indicator of reduced salt movement.

Purpose/Methods
In June of 2017 to January 2018, estimated salt intake measurements were calculated by urine test (Tanaka method) at municipal health examination. After that, volunteers were recruited, and learning about salt intake reduction was conducted as an intensive intervention, and two weeks later, re-measurement of salt intake and a dietary questionnaire were carried out. Three hundred twenty-five community members (103 males, 222 females), related to the Tokyo Kensei Hospital and the Nezu Clinic, enrolled in this study.

Results
The mean age of participants was 74.7. The average amount of estimated salt intake was 8.6g. There was a strong correlation between BMI and daily salt intake. The mean age of volunteers was 66.6. The amount of salt intake after the intervention unchanged or decreased in 21 volunteers. The total score of the dietary questionnaire significantly reduced from 12.4 to 9.9. However, estimated dietary salt intake using spot urine samples showed no significant decrease before and after the intervention.

Conclusions
Although estimation of salt intake often based on subjective evaluation of meal content, objective assessment became possible by adopting estimated daily saline intake using occasional urinalysis. Obesity people tend to be overeating and resulted in salt intake increase. For expanding the “Sukoshio®” movement, it is necessary to conduct awareness-raising activities on balanced eating methods and quantities. Subjective assessment of dietary habits does not always improve an actual salt reduction, and it is essential to instruct diet based on objective indicators.
Needling Stick Injuries in our hospital

SAKAMOTO Shota

Introduction
Needling Stick Injuries (NSI) is an important problem directly linked to health problems of medical staffs. We investigate the occurrences of NSI that occurred in our hospital in 2011-2018 and review the risks of NSI.

Purpose/Methods
We have used "Epinet for Japan" for reporting NSI in our hospital. It is a blood / body fluid exposure report form provided by the Occupational Infection Control Study Group. We use the free analysis software "Episys" to compile and analyze the data reported at our hospital. We compare our results with national statistics and consider the preferential measures to prevent NSI in our hospital.

Results
The total number of NSI reported in our hospital from 2011 to 2018 was 226, and 203 cases (89.8%) were found out for the target patient, and 23 cases (10.2%) were unknown or unspecified. For devices used, compared with national statistics, NSI by injection needle (22.1%) was smaller and by drug filling needle (19.0%) was larger relatively. The injuries occurred in 17 cases (7.52%) when recapping needles, 39 cases (17.3%) when disposing of sharp device.

Conclusions
In our hospital, the rate of NSI due to the drug filling needle is high. It is considered that one reason is that the number of insulin injection procedures is large. And many NSI occur due to inappropriate disposal of needles used. In cases of NSI after disposal, the target patient is likely to be unknown. Thus, the risk is much higher than other NSI, this problem must be addressed preferentially.

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Association of Malnutrition-Inflammation Score With Hand Grip Strength In Peritoneal Dialysis Patients

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Introduction
Malnutrition is a common problem in dialysis patients. Malnutrition-Inflammation Score (MIS) is a quantitative assessment tool based on Subjective Global Assessment and predicts mortality and morbidity in dialysis patients. The Hand Grip Strength (HGS) is recognized as a useful tool to evaluate muscle strength, and therefore, it is suggested that can detect malnutrition. In this study, to evaluate the nutritional status by MIS and the hand grip strength in peritoneal dialysis patients.

Purpose/Methods
A cross-sectional study was conducted with patients for peritoneal dialysis in Keelung Hospital. Anthropometric data, MIS and HGS were collected. The MIS, an inexpensive and easy-to-assess score of 0 to 30 to examine protein-energy wasting and inflammation, includes 7 components of the Subjective Global Assessment, body mass index, and serum albumin and transferrin concentrations. Data was analyzed using the descriptive statistics and spearman’s rank correlation coefficient.

Results
In this study, the average score was 9.00 ± 6.15 of MIS and 67.4% of patients on peritoneal dialysis were malnutrition. The average score was 9.00 ± 6.15 of HGS and 35.7% of patients on peritoneal dialysis were weak. The association of malnutrition-inflammation score with hand grip strength was negative correlation in peritoneal dialysis patients (r = -0.608, p < 0.01). On other hand, there was low hand grip strength in malnourished patients with peritoneal dialysis.

Conclusions
MIS and HGS were nutritional assessment tool in peritoneal dialysis patients. Use assessment tool regularly can provide nutritional support for those found to have a malnutrition status.

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Shared Decision Making for dialysis access in hemodialysis patients

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Introduction
The choice of decision on vascular access to patients, with Stage 4 to 5 Chronic Kidney Disease, is often deferred until the kidney function becomes urgent. The delay decision results in an emergent situation through a central venous catheter for urgent dialysis. Research shows that Hemodialysis (HD) patients usually prefer AV fistula for treatment, which is directly suggested by Nephrologist in Taiwan. However, patients who take Nephrologist’s advice are rarely understood how the choice would change their lives.

Purpose/Methods
This study involved 20 volunteers with a medical background for pre-test and 30 patients in the real test. We designed Patient decision aids (PDAs)"How making a choice in selecting a dialysis access? A decision coach will provide further information for patients during CKD stage 4 to 5 and introduce how the AV fistula and catheter work. With 5 step dialogue to confirm patients’ preference of decisions, the coach can compare the decisions conflict after the decision making process.
Results
Participants who are at CKD stage 4 to 5 volunteers (10 men and 20 women) could select three options (Option one: AV fistula, Option two: catheter and Option three: not sure yet). After the SDM process, female patients at option three (not sure yet) go from 50% to 25%. Male patients go from 30% to 20%. The score (dislike level total 15 points) that patients’ concern about influencing to the catheter shows (13.9), higher than AV fistula (12.9).

Conclusions
We use a radar chart to compare multiple quantitative variables on a decision making process. 20 medical volunteers indicate that patients after SDM process can understand the pros and cons with selecting AV fistula or catheter for dialysis access. Study results indicate that the SDM process also can help patients clarify the conflict zone for their selection. Moreover, patient still not used to recognize that decision must be made by themselves with the suggestion from medical support.

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Differences in primary care support offered to patients with documented lack of physical activity. Regarding patients with diabetes, hypertension and depression

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Introduction
The importance of physical activity for both prevention and management of non-communicable diseases is well established. Less is known, to what degree health-care providers identify patients with lack of physical activity and how many of these are offered support. There are also differences between patients with diabetes, hypertension and depression and whether they are asked about their level of physical activity.

Purpose/Methods
In the Swedish County Council of Västernorrland a system for documentation of lifestyle habits is part of the Computerized Medical Record System. Patients with appointments connected with a diagnosis of depression, diabetes or hypertension at one of the counties’ 32 primary health-care centers were studied.

Results
In 2016, of the counties’ 209,940 inhabitants at age 13 or elder 12,425 had been seen for depression, 15,112 for diabetes and 12,425 for hypertension. Proportions of patients whose level of physical activity was registered were 24 %, 43 % and 32 %, respectively. 73 % (depression), 76 % (diabetes) and 70 % (hypertension) had adequate levels of physical activity and of these 48 %, 49 % and 46 % were offered support. At individual Health care centres, proportions of patients with recorded activity levels varied between 2 % and 77 %, proportions of inactive patients who were offered support vary between 0 % and 100 %.

Conclusions
Patients with diabetes had their activity levels recorded to a larger extent than those with hypertension or depression. It is of importance to present the variations in support from primary health care centers between different diagnoses, as patients with diabetes receive the most support whilst those who suffer from depression get the least amount of help.

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Improve the nutritional support of nursing homes to promote the nutritional status of the elderly in long-term care

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Introduction
Since 1993, Taiwan has been an “aging society” as defined by the United Nations World Health Organization. According to the standard of the conference, the ratio of the elderly population over 65 years old is 7.1% (1.49 million 801). Entering the aged society in 2018, the elderly population will reach 14.5% (3,434 million). The elderly population rate continues to rise. Many elderly people have been sent to a long-term care facility to live after becoming disabled in order to reduce the burden of family care. That is associated with a worse prognosis and is an independent risk factor for morbidity and mortality in elderly people.

Purpose/Methods
Examine the nutritional support for the long-term care of malnourished elderly people in Keelung Hospital’s nursing home. With nutritional interventions within 16 months, the dietician adjusts diet of the calories, protein, dietary fiber, vitamins and nutrients in the diet. Then, the diversification of patient’s body weight, albumin, blood biochemical values and digestive functions are observed. Outcomes were combined using the T-test.

Results
After continuous observation of a patient, changes in nutritional indicators within 16 months were found. There were increased significantly between before and after of calories intake, body weight, albumin. Blood potassium and total cholesterol were increased but not had significantly.

Conclusions
This indicates an independent association between body weight, albumin and malnutrition in the elderly residing in a long-term care facility. The results show, long-term nutritional intervene elderly after disability are important, may be can prevent malnutrition deficiency among in long-term care.

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Factors of Colorectal Cancer Screening among Males in Southern Taiwan

WANG Yuh Wei, HUANG Li Lan, LEE Hua Kuei

Introduction
Background: Screening rate in colorectal cancer of Taiwanese males was low. Understanding factors of the low rate can raise people's awareness of regular screening for cancer to early detect diseases and initiate treatments. Objectives: To investigate screening rate in and factors of colorectal cancer of males.

Purpose/Methods
Methods: Males aged 50-70 years were randomly recruited in one regional hospital. Knowledge about cancer including early warning signs/symptoms, risk factors, and screening/prevention of colorectal cancer was measured using validated 28 questions (CVRs: .90-1.00, Cronbach's alphas: .65-.94). Demographic data included experience of screening tests, health behaviors, lifestyle, and other personal information. SPSS version 22.0 was used to analyze data. Eighty-one males were invited and 80 males returned the questionnaires.

Results
Results: Only 23.4% of males had ever gotten colorectal cancer screening and 9% were screened within one year. More white-collar workers had done screening before than their counterparts. Screening rate did not differ by age, educational level, marital status, and alcohol consumption. Those who habitually chewed betel nuts and did not exercise regularly had lower screening rate. Participants' knowledge score was not related to whether they got screening tests.

Conclusions
Conclusion: Although colonoscopy is a more accurate screening for colorectal cancer, it is expensive and time consuming. In contrast, fecal occult blood test is easy to use. We found that smoking, betel nut chewing, and inactive lifestyle were related to low screening rate. Advocating and educating people the importance of cancer screening and healthy lifestyle can promote early detection and treatment and lower mortality.

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Using Shared Decision Making to Enhance the Vaccination Rate of Cervical Cancer Vaccine in Young with Postpartum Women

HUNG Hsiang-Ying, TSENG Tzu-Wei, WANG Yi-Huang

Introduction
Cervical cancer is the third woman in Taiwan to have a malignant tumor. The key to high-level cancer is the lack of awareness of cervical cancer vaccines, and the rate of cervical cancer vaccination is low. Studies have shown that cervical cancer vaccination can reduce the risk of cervical cancer in young women after childbirth, and hope to use sharing decisions to improve the vaccination rate, to achieve prevention is better than treatment.

Purpose/Methods
Using the “Shared Decision Making” promoted by the Medical Council, designing suitable visual maps for young postpartum women to explain the concept of vaccine prevention; and making portable intimate cards to strengthen prevention than treatment; assist in appointments and Remind the time of vaccination and call for vaccination.

Results
From January 2017 to October 2018, after the “Medical and Disease Sharing Decision” process, the project members analyzed 100 cases of “Cognitive Checklist for Cervical Cancer Vaccination for Young Postpartum Women”, and the cognitive accuracy rate increased by 32%. To 90%, the rate of cervical cancer vaccination for young postpartum women has increased from 15% to 95%.

Conclusions
Designing a teaching aid for young postpartum women, through the “medical sharing decision-making” process, to encourage young postpartum women to understand the importance of vaccination against cervical cancer, strengthen cognition, and thus increase the willingness of such patients to vaccinate, and finally receive vaccination. It is true that the highest goal of vaccination is better than cure.

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The Study on The SERVICE Quality of Against Medical Advice Discharge Factors in Emergency Department By PZB Model

SU JIN-MING, CHEN Shu-Lin, CHEN Chieh-Fan, LAI Jun-Huang, CHANG Hong-Tai

Introduction
This study investigates the against medical advice discharges in emergency departments concludes that the majority of the against medical advice discharges patients leave hospitals for personal and medical reasons. There are medical perception and experience gaps between patients and physicians.
Purpose/Methods
A retrospective chart review and a matching survey based on P2B model was performed. A total of 150 against medical advice discharges patients discharged from a regional teaching hospital were compared retrospectively with another general physician-approved discharged patients during the same period. The questionnaire compares the medical perception and experience from patients discharged against medical advice discharges and their attending physicians.

Results
Patients who leave hospital against medical advice differ from the general patient population. They include a higher proportion of male gender, living in other city, admission through the emergency department and readmission with 14 days after discharge. Regarding medical perception and experience appear to be significant on reliability, assurance, responsiveness, and empathy aspects. The largest gaps in five constructed differentials is empathy.

Conclusions
The study establishes a profile of against medical advice discharges patients leave hospital. Early identification of targeted patients may facilitate this process. Such as, early discharges planning for appropriate outpatient treatment are recommended, thereby decreasing readmission and improving health outcomes. One challenge that patients who leave hospital against medical advice discharges authority may not best interest and the doctrine of informed consent, so comprehensive documentation should be planned and reinforced. It has been suggested in postgraduate medical education. Healthcare quality professionals should also receive formal training on patient relations as part of the management program, programs to improve continuity of care and to provide easier access to the health care system.

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Clinical Practice Guideline on Radiation Dermatitis in Cancer Patients

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Introduction
Radiation dermatitis is a common side effect when cancer patients receiving radiation therapy. Complications caused by severe radiation dermatitis can lead to treatment interruption. Prevention and management of radiation dermatitis is important to ensure patient’s quality of life and treatment outcome. This guideline is intended to assist the oncology nurses in their clinical decision-making for providing optimal quality of individualized patient care.

Conclusions
This guideline is intended to assist the oncology nurses in their clinical decision-making for providing optimal quality of individualized patient care.

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The Association between Serum Calcium and Cardiometabolic Risks in Community-dwelling Adults

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Introduction
Metabolic syndrome (MetS), diabetes mellitus, and hypertension are three major health challenges among industrialized countries worldwide. Serum calcium, although only comprises 1% of total body calcium, are involved in intracellular signal pathway, vascular dilatation/constriction, and muscle contraction. Owing to the crucial role serum calcium plays in MetS, diabetes, hypertension and highly overlapping characteristics of these diseases, we decided to conduct a longitudinal cohort study using serum calcium predicting their incidents.

Purpose/Methods
This study is comprised of 10,080 participants 20 years old receiving health exams at Tri-Service General Hospital, Taiwan during the period 2010 and 2016. There are two parts in our study: cross-sectional analysis and longitudinal analysis. In the cross-sectional analysis, logistic regressions were applied for association between serum calcium and presence of metabolic syndrome, diabetes, and hypertension. Cox proportional hazard models were used for longitudinal analysis of relationship between serum calcium level and risk of developing metabolic syndrome, diabetes, and hypertension.

Results
Forty seven articles included studies. This guideline is written as a format of four-step nursing process: 1) Assessment; 2) Identification of problem; 3) Intervention: prevention and care; 4) Evaluation: evaluation and management of complications.

Conclusions
This guideline is intended to assist the oncology nurses in their clinical decision-making for providing optimal quality of individualized patient care.
Employee health enjoy the “thin” program

CHENG WAN-YI, LIN Shu-Chao, TSAI Tsung-Lung

Introduction
Obesity is an important factor in chronic disease, with 8 of Taiwan’s 10 leading causes of death linked to obesity. According to the 106-year employee health check, BMI >27 accounted for more than 29.89%, so the plan to reduce the ratio of BMI >27 staff down 5% as the goal.

Purpose/Methods
According to the staff’s work attributes to handle diversified activities, in the diet control, to handle healthy eating advocacy and production courses, to provide low-card meal boxes, in sports, to handle health activities and provide steps, aerobics, sports associations and other activities.

Results
After 7 months of weight-reduction related activities, the ratio of tracking BMI to more than 27 employees decreased from 29.89% to 25.59%, hypertension from 6.76% to 3%, hyperglycemia 14.95% to 11.64%, and hyperlipidemia from 39.15% to 35.86%.

Conclusions
In addition to reminding employees of their importance to their own health, to help build a healthy life of understanding, to develop a healthy lifestyle, hoping to develop the concept of self-health management of employees, and jointly create a “healthy hospital” environment. This programme will provide participants at this seminar to take into account the nature and needs of the work of the staff in the design of their health promotion activities, so as to increase the participation rate and help more employees to develop a healthy life.

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The relationship between physical fitness and careers performance for residents in community

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Introduction
The purpose of this study is to examine the relationship between career performance and physical fitness for 1512 residents in Puzi City, Chiayi County, Taiwan. Puzi Hospitals support the effectiveness of the community health system, providing concepts of Health lecture, continuous availability of services for physical fitness and cancer screening. In the next section, a physical fitness survey was recorded at the age of 23 years to 65 years for Puzi City residents.
Purpose/Methods
The study was conducted in the form of a series of experiments, with data being gathered via Health-related fitness tests, including body composition, muscular strength, endurance, muscular flexibility, heart and lung endurance or cardiovascular endurance. Body Composition can be calculated by using the height, weight and body mass index (BMI). Muscular strength, endurance, and flexibility can be calculated by one minute crunch test, sit and reach flexibility test. Endurance/cardiovascular activity should be done with 3-Minute Step Test.

Results
This research collected statistical data by using Regression Analysis via SPSS, including sex, age, education, and career. These records (651 male/43.06%; 861 female/56.94%) are accomplished from activities including Health-related fitness, health promotion speeches in Puzi city. The significance threshold was set at 0.05 is all that is required. We found a positive significant difference in person works for educational institutions, technology industry (P <.01), and public agency workers (P <.05). Retirement and homemaker show that (P <.01) have negative significant difference.

Conclusions
These results help us to understand the correlation between career and health-related fitness for 1512 residents in Puzi City. Physical fitness shows a positive significant difference on educational institution, technology, public service institution. However, retirement and homemaker need to enhance exercise activities to maintain a good physical condition for daily work. That can cope with sudden emergencies, leisure and entertainment function are also an important issue to keep good physical fitness.

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Effect of Weight Management Intervention for Employees in a Medical Center

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Introduction
The health checkup data of hospital staff shows that most employees whose prevalence rate of overweight and obesity is 39% approximately, thus receiving attention from the hospital, as a result the hospital handles health promotion weight loss activities, healthy weight management intervention lectures, fitness courses for weight loss and case management.

Purpose/Methods
Experimental Design, using a single group, pre-during-post test design, where the hospital employees who meet the BMI≧24kg/m2 registration requirements for healthy weight loss activities are the target subjects, and the effective sample size is a total of 22 in SOHO group BMI≧24≦27 kg/m2, and a total of 24 in LOHAS group BMI≧27 kg/m2 involved in fitness courses for weight loss, health lectures and case management. In addition, they collect pre-during-post test data such as height, weight and BMI in percentage, average value, standard deviation, and independent t-test for analysis.

Results
The weights of the SOHO group and the LOHAS group were significantly different at pre-during-post tests. The average weight and mean BMI of the LOHAS group were higher than those of the SOHO group. SOHO group’s negative growth in during-test weight loss accounted for 66.67%, the average weight loss was 2.23/kg/person, the negative growth at post test was 50%, and the average weight loss was 4.86/kg/person; The LOHAS group had a negative growth of 86.67 %, the average weight loss was 2.21/kg/person, the post test negative growth accounted for 80%, the average weight loss was 4.90/kg/person, and the during test average negative growth of BMI in the SOHO group was 0.84/kg/m2/person, its post test average negative growth of BMI was 1.89/kg/m2/person; the during-test average negative growth of BMI in the LOHAS group was 2.02/kg/m2/person, and the post test average negative growth of BMI was 2.72/kg/m2/person. In the weight-loss process, the SOHO group and the LOHAS group had a significant success rate as long as they persisted to the end.

Conclusions
In the process of this weight loss program, the dropouts for the reason that whose weight remained the same or creased accounted for 40%. Therefore, it is recommended that weight loss activities in the future should be organized to strengthen the weight loss awareness, enhancing the motivation and sustainability of weight loss, and making good use of multimedia information to encourage employees to use the hospital’s or the surrounding sports facilities to create a culture of sports, hoping that the registered employees have the confidence and perseverance achieving effective weight management and health promotion goals.

Comments
The hospital-related rewards measures, they encourage employees to participate in weight loss to help employees effectively manage their weight and analyze activity data for reference about future weight loss activities.

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Use of a novel root cause analysis (RCA2) to construct a safety management for prevention of falls among hospitalized patients

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Introduction
Falls are one of the most common accidents that occur among hospitalized patients and the elderly. Such falls are likely to increase patients’ risk of developing an injury. In this study, we using a novel root cause analysis (RCA2), diagnosed the root cause of the failure of the fall care system set up for prevention of falls among hospitalized patients, identified hospitalized patients at a high risk of falling, and proposed a novel process of nursing care to reduce the frequency of unusual fall events among patients.
Purpose/Methods
We aimed to set up an inpatient fall root cause analysis investigation team; use the “chronological list” and “change factors” to determine the difference between the standard fall process system and its actual implementation; list the front-end factors; and conduct “cause trees” and “barrier analysis” based on clinical evidences to identify the root cause, construct a standard operating procedure and improvement plan for inpatient fall, and further examine the effectiveness of clinical care using measures for prevention of fall and their implementation.

Results
We found that the system was not thoroughly implemented. From September to November 2018, the standardized process of fall prevention care and fall prevention guidelines were revised and appropriate fall care was provided to ensure patient safety. The results showed that the implementation rate of the standardized process for fall care was 100%, and there were three unusual events of patient falls (two in September and one in October).

Conclusions
Regarding the medical care system, to tackle the problems of lacking care or unsatisfactory results, the RCA2 method can be used to effectively solve such issues to facilitate improvement of the safety quality of inpatients, construction of a fall prevention operation process, and development of relevant care strategies that can be practically implemented by nurses, patients, family members, or caregivers to improve the safety management of inpatient falls and to promote health.

Comments
Construction of a fall prevention operation process, and development of relevant care strategies that can be practically implemented by nurses, patients, family members, or caregivers to improve the safety management of inpatient falls and to promote health.

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Nutrition education can provide benefit to body weight loss.

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Introduction
Obesity is a risk factor of metabolic syndrome, cardiovascular disease, and cancer. Therefore, good body weight control is important to health promotion. The strategy of body weight loss includes diet, exercise, and behaviors. Good nutrition education is useful to improve one’s behavior. The purpose of this study is to find the nutrition education will be helpful for weight loss.

Purpose/Methods
We’ll send email to our employees that BMI $\geq 24$ kg/m$^2$ at annual health checkup. We’ll hold one class weekly and lasts for one month. The classes are about food and nutrition education, teaching by professional nutritionist. Moreover, we also provide classes about life style modification, how to set goal and how to overcome urge to eat. Of course, participants enrolled in this program are voluntary. The body weight will be followed weekly and 3 months after.

Results
After the classes ended, every participant body fat percentage will decrease 2% and waist circumference decrease 4cm in average. The total body weight loss of our participants will reach at least 80Kg.

Conclusions
In our study, nutrition education can provide benefit to body weight loss. We hope to monitor more specific about the eating pattern (may be Calorie calculated every meal) after diet education. Moreover, in spite of diet therapy, behavioral therapy and exercise are as important for weight control. We hope to provide a long term and more comprehensive classes for weight control to our employees to learn with.

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The effects of integrated outpatient services for people with disabilities

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Introduction
According to the questionnaire of ministry of interior, Taiwan, 68.8% of people with disabilities had regular visits for doctors. However, 57% of the population had difficulties to visit the hospital independently. They encountered problems such as registraction in the hospital counter or traffic issues. In 2014, We established integrated outpatient services for people with disabilities in our hospital.

Purpose/Methods
In this service program, a case manager assessed patients with disabilities and arranged appointment to medical specialists, including internal medicine, physical medicine and rehabilitation, psychiatry and more, according to patients’ needs. During the same visit, patients with disabilities could see all specialists they need in one visit session, in one clinic room. In addition, patients paid medical fees for a single visit in the integrated outpatient services, which lowers the financial burden for the patients. The aim of the service program was to improve the medical quality, to overcome the obstacles during medical visits for patients with disabilities, and to save patients’ money.

Results
From June 2015 to June 2017, there were 2325 people received service counselling and 2279 people applied for the integrated system annually. (figure 1) For age distribution (figure 2), most patients were between 51 and 60 years of age. For disability classification, most of the patients were diagnosed with neuromuscular deficits and related disabilities (figure 3). In all, there were 689 doctor visits annually. The outpatient clinic specialties pa-tient visited was 1.45 in average. Physical medicine and rehabilitation visits accounted the most. 78 doctor (11.32%) visits were reported. For health-related behavior analysis in the people with disabilities, smoking accounts for 23%, alcohol drinking 13.5% and betel nuts 5% (figure 5).
Improvements to reduce incidence of falls in hospitalized elderly patients

CHOU Hsiu-Ling

Introduction
Prevent patient fall is the policy of patient safety in Taiwan, and always accidents at elderly inpatient. In case of hospital, the incidence of our patient fall is 0.09% from July to December in 2016, and contrast to Taiwan Clinical Performance Indicator (TCPI) peer 75th percentile hospital incidence of patient falls is 0.08%. The aims of this study were to reduce incidence and prevalence of patient fall in the hospital after series of improvements were performed.

Purpose/Methods
Many of these programs use similar strategies: (1) Inviting the three top members of the fall units to participate in the project, and re-analyzing causing problems in patient fall; (2) Check any medical conditions; (3) Modify the environment of the hospital; (4) Improve the patient’s physical fitness; (5) Get the right shoes; (6) Improve the lighting of the ward; (7) Incorporate the appropriate assist devices; (8) Off-bed warning device. The Morse Fall Scale (MFS) was used to assess the risk of patient falls.

Results
After series of improvements, the incidence of patient fall rate decreased from 0.09% to 0.06%, and the numbers of fall per month also decreased from 15.25 to 13.67. Numbers of injury in fall decreased from 5.8 to 4.0. In addition to incidence of falls in the group that above 65 years old decreased 0.072% to 0.063%, and the numbers of fall per month also decreased from 7.0 to 5.17.

Conclusions
These eight improvements of patient fall can decrease significantly after we implemented in the ward. Although the incidence of elderly patient fall had decreased to peer hospital averages (0.06%), and we continued efforts to reduce fall among elderly.

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Project to Improve the Integrative of Health Education for Older with Pneumonia

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Introduction
Pneumonia older’ cognitive of the contents of health education was 54.8%, and the satisfactory of health education was 56%, and these problems may impact on integrative, procedures, timing, and contents.

Purpose/Methods
The goals of this project were: (1) pneumonia older’ cognitive of health education increased to 85%; and (2) pneumonia older’
satisfactory of health education increased to 90%. The proposed improvement project included: (1) applying "PICO" to construct "7 to and 1 attention"; (2) developing multimedia teaching; (3) making group pneumonia vaccination of health education; (4) revising the procedure of pneumonia health education; and (5) making different language cards for countries.

Results
After the improvement project, (1) pneumonia older’ cognitive of health education has increased to 91.8%; (2) pneumonia older’ satisfactory of health education has increased to 98%; (3) foreign caretakers’ satisfactory of different language cards has increased to 99.6%.

Conclusions
The project modified the procedure of health education into lively teaching in order to increase satisfactory of pneumonia education; make lovely picture cards for prevention pneumonia education and developed mnemonic phrase “7 to and 1 attention” in order to patients, families, and visitors can easily learn; and make different language cards (English, Bahasa Indonesia, and Vietnamese) for primary caregivers and foreign caretakers in order to enhance the integrative of health education.

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Hypertension Prevention Assessment in the U.S.: Gene-Environment Interaction Approach

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Introduction
Hypertension is a global public health issue in the 21st century. This health issue is affecting more than one-third of the world’s population. The chances of becoming hypertensive is high among African American, people of low socio-economic status, and women. Hypertension is not only genetically inheritable, but also be influenced through various environmental factors. There are many interventions that are going on but need assessment and promotion at the government level to have better prevention outcomes.

Purpose/Methods
According to Yu et al. (2017), the lifestyle modification improves in lowered blood pressure and lessened hypertension complications; we need to be aware of hypertension and how it can be improved and prevented. There are several health prevention programs are existing including Dietary Approaches to Stop Hypertension (DASH) program, blood pressure monitor loaning, and free health classes; even though these hypertension prevention programs are already existing, it is useless if they are not getting promoted well and not being used.

Results
Early screening and reporting should be encouraged and have shown positive results in the past trials. Self-reporting of the blood pressure tools should be generated and promoted in the community for the detection outside of the clinical or healthcare setting. This will eventually reduce the complications related to hypertension and hence decreasing the morbidity and mortality due to stroke and other cardiovascular events.

Conclusions
A collaborative approach in national, statewide and local level will improve health equity by building communities that promote health. Several non-pharmacologic interventions can be used to control hypertension. Telemedicine can also play a huge role in creating health promotion and prevention of hypertension. Overall, educating the community and simple lifestyle changes can lead to much better health and behavioral outcomes. If collaborated, these efforts can make a positive impact on the society.

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The Improvement of Diet Cognition of Patients with Liver Cirrhosis

LIN Jui-Hsiang

Introduction
It was determined that the current average patient lack of awareness of disease and correct dietary intake of patients with cirrhosis complicated with ascites, and non-compliance with the content of the Guardian. Staff for patients with cirrhosis complicated with ascites diet cognition up to 42.8%. The Guardian guidance is inconsistent and does not really understand and track the patient’s diet. Auxiliary Tool Level: there is a lack of individual dietary Methodist, poster and Guardian films in patients with cirrhosis combined with ascites in the unit.

Purpose/Methods
Improvement measures: (1) 6/1 production of cirrhosis with ascites diet education manual and design posters posted in the education zone, (2) 6/10 production of low sodium food charts and food considerations (content contains grain roots, protein and the moisture content of foods such as fruits; the calculation method of self-prepared dietary water and sodium content), the cirrhosis patients according to the complication of individualized cirrhosis diet cognition up to 42.8%. The Guardian guidance is inconsistent and does not really understand and track the patient’s diet. Auxiliary Tool Level: there is a lack of individual dietary Methodist, poster and Guardian films in patients with cirrhosis combined with ascites in the unit.

Results
The patient’s awareness of cirrhosis diet increased from 46.7% to 92.8%; the dietary awareness of nursing staff for patients with cirrhosis and ascites increased from 59.2% to 100%.

Conclusions
The result revealed that the diet cognition among patients with liver cirrhosis could effectively improved by cross-disciplinary cooperation.

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Using “FAMILY” integrated network to increase betel quid cessation rate

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Introduction
Betel quid chewing is the main cause of oral cancer in Taiwan. Oral cancer is the most common cancer for young men, and the average age at oral cancer death in Taiwan is less than 55 years old. In order to increase betel quid cessation rate and reduce the risk for oral cancer, a project named “FAMILY” integrated network was proposed.

Purpose/Methods
“FAMILY” integrated network was set as follow steps in March 2017. Find--------Finding any case of chewing betel quid actively. Anywhere------Consultation service can be anywhere. Machine-----Utilizing action E car. Intervention---Taking action by betel quid cessation manager Learn----------Giving betel quid education and health knowledge Yearn---------Giving confidence of betel quid cessation with family support

Results
Before “FAMILY” integrated network had been practiced, betel quid cessation rate was 40.0% in 2015 and 43.8% in 2016 respectively. In 2017, betel quid cessation rate was 64.6%, which was 20.8% higher comparing with 2016. In addition, the betel quid chewing cases missing rate was 23.2%, which was 17.4% lower than that in 2016(40.6%).

Conclusions
By actively detecting betel quid chewers(Find),increasing betel quid cessation site intimate(Anywhere),deploying electronic vehicle(Machine),linking screening,betel quid cessation one-stop service(Intervention), betel quid chewing prevention and education(learn),and promoting family support(Yearn), the betel quid cessation rate has obviously increased. This project has effectively improved betel quid chewing behavior.

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Whether chewing gum can affect GERD after meal or not

LIN WEN-CHUAN, TSAI Pei-Yun

Introduction
Gastroesophageal reflux disease (GERD) is very common disorder and still increasing, it caused by frequent acid reflux(Mayo-clinic). Worse after meals and antacids are usually consumed after dietary indiscretion. To evaluate and investigate the effects whether chewing gum can affect GERD after meal or not. With this aim, we summarized the results of relative papers and we had some discussions several weeks. Key findings from the study are in the results.

Purpose/Methods
Planning is the first step for the team to decide search strategies for PICO format. We discussed during the planning process. Randomized controlled trials of PubMed, Web of Science and Cochrane Library were searched for English-only surveys (up to 1 July 2018) by using the PICO format. The search strategies of controlled vocabularies and text-words typically consisted a variety of databases, combined the MeSH terms “gastrooesophageal reflux” with chewing gum. The literature from 2008 to 2017 were included.

Results
The search strategy identified 13 articles, of which 4 were relevant comparing GERD with gum chewing in adults. Follow up data were obtained for 4 articles that showed chewing gum for one hour after the meal that can reduce the acid contact time. Sugar-free gum for half an hour after a meal would be beneficial.

Conclusions
This study meaningfully contribute to systematic reviews and we make effort to survey. The results that chewing gum after a meal alleviated symptoms of GERD and following a refluxogenic meal that can help to reduce GERD. Chewing gum might be a non-pharmacological treatment option for some patients with symptomatic GERD. A working group of specialists convened to discuss current practices. However, we suggest a prospective study to make an evidence practice to examine how the findings could improve GERD.

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Service innovation model -Community health check as an example

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Introduction
Dalinpu area is an heavily industrialized area in Taiwan. Due to the continuous expansion of the industrial hinterland, the industrial area gradually surrounded the tribe, causing inconveniences to the residents. Since its inception, Kaohsiung Municipal Siaogang Hospital has been actively involved in the prevention and health promotion of environmental occupational diseases in Siaogang District. Since 2016, we plan to improve and promote the regional characteristics of health care in the Dalinpu area.

Purpose/Methods
In order to provide local health care services, we plan to conduct exclusive health checks and promote them with local leaders. The hospital also sends special shuttles to pick up and drop off the residents and sets up a special inspection areas to simplify the inspection process, which is one of major features of the project.

Results
During the implementation of the plan, there are 1,803 residents who received health check-ups from June to August 2016, including 704 males (39.05%) and 1,099 females (60.95%), with an average age of 57.32 years old. The maximum numbers are 540
The Relationship Between Gestational Diabetes and Early Postpartum Type 2 Diabetes and Coronary Heart Diseases

CHENG Chih-Chien

Introduction
Background/Objective: Gestational diabetes mellitus (GDM) is a pre-diabetic state. The aim of this study was to investigate the factors affecting GDM pregnancies with development of subsequent type 2 diabetes and to compare the differences between diabetic and non-diabetic groups with the risk of coronary heart diseases.

Purpose/Methods
Methods: Based on a non-concurrent cohort study design, total 558 women with GDM and delivered at a medical center of Taipei for a 5-year interval. Participants were asked to complete the questionnaire and finish the blood test while they visited postpartum (abed 5-year/10-year followup). The StatXact 4.0 was adopted to analyze the incidence of type 2 diabetes. Meanwhile, we presented the descriptive analysis, t-test, K-W test, and multiple regression analysis using SPSS 11.0.

Results
Results: A total of 152 GDM women had been followed, 10 of which developed diabetes afterwards; five women with predisposing diabetes before this study were concluded also, the incidence of postpartum diabetes was 9.6%. The incidence density of diabetes was 2.50/00 person year, and the potential factors to diabetes before this study were concluded also, the incidence density of postpartum (abd 5-year/10-year followup). The StatXact 4.0 was strengthened, but by using the context-based interactive learning technique for the nursing education the ability of the staff for prevention and early recognition of skin damage was also effectively enhanced.

Conclusions
Conclusion: This study revealed that the incidence of type 2 diabetes and potential predictors of GDM women. GDM women with subsequent development of type 2 diabetes had higher risk in coronary heart diseases.

Comments
Although the rate of complications remains low, GDM creates a predisposition to increased maternal and neonatal complications. Developing type 2 diabetes women with GDM have higher risk in factors of coronary heart disease than the other women.

Use of Context-Based Learning to Reduce the Incidence of Pressure Injury of the Skin related to Noninvasive Positive Pressure ventilation (NIPPV)

HUANG Yi-Ling, YU Wei-Hua, CHU Kuang-En

Introduction
Noninvasive positive pressure ventilation (NIPPV) provides positive pressure ventilation through a tight mask. The average incidence of stress injuries in hospitalized patients was 0.12%, of which 90% was caused by NIPPV using tight facial masks, and among these patients as high as 70.7% using nasal masks. The root cause analysis was applied to study the causes, and accordingly, a situational learning method was developed for the education of the nursing staff to reduce the incidence of nasal pressure injuries.

Purpose/Methods
The cause and effect analysis pointed out problems such as lack of alertness to skin damage in patients using mask-type ventilators, using inappropriate dressings, and lack of nursing records. For high-risk patients, strategy such as enhancing alertness, setting the best timing for the change of the masks, use of appropriate dressings, context-based learning technique for the nursing education, weekly presentation of cases for discussions and regular audit for evaluation were taken to improve the quality of patient care.

Results
There were 15 hospitalized patients with mask-type ventilators from May through October 2018. After the implementation of the improvement measures in the patient care, the incidence of pressure injury effectively turned out to be 0%, and the incidence of pressure injury was reduced from 0.06% to 0%. The incidence of nasal pressure injury was 0%. These results showed that the strategy for improvement had a positive effect on reducing the incidence of skin lesions in the care of hospitalized patients.

Conclusions
Through the implementation of the strategy and measures to improve the quality of patient care, not only the important concept for a careful assessment of the high-risk patient’s skin conditions was strengthened, but by using the context-based interactive learning technique for the nursing education the ability of the staff for prevention and early recognition of skin damage was also effectively enhanced.
Analysis of MERS outbreaks in South Korea

LEE Ji Hong, BOMALIYAMU Aima Iti, KIM Kue Sook, BHANDARI Ashish

Introduction
In 2015, the Middle East respiratory syndrome coronavirus started from Saudi Arabia and then spread over Asia; especially, South Korea encountered the utmost MERS outbreak. It brought a huge impact of epidemic issue and it was a big question why South Korea had poor experience on MERS outbreak, even worse than Saudi Arabia who are very familiar with camels; also, this research was questioning how hospital to hospital transmission has happened through strong protection system.

Purpose/Methods
This research contains biology, serology, genetics, politics, phylogeny, epidemiology, statistics, social media and public health disciplines. Politics, social media and public health disciplines are the most important factors in this research; they provide assessment and improvement for better prevention and protection from future outbreaks. It was determined how the zoonotic pathogen transmitted to humans, especially MERS coronavirus. Moreover, the difference between the MERS outbreak in South Korea and other countries were compared.

Results
Regardless of South Korea’s great medical systems and ability to analyze and prevent outbreaks, the lack of the One Health promotion and government funding issue appeared as failure: (1) lack of knowledge of MERS-Cov, human to human, and hospital to hospital transmission, (2) lack of alertness of self-report, (3) ‘doctor shopping’, (4) poor patients’ facilities, (5) government and social media’s uncertainty on the outbreak.

Conclusions
This outbreak gives a wake-up call to indicate the need of flexible epidemiological control systems and strong public health support to detect early and to exterminate potential. When the index case appears, caregivers should suspect the patient to have MERS and use appropriate precautions. It is a duty for government and healthcare institutes to prevent future outbreak before it happens; an individual’s effort to understand One Health and global health can prevent future outbreak.

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Quality of Life of Primary Caregivers of Liver Cirrhosis Patients and Related Factors

HSU WEN-CHUAN

Introduction
The prognosis of patients with liver cirrhosis often involves multiple complications and repeated admissions, which may significantly burden and reduce the quality of life of the primary caregivers of these patients.

Purpose/Methods
A structured questionnaire, which included the Primary Caregiver Burden Scale, Coping Behaviors Scale, the WHOQOL-BREF, and a caregiver demographic dataset, was used to collect data. Descriptive and inferential statistics (independent t-test, one-way ANOVA, Pearson’s product-moment correlation, and stepwise regression analysis) were used to analyze data.

Results
A total of 113 participants were recruited from a medical center in northern Taiwan. The results revealed: (1) The highest average scores for caregiver burden were in the financial domain, while the lowest average scores were in the physical domain. The highest average scores for quality of life were observed in the environment domain, while the lowest average scores were in the physical health domain. (2) Most of the caregivers adopted a problem-solving oriented strategy to care for their patient. (3) Overall care burden correlated negatively with overall quality of life (r = -0.223, p < .05). The caregivers’ ‘self-assessed health’, ‘financial load’, and ‘daily care hours’ were significant factors affecting overall quality of life, accounting for 58% of the total variance in the results.

Conclusions
The results of this study may help nurses better understand and work to reduce the burden of caregivers in order to enhance their quality of life. Nurses should assess caregiver burden, especially in cases where caregivers themselves are in a poor financial situation or have poor self-assessed health, in order to provide necessary support and assistance.

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Explored the effectiveness of applying QR code to implement passive range of motion

YU Chun-Ti, HUANG Wen-Hsing

Introduction
The incidence of inpatient fall in 2017 was 72.0% due to health factors, and the fall was common caused by gait instability or physical weakness occurs in the lower limbs. Generally the unit will consult the physical therapist to performs muscle strength assessment and verbal teaching patients and caregivers about PROM. The nurse will remind that but the unit does not have PROM paper teaching leaflet for the patient and caregiver to use.

Purpose/Methods
Therefore, multidisciplinary collaboration with physiotherapists in 5, May, 2018 Planning and building PROM video materials. And 1. Built on the website of the Health Education Center of the hospital. Everyone can use the cell phone to scan QR code to link PROM videos. 2. Broadcasting every Monday to Sunday from 8:00-17:00 in our Health Education TV Channel 97. 3. Produced
Develop of Cell Phone App for Blood Glucose Self-Monitoring to Improve Patient Health Care

CHUANG Ch'in-Ju, LIAO Lin-Chu, HSUEH Ya-Hsin, CHEN Yi-Pin, HUANG Yung-Cheng, HSIEH Cheng-Ying, TSAI Pei-Ling, WU Chiu-Yi, CHIANG Min-Xiang

Introduction
The population of diabetes is increasing at a rate of 25,000 people each year in Taiwan. Pharmacists is one of the medical team in the health care system. Many evidences show that pharmacists, through a range of extended services, may contribute positively to the clinical and humanistic outcomes of those with diabetes. The aim of this study is to develop the App with blood glucose (BG) level record and to educate them to be in the habit of measuring and recording BG level regularly.

Purpose/Methods
The App will include reminding, reading and recording the BG level. Assigned to current Bluetooth Blood glucose monitor, the App has to process protocol packets interpretation of Bluetooth 4.0 (BLE 4.0). This project also including design the UI (User Interface), overall operation process, and display graphics of whole App. The App will be tried out in the Drug Counseling Room of our hospital. We observe users’ responses on our App and enable to figure out the satisfactions about the experiences of using App by the subjects.

Results
The overall mean score the respondents gave to satisfaction with the App Experience was 4.7±0.48 out of a maximum of 5.00 score. Maximum mean scores were given for "App helps me record blood glucose level " (4.78±0.42) with the lowest being scored for " App helps me measure blood glucose level regularly "(4.56±0.54).

Conclusions
According to the results of our study, the BG level is directly transmitted to the mobile phone, which can reduce the inconvenience and error. Users can easily set repeated reminders to measure BG level. The App will let people know when it’s time to check their BG level, keeping them on top of this important task. Moreover, it also enhances health care professionals communication and people self-health care.

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Using health checkup data to explore the relationship between obesity indices and fatty liver, and develop a health care plan

LEE Meng-Szu, WEI Yu-Ju, DAI Chia-Yen

Introduction
Fatty liver is the most common liver disease in Taiwanese, which will evolve into cirrhosis and even liver cancer after deteriorating. The CAP value detected by Fibroscan is the quantitative value for evaluating fatty liver, which classified into four levels: S0(normal),S1(mild),S2(moderate),S3(Severe). This study was to analyze the relationship between obesity indices (BMI,WC,WHR,and WHtR) and fatty liver based on health checkup data, and then develop a health care plan to prevent fatty liver caused by obesity.

Purpose/Methods
A total of 297 participants passed the Fibroscan examination was collected from 2017 health checkup of a medical center in Kaohsiung Taiwan, and the Minitab V.17 was a statistical analysis tool. Pearson correlation coefficient and ROC curve were used to evaluate the relationship between obesity indices and fatty liver, and then showed which was the best diagnosis index for fatty liver, further using ANOVA test to analyze the difference between the fatty liver grading and the obesity index values.

Results
The average age of the 297 cases was 51.1±12.4 years, of which male was 58.6%. The prevalence of fatty liver was 49.1%, in which its grades (S1~S3) were 15.8%,13.1%,and 20.2%. The Pearson correlation coefficient of four obesity indices versus CAP values was BMI>WHtR>WC>WHR, and the order of AUC values of ROC curve was identical either, thus the result showed BMI was the best index in diagnosing fatty liver, and the BMI≥27 indicated at a high risk of fatty liver.

Conclusions
Among four obesity indices (BMI,WC,WHR,and WHtR), the BMI was the best reference index for diagnosis of fatty liver, in which participant with BMI≥27kg/m2 was listed as a high-risk group for implementing health care, and then a health care promotion...
Preliminary Experience of Implementing Evidence-based Obesity Prevention and Management Guideline into Healthy Hospital Accreditation

CHEN Hung-Yu, SUN Zih-Jie, HUANG Kuo-Chin, LEE Hung-Chang, LIN Wen-Yuan, CHANG Chin-Jen, CHANG Chiung-Dan, LIN Li-Ju, WANG Ying-Wei, YANG Yi-Ching

Introduction
Obesity is a worldwide problem nowadays. In Taiwan, the proportion of people in healthy weight range has dropped from nearly 60% 20 years ago to less than 50% currently. Correspondingly, the proportion of overweight and obesity has increased, and at present, about one in five people in Taiwan is obese. In response to the Global Action Plan developed by WHO, Taiwan government is working on the prevention and management of obesity, aiming to reduce the detrimental effects of obesity.

Purpose/Methods
In 2017, we developed the GRADE based "Evidences-based Guidelines on Obesity Prevention and Management". To put into practice, the Health Promotion Administration of Ministry of Health and Welfare of Taiwan recruited experts to act on the project of "the Counselling and Promotion of Evidence-based Obesity Guideline", and its aim is to enhance the expertise of medical staff, to establish mechanisms for referral of obese people to health care organization, and to promote effective obesity management in healthy hospitals.

Results
The Taiwan Medical Association for the Study of Obesity organized and developed the reference standard operation procedure for integration the guideline into practice, and four hospitals were entrusted to implement the guideline into healthy hospital accreditation, including developing automatic weight range judgement, setting up weight control clinic, establishing mechanisms for referral, and promoting employee healthy weight maintenance. We also produced E-learning videos for medical staffs on-the-job training and edited the “Obesity100 plus Q and A Handbook” for general public.

Conclusions
Obesity is not just about weight gain increasing health risk but also a disease resulting in many complications. Medical staffs were encouraged to take the responsibility of prevention and management of obesity and to promote people’s health. Integration of the evidence-based obesity guideline into healthy hospital accreditation can make Taiwan’s obesity prevention and management more in line with the connotation of clinical practice and reduce the health hazards caused by obesity.

E-Posters: Health promotion for older people and long-term patients

JHUANG Jia-Ci, LIN Chin-Ju

Introduction
After receiving nasal surgery, ice compress can slow swelling, bleeding, and reduce pain, but the general use of ice bag is more bulky, not fixed, need to assist help, resulting in patients inconvenient to reduce use, in order to achieve patient comfort, reduce postoperative side effects, its special ice bags treasure can be reused, Reduce consumables loss and waste, in addition to humanized service, look forward to creating a friendly medical environment, improve medical quality and care satisfaction.

Purpose/Methods
The use of PP bags, anionic agglutination agent can be designed in different sizes and shapes, in line with the patient’s face parts, and the use of chemical materials, increase water preservation, light easy to use, temperature has ice compress effect, but will not cause skin discomfort, its practicality is high.

Results
The postoperative satisfaction of patients with nasal surgery was 92%, and the patients indicated that the ice bags was lightweight, malleable, coated with ice, practical and receptive, and did not need to be assisted by the caregiver.

Conclusions
Special ice bags treasure, considering that the old ice bag is more bulky, and not enough to paste, the use of often need to help the caregiver, the overall use of the inconvenience, most patients often feel troublesome, and reduce the number of use, resulting in more obvious pain, increased bleeding situation, improved, and the use of chemical materials, increase moisture preservation, The temperature has the effect of icebags, but does not cause skin discomfort.

Comments
Under the same material use, can be designed in different sizes and shapes, using any part of the human body, its high practicality. And it is promotional, and the teaching method is simple, easy to use, can increase the number of patients used, reduce the pain of patients. Discomfort, reduce the workload of nursing staff, increase patients’ postoperative comfort, and expect to establish a medical friendly environment.
Using Shared Decision Making to Enhance the Vaccination Rate of Pneumococcal Polysaccharide (PPV) Vaccine in Elderly with Chronic Obstructive Lung Disease

HUANG Ssu-Wei, CHIANG Shu-Chuan

Introduction
Pneumonia mortality is the third leading cause of death in Taiwan in 2016. In addition to the aging of the population structure, the low vaccination rate of Streptococcus pneumoniae is also one of the important factors. Studies show that S. pneumoniae vaccination can reduce hospitalization and mortality due to pneumonia in elderly patients with COPD. Use medical disease SDM the vaccination rate, so as to achieve the goal of prevention better than treatment.

Purpose/Methods
Using the “Shared Decision Making” promoted to elderly patients with COPD, Designing an image card suitable for the elderly to illustrate the concept of vaccination prevention. Producing the national Taiwanese audio-visual media to replace the traditional education leaflet to strengthen prevention than the treatment of awareness. Assist in making appointments for vaccination and free access to hospital services and Telephone care after vaccination.

Results
From October 2017 to October 2018, After using the “SDM”, 60 questionnaires were analyzed for “Cognitive Checklist for Streptococcus pneumoniae Vaccination in Elderly Patients with COPD”. The cognitive correct rate increased from 59% to 96%, increase 37%. The rate of pneumococcal vaccination in elderly patients with COPD is 60%, increased 42%.

Conclusions
Designing a teaching aid for older people to use the “SDM” process, To understand the importance and advantages of S. pneumoniae vaccine in elderly patients with COPD, to clarify doubts, to correct misconceptions, and to improve the vaccination intention to implement vaccination, to achieve the highest goal prevention is better than treatment.

Comments
According to the analysis of the “SDM” process, the high price of self-pay vaccine is one of the reasons that affect the vaccination rate. Clinical empirical studies indicate that the benefits of Streptococcus pneumoniae would decrease with age. It is recommended that government units reduce the age of free pneumococcal vaccine from 75 years old to 65 years old according to the empirical result, improve the vaccination rate and truly implement vaccination is the best way to prevent diseases.

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The effectiveness analysis of a regional hospital participated in the “outpatient-centered integrated care in hospital clinic” program

YANG Shu-Ling, FUNG Kenrick, CHEN Chen-Bao, WU Yu-Hsia, CHENG Wei-Chen

Introduction
According to the definition of the World Health Organization, when the proportion of the elderly population over 65 years old reaches 14% is "old age society". according to the Ministry of the Interior, the proportion of the elderly population over 65 years old in Taiwan reached 14.05% at the end of March 2018. Taiwan officially entered the "aged society". Taiwan's demographic structure is aging year by year, and the prevalence of multi-morbidity is increasing.

Purpose/Methods
This article aims to understand the participation of "integrated care program" in the outpatient-center for multiple chronic diseases, advanced age, high blood pressure, high blood sugar and hyperlipidemia. The clinical application will take the caring list of patients from January 1st, 2015 to October 31st, 2018 at a regional hospital in the southern Taiwan, and carry out the retrospective analysis and application results with clinical data, in addition to improve the caring rate and analyze the effective index.

Results
The statistical care rate after the implementation of the plan is, 59.04% of 2015, 45.66% of 2016, 69.88% of 2017, and 83.61% for the first ten months of 2018. The program has been found to reduce medical expenses (-1.93%), outpatient visits (-1.77%), repetitive rates of different prescriptions - hyperlipidemia drugs (-30.77%), and hypertensive drugs (-19.01%) and hypoglycemic drugs (-6.67%), but the effectiveness of avoiding hospitalized rate in outpatients and hypertensive or diabetic patients were not significant.

Conclusions
Through this program, we focus those patients by educating about their illnesses and drugs use and strengthen the patient’s emphasis on medication safety in order to avoid repeated medication . For drug use of hypertension or diabetes patients, the effect of avoiding hospitalization rate is not significant, may be related to their aging and morbidity. It is recommended to encourage them to attend diabetes-related care programs to increase their awareness of disease care and reduce the hospitalization of related diseases.

Comments
In this implementation plan, in order to reduce the number of multi-disciplinary visits and polypharmacy for elderly patients with multimorbidity and polypharmacy, assist integration care Owing to the patient’s medical habits and trust we take more time to communicate with patients and family members. It is expected that the future improvement of medical environment will make the use of medical resources more efficient and contribute to the health promotion of the elderly and chronic patients.

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2018 Latent Tuberculosis Infection of the Elderly in Long-term Care Institutions - Case Study of a Municipal Hospital in Kaohsiung

**SHU-HUI Wu, YA-WEN Mao, CHIA-CHI Yen**

**Introduction**
According to the statistics of Centers for Disease Control, the tuberculosis cases in long-term care institutions accounted for 7% of the national tuberculosis cases, among which the elderly accounted for 83%. The incidence of tuberculosis in the institution was estimated to be 700 per 100,000 people, which was far higher than the average (204 per 100,000 people), showing the importance of tuberculosis prevention in the institution. The purpose of this project was to reduce the incidence of tuberculosis in the institution.

**Purpose/Methods**
1. The project started from January 2017 and targeted workers in the institution and patients in the nursing home. The project seminar was organized for workers, patients and family dependents. 2. Number of people undergoing chest x-ray screening: 134 (92 patients and 42 workers). 3. Number of people undergoing IGRA test: 130 (89 patients and 41 workers). Chest x-ray screening and IGRA test were completed between March and July. 4. The 7-point screening method was used to test and record symptoms on 1st and 15th of every month.

**Results**
1. A total of 80 workers and family dependents attended the project seminar, with an attendance rate of 60%. 2. Number of people reporting chest x-ray screening abnormality: 64, including 61 patients and 3 workers. Number of people undergoing sputum test: 43 (67.2%), including 40 patients (62.5%) and 3 workers (4.69%). 3. One patient was reported positive MGIT and hospitalized. 4. Number of people undergoing IGRA test: 92 (53 patients and 39 workers). Number of people reported positive IGRA: 26 (92 patients and 41 workers). Chest x-ray screening and IGRA test were completed between March and July.

**Conclusions**
About 5-8 tuberculosis infections occur in the institution every year, the elderly aged 65 or above accounted for 83% of the tuberculosis cases in the institution mainly due to suffering from chronic diseases and a confined environment. This shows that the institution should stress tuberculosis prevention and reduce the incidence of tuberculosis by early screening latent tuberculosis through annual health examinations and the 7-point screening method.

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**Cancer patients at home Parenteral nutrition care**

**LI Jr-Ying, WU Hui-Ju, HANG Yi-Ju, WANG Hsin Ling, CHUANG Chieh-Han**

**Introduction**
HPN (Home parenteral nutrition) can be given to patient who is stable to be discharged from hospital and needs to obtain enough nutrition parenterally, which might be the only way for some cancer patients suffer from G-I obstruction.

**Purpose/Methods**
After assessing by clinical physician, and consulting by nutrition therapy team(NTT) about the home care ability 7-10 days prior to discharge patient, RN from NTT will demonstrate and give instruction concerning how to mix and prepare IV fluid, adjust injection rate, infusion line care, medical waste disposal, and fill out the home care record. Arranging home visit at patient’s house within a week after discharge from the hospital to make assessment on patient’s condition, infusion, and the safety of the enviroment by hospice care team and home visiting care team.

**Results**
Providing a patient-centered care by combining medical and social resources to the patient for discharge from hospital, decreasing anxiety, increasing home care ability, and further improving quality of living for cancer patients.

**Conclusions**
By giving detailed instruction concerning home care skill, we can make sure patients and family members who obtain HPN to receive better care, improve quality of living at home, and decrease the chances to be admmiting to the hospital.

**Comments**
Home parenteral nutrition care can help cancer patients return to familiar home environment and improve their quality of life.

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**Cognitive Detection and Emotional Express System by Nostalgic**

**SHI-QIANG Lee, MIN-WEI Huang**

**Introduction**
The dementia of the elderly over the age of 65 is an issue that the government urgently needs to pay attention to. Our multi-disciplinary team has developed software to detect and prevent cognitive decline and emotional disorders in elderly people, to delay disability and aging, to significantly reduce the cost of care in the future, and to reduce family burden and medical resources.

**Purpose/Methods**
Using video game software that can detect the cognitive function of elderly people, it can detect cognitive functions during the game, and has the effect of teaching and learning and achieving
Socioeconomic Inequality in One-Year Mortality of Elderly People with Hip Fracture in Taiwan

HSU I-Lin, LI Chung-Yi

Introduction
Hip fracture commonly results in considerable consequences in terms of disability, mortality, long-term institutional care and cost. Taiwan launched its universal health insurance coverage in 1995, which largely removes financial barriers to health care. This study aims to investigate whether socioeconomic inequality in one-year mortality exists among Taiwanese elderly people.

Purpose/Methods
This population-based cohort study included 193,158 elderly patients (≥65 years) admitted for hip fracture between 2000 and 2012. Results
With over a one-year follow-up, 10.52% of the participants died from all causes. The mortality rate was low in the northern part of Taiwan and in urban and high-family-income areas. Multiple Poisson regression models further suggested that the level of Q1–Q3 and >Q3–Max showed significantly reduced odds ratio of one-year mortality at 0.90 (95% confidence interval (CI), 0.87–0.93) and 0.77 (95% CI, 0.74–0.81), respectively, compared with that of the lowest family income level (i.e., Min.–Q1). Despite a monotonic decline in overall one-year mortality during the study period, socioeconomic inequality in one-year mortality rate remained evident. The annual percentage change in one-year mortality was higher (−2.86) in elderly people from families with high income (>Q3–Max.) than that for elderly patients from families with low income (Min.–Q1, −1.94).

Conclusions
Accessibility, rather than affordability, to health care for hip fracture is probably responsible for the observed socioeconomic inequality.

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The Role of Physical Therapy for the Long-term Home-based Care in the West Coastal Areas of Chiayi County

WANG PEI-JUNG, LO CHIA-YUAN, TSAI TSUNG-LUNG

Introduction
At present, population aging rate of Taiwan ranks second in the world. Chiayi County owns the highest elderly population particularly. Puzi hospital, ministry of health and welfare, is the only public hospital. Aging in place is expected to Long Term Care 2.0 project for national policy. The purpose of this study was to share home-based experiences in the west coastal areas.

Purpose/Methods
This study used a repeated measures design. 24 subjects referred from long-term care management centers were collected. 10 subjects were excluded by admission or expire. 14 subjects participated in an 18-week home-based physical therapy. Intervention executed 1 hour/session, 3 sessions/month and apply therapeutic principle of 3M (movement, manual, modality) model. Barthel Index (BI) for Activities of Daily Living (ADL) was collected at baseline, 9, and 18 weeks. The Wilcoxon signed rank test was used for outcome measure, with p level of 0.05. SPSS 20 was used for statistical analyses.

Results
The study included 7 men and women (n=14). The mean age of the participants was 75.9 years (SD = 12.9 years, range=52-95 years). All suffered comorbidity of hypertension, coronary artery disease, cerebrovascular accident, dementia, osteoarthritis, or fracture. Results of BI at baseline and 9 weeks, baseline and 18 weeks both showed significant improvement (p<0.05). BI at 9 and 18 weeks showed no significant improvement (p>0.05).

Conclusions
Frail elders at home might increase ADL performance after 9 or 18 weeks program. The ADL performance could be maintained during 9 to 18 weeks continuously. However, manpower and transportation costs annoyed with business management. Implementation of trans-disciplinary team concept could solve the professional deficit in remote region. Keeping patient’s and family’s accompany might act as invisible support.

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The current status of Advance Care Planning in home visit medicine of our hospital

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Introduction
Recently the end of life care is argued in Japan because of super-aged, and numerous and various death society. A concept as "Advance Care Planning (ACP)" is proposed in recent years, but it isn’t widely used in Japan. In home care medicine department of our hospital, we have been thinking about the end of life treatment with a patient and the family using a document named "my decision making." In this study, we considered whether this document was functioning as ACP.

Purpose/Methods
One hundred eighty-eight patients who are received home visit medicine of our hospital as of June 2018 are eligibles for this study. We assessed the use situations of "my decision making" and patient backgrounds. This document contained three decisions; (1) if I’m diagnosed as difficult sickness that cannot cure by the contemporary medicine, (2) When there is no means of treatment already, and I’m at the state that time of death is drawing near, (3) About the location of the end.

Results
Twenty-four were uncollected. Descriptive contents of each decision from collected 164 were; (1) 108 hoped for an announcement, 55 didn’t hope, and 1 was no answer, (2) A life prolongation disposal request was 12, 151 didn’t hope for life prolongation treatment, and 1 was no answer, (3) Eighty-nine hoped at home, 62 hoped for a hospital and facilities, six were flexible, and 7 were no answer. Only a person has changed the answer to this document in the collected 164 people.

Conclusions
The decision making by a patient own is important to ACP. But we couldn’t confirm whether the decisions were the patient’s own will or mandatory’s opinion from our documents of “my decision making.” A person who has changed it was only one. That shown our questionnaire document was insufficient as ACP.

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Applying of Taste Stimulation Group in the Geriatric Day Care

HUANG Hui-E, CHEN Po-Yen, LU Huei-Lan, CHENG Ching-Ming

Introduction
This study aims to facilitate the elderly to recall the positive and funny memories through experiencing various tastes of food in the group activities to slow down the degeneration of the memory function. Also, enhance their social interaction by encouraging sharing the past memories to each other.

Purpose/Methods
The taste stimulation group consisted of 8 sessions. In each session the leader prepared two types of food for the elderly, and then encouraged the participants to try different food without seeing. The sharing and discussion topics contented the feelings about the first taste, the feelings to the food, the past moment and experience about the food, the association of the food, and the mood after tasting the food. The physical and mentally data were collected by behavioral observations, individual interviews, and the transcripts of the sharing process in the group. The transcripts of interviews and sharing focused on the subjective description of the elderly. The data were finally classified by the content analysis.

Results
The taste stimulation group was held between January and April, 2017. Total of 30 elders between 65~84 years old in the Geriatric Day Care were galleried. 77% of them were diagnosed with Dementia, 23% were other psychosis. Their CDR score were between 0~2. In the physical data, all of the elders could express the sensory of the first bite like sour, salty, sweet, cold, spicy, and the texture of the food like soft or solid. 83.8% of them know the food. 63.8% of them could recognized the food without seeing, especially the food with heavy tastes. In the mentally data, all of the elders felt pleasant in the group. 86.2% of them connect the food and the past memories. 48.8% of them shared with others. The young memories of tastes, playmates and interaction with mother were mentioned. The satisfaction was extremely high in the group activities.

Conclusions
In this study, we found that the long-term memory, mood, interpersonal interaction and self-satisfaction were positively increased through guiding and encouraging the expression of the elderly.

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Crossing Obstacle Training for Elderly in Geriatric Day Care Service: A Preliminary Study

YEN Yu-Ting, LU Huei-Lan, CHENG Ching-Ming

Introduction
Across the obstacle course to strengthen the thigh muscles is one of the elderly muscle endurance training. From sit-to-stand or progressive resistance training, it is helpful for gait and reducing the risk of falling and enhancing the independent function of daily life. This study explored the effectiveness of strengthening the thigh muscles in the elderly by training the lower limbs across obstacles.
Purpose/Methods
In this study, crossing obstacle training was applied in geriatric day care in a psychiatric center southern of Taiwan. 30 elders average age was 75 years, 80% was diagnosis of dementia, 20% was other mental illness, CDR was 1-2 points. Cardboard boxes was used as an aid to train across obstacles. The height of the carton is gradually increased from 12 cm to 18 cm, and the training is carried out on 5 laps of 200 metric meters. The group performs a total of 10 times, each training time is 30 minutes, once a week, and the group ends with a measure of the height across the carton.

Results
The results found that the elders had a significant increase in muscle endurance of the thigh muscles by training across the obstacles. During the training process, the percentage of elders who completed the height of the 12 cm carton was increased from 50% to 80%, and the height of the 18 cm was increased from 50% to 70%. The elders also completed the training of 5 laps of 200 meters. After the overall training, 90% of the elders expressed very satisfaction, and considered that this training is effective for the thigh muscles’ muscular endurance and balance training.

Conclusions
This study showed that by strengthening the obstacles of lower limbs training, the ability of the elderly to strengthen the thigh muscles and cross obstacles has a significant effect. In the future, this kind of obstacle training method can not only improve the sense of balance of the elders, but also strengthen the body muscle function and delay aging, which has positive effects on improving daily functions of life.

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Nursing experience of a senior peritoneal dialysis patient with a comprehensive geriatric assessment
LIU Pao-Ling, TSAI Pei-Hui, TAI Hsin-Ling

Introduction
In Recent decades, the elderly population in Taiwan has increased rapidly. The kidney disease ranked ninth among the top ten leading causes of death, and whose estimated annual cost of about 40 billion created a significant financial burden to the government. The case is a 73-year-old nun, who is treated with peritoneal dialysis for renal failure and uremia. By sharing the nursing experience of this case, we hope to help the elderly kidney patients to overcome the anxiety of treatment.

Purpose/Methods
The comprehensive geriatric assessment (CGA) is composed of information on social resources, environmental factors, medical level, psychological level, life function, caregiver resources, and economic factors. Medical teams, nutritionist, and family members are involved by means of interviews, telephone interviews, and participation in peritoneal dialysis procedures.

Results
Through the nursing assessment, the patient has three major health problems, including anxiety, lack of knowledge, and lack of nutrition. Thus the nursing goals are proposed as below. During treatment, learning difficulties were caused by aging, anxiety and physical weakness; however, through the use of teaching aids, model guidance, constant practice, revision of training
Using health check data to analyze the correlation between obesity indices and hyperglycemia in the elderly, and develop health care strategies

LEE Meng-Szu, WEI Yu-Ju, DAI Chia-Yen

Introduction
Long-term hyperglycemia will cause a series of complications such as diabetes, cardiovascular disease and other issues. Diabetes is one of the top ten causes of death in Taiwanese elderly, and obesity is one of the main causes of diabetes. The aim of this study was to analyze the association between obesity indices (WC, WHtR, and BMI) and hyperglycemia based on physical examination data of the elderly, and developed corresponding care strategies for preventing hyperglycemia and diabetes caused by obesity.

Purpose/Methods
A total of 9363 cases of elderly health checkup data from 2014 to 2016 in a medical center of Kaohsiung Taiwan were used as analytical samples and Minitab V.17 was a statistical analysis tool. If the fasting plasma glucose (FPG)≧100mg/dl is diagnosed as in the hyperglycemia status. Pearson correlation coefficient and ROC curve were used to analyze the correlation between obesity indices and hyperglycemia, and the ANOVA analysis was used to test the difference between hyperglycemia and each obesity index.

Results
The average age of the 9363 participants was 72.2±6.3 years, of which male was 51.0%. The prevalence of hyperglycemia was 61.0%, in which women was significantly lower than men (p<0.001). The intensity of three obesity indices by Pearson correlation analysis was WC>WHtR>BMI and the order of the AUC value of ROC curve was identical either, thus the WC was the best index for predicting hyperglycemia and diabetes, and the relative risk of WC for male≧90cm (female≧80cm) was 1.86.

Conclusions
Among the three obesity indices, the WC was the best index for predicting whether the elderly had hyperglycemia and diabetes. The prevalence of hyperglycemia in the 9363 elderly was 61.0%, thus the WC for male≧90cm (female≧80cm) was listed as a high-risk group, and a follow-up care plan was established to help hyperglycemia patients for controlling diet habit, blood sugar and health management, further for reducing the risk of developing diabetes and other deadly conditions.

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Bonding with others is the key to motivation for life for those with senile dementia

CHIEN WEN-RUNG, LO YU-TAI, WU YU-HAN, LIOU WEN-CHIN, YANG YI-HUA

Introduction
Member of the St. Joseph Hospital dementia community service site said the elders at home spend time watching TV or staying at the bedroom without proactive interpersonal interaction, so the poor expressions in words and thoughts lead to depression at the end of the day. As they attend the class at the center, they not only revive cerebral and kinetic functions with the curricular contents but also look forward to and focus on the hours spent at the center. Interpersonal exchanges reinitiate the emotional connection for the elders converted from a passive care receiver to a proactive trust builder.

Purpose/Methods
The site is open in the weekday morning hours on a daily basis. The open group mode is adopted with diversified classes made available to the elders suspected with cognitive impairment (senile dementia) and diagnosed with mild senile dementia including patching, aromatherapy, tabletop games, art therapy, medical seminars, old songs singing, exercise, etc. Besides, a social worker is arranged to attend the class at the site all the time to urge the group momentum to be formed.The course is a nice interactive medium. Such process enables the elders to talk mutually for generation of sentimental exchanges and emotional support.

Results
The open group mode is adopted with diversified classes made available to the elders suspected with cognitive impairment and diagnosed with mild senile dementia. Besides, a social worker is arranged to attend the class at the site all the time to urge the group momentum to be formed. The course is a nice interactive medium. Such process enables the elders to talk mutually for generation of sentimental exchanges and emotional support.

Conclusions
The structured and diversified curricular design is the incentive for those with senile dementia to go out for activities. In addition to deferring dementia, the participants gain sentimental exchanges with others unexpectedly. A mental state with depression and low motivation is converted to a life full of joys and goals besides confidence reinforced; accomplishment acquired and happiness reassured. Social participation broadens the path of support in terms of information, instrument and sentiment. Accordingly, interpersonal interaction works as a key to activate the biopsychosocial of people.
Association between Anthropometric Characteristics and Grip Strength among Elderly Population in Taiwan – The Chiayi Community-based Elderly Health Survey (CCEHS)

CHU Nain-Feng, LIN Yu-Chen, LIU Chun-Yin, WU Der-Min

Introduction
Sacropenia and muscle weakness are important public health and clinical issues which may be associated with falling down and disability among elderly population in the world-wide. The purpose of this study is to evaluate the association between anthropometric characteristics and grip strength (GS) among elderly population in Taiwan.

Purpose/Methods
We conducted the community-based health check-up and survey among elderly population in Chiai County, Taiwan. The people more than 65 years old and lived in Chiai county will be invited to attend this survey every year. General demographic data and lifestyle patterns were measured using standard questionnaire. Anthropometric characteristics such as body weight, body mass index (BMI), waist circumference, hip circumference and body fat were measured using standard methods. The grip strength was measured using digital dynamometers (TKK5101) method.

Results
There are total 3,739 elderly subjects recruited in the survey. Among these subjects, there are 1,600 males and 2,139 females (from 65 to 85 year old). The mean GS was 32.8 +/- 7.1 kg for male and was 21.6 +/- 4.8 kg for female (p< 0.001). In correlation analyses, body height, body weight, BMI, waist circumference and body fat were positively correlated with GS (p< 0.001) in both genders. However, in multiple regression analyses, after adjusting for age, body height, body weight and other potential confounders, the waist circumference became negatively associated with GS (for male beta = -0.218, p< 0.001 and for female beta = -0.005, p< 0.001). More interestingly, the subjects had the same BMI but larger waist circumference had lower GS.

Conclusions
From this survey, we found that the overweight and mild obese elderly subjects had higher GS than the normal weight subjects. However, after adjusting for the potential confounders, the waist circumference was the only anthropometric variable inversely associated with GS in both genders. This suggested that central obesity may be significantly associated with decrease of GS among elderly which is an important factor to predict GS among the elderly in Taiwan.

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The members who participate to the “Hankai” meetings. They are living ambitiously!

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Introduction
Japanese Health and Welfare Co-operative Federation(Hew Co-op Japan) consists of 3 millions of community members and medical staff. 150 thousand joins “Hankai.” Community and medical members create a small group as a “Hankai” and hold meetings regularly. They learn various topics, talk to each other or so, and measure blood pressure and an amount of salt in urine. That is also a health check. It’s important for the elderly to join social activities. But the effect on them is unknown.

Purpose/Methods
We recruited members of the Hew Co-op Japan and conducted questionnaires on 12 items including age, gender, income, educational histories, number of diseases, smoking history, self-reported health and or so. We compared the “Hankai” groups to the groups without social participation. Our inclusion criteria were: to join the “Hankai” 3 times or more a year and not to receive long-term care insurance. Statistical analysis were done by logistic regression and multiple linear regression model. We used STATA 15.

Results
The collected questionnaires were 3,273 from 47 cooperatives. 2,965 were over 65 years(2,799 women). 2,093 were answered not in trouble economically. 3,119 didn’t need care in everyday life. 515 have three or more chronic diseases. 2,754 had no smoking history. 2,161 joined social activities such as volunteers, except for “Hankai”. Self-reported health, depressive tendency, and the risk of long-term care were statistically significant for “Hankai” participants by adjusting for age, gender, income, educational histories, number of diseases and smoking history.

Conclusions
It was tended that the group of participants have a high level of self-reported health, less depression and lower risk of requiring nursing care. It is the first survey to compare the effectiveness of “Hankai” activities of the Hew Co-op Japan which is a nationwide organization, with the other groups. We will lead a similar survey three years later and we will verify the change in the risk of long-term care.

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Discussion on the effect of discharge planning for long-term care 2.0

CHIA-LING Ko, CHEN-JU Chen

Introduction
The overall population structure of Chiayi, Taiwan is rapidly aging. The total population ratio is about 18% of the elderly population over 65 years old, far higher than the national average with a value of 14%. The family function micro, resulting in a high rate of re-admission within 14 days after discharge. The urgent need for long-term care professionals to help service.

Purpose/Methods
A cross-sectional studies, disabilities who are over 65 years old and those who are Mentally and Physically disabled are selected as the target of the case. Interventional : 1. Provide interprofessional practice services in hospitalization. 2. Complete the Long-Term Care Assessment Scale (ADL, IADL) 3 days before discharge and log in to the information system to complete the referral of professional services.

Results
The date of the long-term care service obtained after discharge was shortened from the original 7-14 days to 3 days. The hospital-to-community thoughtful care arrangements ensured continuous care after discharge and reduced the rate of re-admission within 14 days of unplanned discharge.

Conclusions
The seamlessly connected hospital-to-community service, which is assisted by professional service staff to make good use of their potential, so that the self-care of the case can be optimized, promote the self-reliance of the case, reduce the dependence on care, reduce unnecessary re-admission, and greatly improve the quality of life care for case and caregiver. Let the elderly in the family stay in the community for care and implement the ideal of “aging in place”.

Comments
To seamlessly integrate medical care with long-term care. By strengthening the effectiveness of discharge planning services, it is imperative for professionals to assist cases and caregivers, to obtain services early, to alleviate caregiver concerns, improve the quality of life. At the same time reduce unnecessary re-hospitalization.

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Aging in Place: Innovation project for community care service of elderly

YI-LIN Su, MEI-HUA Zhong, CHAO-CHIN Hu

Introduction
Taiwan’s population is aging rapidly. In 2018, it entered the “elderly society” formally. Promoting community care services for the elderly in the concept of old age is an important development trend for the promotion of aging population services in China. It is also an attempt to combine social welfare with community building in recent years. Promote important changes in the care of the elderly community.

Purpose/Methods
The plan aims to implement the community care service for elderly people in the New Taipei City, Taiwan, which accounts for 12.1% of the elderly population. It emphasizes the ideas of allowing the elderly to live in the community and can serve as an important reference for the public sector in response to aging society. Community care service programs include: supportive environment for community care bases, public care centers, sil-
The Program of Using the Ottawa Charter Five Action Plan to Promote Health Promotion for Community Elderly

YI-LIN Su, MEI-HUA Zhong, CHAO-CHIN Hu

Introduction
Senior age issues are of particular concern. Aging in the environment, maintaining elderly autonomy, self-esteem, and quality of life are the biggest goals for health promotion. Therefore, building a community network and strengthening the community’s linking force can enhance the health literacy of the elderly and achieve the ultimate goal of self-help. The goal is no delay.

Purpose/Methods
The plan is to use community care sites to promote health promotion activities for the elderly so that the elderly can obtain health, safety and social participation services to achieve the goal of healthy aging. Using the Ottawa Charter’s five major action plan, from April to August 2016, we will build a “Community Health Service Base” in conjunction with the community’s neighbors to conduct physical, psychological, and social participation training programs, such as physical fitness exercises, steps, meridian massage, regular and continuous health promotion activities to provide more coverage.

Conclusions
Long-term, regular, and continuous health promotion activities not only strengthen community links, but also increase health awareness, implement health behaviors in life, stimulate community awareness among people, evoke the concept of sustainable management, and deepen the community through The power to achieve “aging in place” is the goal.

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An Overview of Cases within the National Health Insurance Integrative Program for Home Medical Care - Take a Regional Teaching Hospital in Southern Taiwan as an Example

TSENG Hsiu-Chen, WENG Ching-Hui, YANG Ghu-Yang, SU Yi-Chen, HUANG Yi-Ju

Introduction
As the elderly population in Taiwan has reached over 14% in 2018, chronic diseases resulted from rapid population aging have led to increase, aggravating difficulties in seeking facility- or hospital-based medical care in disabled population. To improve the accessibility of medical care for home-based patients due to their disabilities, National Health Insurance Administration (NHI) has organized a “NHI integrative program for home medical care” in 2016. Improve the accessibility of home medical care to disabled patients.

Purpose/Methods
Subject should be homebound (facility bound is not included), having definitive medical needs determined by healthcare professionals, and having difficulties in seeking facility- or hospital-based medical care due to their disabilities or ease nature. During the “home medical care” phase, we provided home-based medical visits, home diagnosis and care (including drug prescriptions, examinations and tests), health management and 24-hour telephone consultations to the target population.

Results
The results showed after the intervention of “home medical care” program, the average hospital visits per person-year was 1.4 times, the hospital stay was 3.1 days, the rate of emergency visits was 54.2%, and the readmission rate with 14 days after dis-charge was 0%.

Conclusions
Home care is a medical measure applying to modern society, to achieve the goal of aging in place, reduce the inconvenience of the patient’s actions and traffic, and hopes to reduce the number of days in which people are hospitalized. Let the people rest in peace at home, or even hospice.

Comments
Taiwan’s National Health Insurance Administration has launched the pilot project of “NHI integrative program for home medical care.”
Exploring the knowledge and attitude of advanced care planning among nonhospitalized Elderly in Taiwan

LI In-Fun, HSIUNG Yvonne, BAIR Ming-Jong, CHIU Shin-Che, HSING Hui-Fen, HUNG Ta-Chuan

Introduction
Taiwan passed the Hospice Palliative Care Act in 2000, encourage hospitals to promote Advance care planning (ACP) and complete advance directives (ADs). ACP aims at helping people clarify and communicate their values, beliefs and preferences for future medical care during serious and chronic illness. But people do not want to talk about death, especially the elderly. The study aimed to explore the knowledge, experience and attitudes of the elderly Taiwanese of ACP, and to facilitate further intervention about ACP.

Purpose/Methods
This was a cross-sectional study. The patients and families who over 65 years old were approached and completed questionnaires from the outpatient setting. Data were collected from participants using a structured written questionnaire developed by Prof. Hsiun’ ACP survey. This questionnaire included experiences about accompanying terminal family and end-stage medical decision making and understanding and perception of ACP values and beliefs.

Results
89 participants were included. 18.6% of participants have completed the documents of AD. 54.6% of the participants had participated in the terminal medical decision of their families. 45.4% of the participants did not know the ACP. Participants considered the mean score of Pros and Cons of ACP were 3.76 (SD=0.88) and 2.37 (SD=0.69). The correlation between knowledge and pros was r=.430 (p< .005), between knowledge and overall about ACP was r=.616 (p< .005). Knowledge is the predictor of completed AD.

Conclusions
This study finding that few people complete ADs because of insufficient knowledge of ACP. Knowledge will affect the perception of ACP and decision-making balance. The better the level of knowledge, the more recognized the ACP is a good idea. According to some surveys, most of the knowledge comes from media reports in Taiwan. In the future, health provider should provide appropriate information of ACP and effective in increasing ACP discussions and completion of formal documents.
medical records. Nursing assessment was conducted based on the Orem’s Model of Nursing. The patient’s nursing problems before, during, and after surgery included anxiety, potential risk of surgical injury, and postoperative comfort-related changes. Before surgery, the author established a nurse-patient relationship by listening to the patient and showing empathy. The author used illustrations to explain the operating room environment and provide information related to anesthesia; the author also replied to the patient’s questions and addressed the patient’s surgical injury, and postoperative comfort-related changes. Before, during, and after surgery included anxiety, potential risk of surgical injury, and postoperative comfort-related changes. Before surgery, the author established a nurse-patient relationship by listening to the patient and showing empathy. The author used illustrations to explain the operating room environment and provide information related to anesthesia; the author also replied to the patient’s questions and addressed the patient’s doubts in order to improve the patient’s understanding of pituitary surgeries and reduce the patient’s anxiety.

Results
During the surgery, the patient’s privacy was protected and a safe operating environment was provided; a correct lying position was ensured and silicon cushions were used to protect pressure points and apophyses in order to maintain skin integrity and prevent neuromuscular damage. Attention was given to the implementation of aseptic techniques, proper use of counter devices, and medical dressing, in order to prevent potential harm to the patient. Individual nursing care was provided to alleviate postoperative discomfort caused by wound pain and nasal tampons.

Conclusions
During the perioperative care process, the author formulated an appropriate nursing program and implemented nursing measures to ensure safe surgery and promote the patient’s postoperative self-care ability. It is hoped that this nursing experience can provide reference to nursing personnel providing care to patients with similar conditions.

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The Development Model of Holistic Health Behavior Modification and The Environmental Management in Housing for the Elderly

WONGCHAN Supitcha, UNANUN Wasan

Introduction
This quasi-experimental research aimed to development model of holistic health behavior modification and the environmental management in housing for elderly and effectiveness of health behavior modification the environmental management in housing for elderly to nutritional status, health behavior, the environmental management in housing, physical fitness, balance, fear of falling, depression and sleep for elderly before and after holistic health behavior modification program and the environmental management in housing.

Purpose/Methods
The sample consisted of 114 elderly people whose ages were between 60 – 75 year of age and who were living in Amphoe Bang Krui, Nontraburi province. The people had participated program for 12 weeks. The tools used for data collection were following: personal data questionnaire, health behavior physical fitness, balance, fear of falling, depression and sleep measure. The collected data were statistically analyzed by using frequency, percentage, mean, standard deviation, and Paired t-test.

Results
The result of this study showed that the elderly had an average score of weight, waist circumference and depression lower than pretest of statistical significant (p<.05) and an average score of health behavior, environmental management in housing, physical fitness, fear of falling, balance, sleep quality higher than pre-test of statistical significant (t<.05).

Conclusions
In conclusion, the results of this study suggest that development model of holistic health behavior modification and the environmental management in housing the enhances nutritional status, health behavior, the environmental management in housing, physical fitness, balance, fear of falling, depression and sleep in the older person. Consequently, such a program should be continuously implemented in other groups of elderly. However, this research is a study in elderly self-care and non-serious disease. Application should be considered as appropriate.

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To help an elderly person to improve his health with an integrated strategy of reversing the elderly health promotion mode

YU-TING Nien, FANG-JU Cheng, CHUNG-YI Lin, SU-TSAI Huang

Introduction
In 2018, Taiwan entered an aging society, old age dependency ratio 19.28%. Therefore, maintaining good health and independent living is the most important goal of the elderly health promotion strategy. This essay is exploring an 83-year-old male whose health gradually dropping caused him depressed and reducing community participation. Through an integrated strategy of health promotion, we enhanced the man’s community participation and improve his healthy quality.

Purpose/Methods
On November 1st, 2017, the elderly person joined the integrated strategy of reversing the elder health promotion mode, which contains a contract of the rights and obligations of attending classes, including teaming up to participate in the elderly talent competition, courses of 17-hour strength improvement, 2-hour muscle-enhancing diet, and 3-hour mental health, and joining a social group of LINE app.

Results
With full attendance, the individual participated in the courses and the elderly talent competition. The outcome of Brief Elderly Accuracy of the 5-item Geriatric Depression Scale, GDS-15, got improved from “possible depression” to “normal”. The outcome of Physical Fitness got improved from bad to good for arm curl test, and 25% promoted for 8-Foot Up-Go Test. It’s obvious that the integrated strategy of reversing the elderly health promotion mode is good for promoting the elderly physical and mental health.
Conclusions
The elders attach great importance to the interaction and respect among their peers. With positive mental support, the elders are willing to participate in various activities (Lai, Li, & Chen 2014). This multiple project contains the ingredients of personal commitment, peer support, self-efficacy, group honor etc., which lets the individual join the courses aggressively to further enhance his personal health.

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Multicomponent Intervention is Effective to Improve Physical Performance in Community-dwelling Elders

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Introduction
Aging society is a universal concern. Prevention of disability and frailty is the first priority for elderly care. National Taiwan University Hospital Yunlin Branch has devoted to providing the comprehensive geriatric care and engaged in executing the program to prevent or delay the disability for community-dwelling older adults. We organized a disciplinary team to conduct a multicomponent intervention, comprising 12-weeks group exercise, nutritional intervention and healthy education lectures and evaluate the effectiveness of this program.

Purpose/Methods
Study population: Community-dwelling older adults The multicomponent program consists of 1.12 weeks exercise training (1 time/week, 30 mins home exercise program education and 30 mins supervised progressive resistance, balance exercises) 2. 12 weeks healthy education lectures, including frailty prevention, polypharmacy, fall prevention, malnutrition prevention, preventive health care, etc. 3. 12 weeks congregate lunch meal to provide the various nutrients intake and enhance the interactive behavior between the elders. The outcome measures are the improvements of physical performance such as muscle strength, dynamic balance test, etc.

Results
Total 93 community-dwelling elders (female 69%), with a mean age 73 years old, are enrolled in our program. After 12 weeks multicomponent program, the grip strength, bending over performance and dynamic balance test improve significantly.

Conclusions
Multicomponent program, including exercise training, nutrition intervention and health literacy promotion, is effective to improve physical performance in community-dwelling elders. The aging population may benefit from this intervention to have higher levels of functionality and a lower risk of disability.

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The benefit of multi-care group activities: An example in Kaohsiung community care center

CHIANG Yu-Fen, SU Jui-Hsing Su, WU Ming-Feng

Introduction
In response to the arrival of a senior society, we should establish a protection system before the need for care. Implement primary prevention, and start early detection when the elderly are healthy. Community care station which will not only effectively integrate community resources, but also be close to the needs of the elderly, allowing the elderly to stay in the familiar community, maintain their autonomy, enhance their psychological security and community participation, and enable the elderly to have dignity and be more active and healthy.

Purpose/Methods
Led by multi-disciplinary medical staff, the program designed a multi-care group for 19 frailty and slightly disabled seniors; the activity time per unit was 120 minutes, totaling 1440 minutes. The program covers muscle strength, oral health and cognitive training.

Results
1. The average score of the Kihon Checklist scale decreased by 1.5 points. 2. The general fitness of the elderly is improved. In particular, the “arm curl (biceps)” and “2 minute step in place” tests showed increase of 8 and 11 repetitions respectively. 3. The Center of Epidemiological Studies (Depression Scale, CES-D Scale) scores decreased. 4. The group activity service plan is recognized by the community elders, the activity satisfaction is 90.2%

Conclusions
1. Progressive muscle training, increase softness, strengthen muscle strength, and reduce falls and sarcopenia. 2. Through cheeks and throat swallowing muscle strength exercise, with creative, interactive activities, improve the ability of the elderly to swallow. 3. In the cognitive activities encourage actively participate, enhance self-confidence and self-satisfaction in the process of experience and sharing. 4. Enriching and diversified courses can increase the willingness, improve the social participation rate and happiness of life, and achieve the successful aging of functional integrity.

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Elder Simulation experience Implications of Empathy for Healthcare Workers

YI-HSUAN LIN, SHIH-YU YEH

Introduction
The population aged over 65 in Taiwan has exceeded 14% this year. According to the definition of the World Health Organization, it is an aging society. In order to provide health care professionals with a better understanding of the knowledge that their elders need, they can experience the inconvenience caused by aging through the elder simulation experience and inspire empathy to create a friendly environment for senior citizens.

Purpose/Methods
We implements elder teaching experience activities for employees. And allow them to experience elder simulations, wear equipment to simulate senior citizens’ living conditions, and experience the feelings of the elderly in daily life. The Jefferson Scale of Physician Empathy (JSPE) questionnaire was used to the analysis of empathy factors after employee experience.
Results
IF the score of questionnaire item 5 is divided into the highest, the more empathetic is the delegate; on the contrary, the worse is the empathy. According to the results of the questionnaire test, the total average value of our employees is 4.19, which is highly empathetic. The highest score in the scale is the “know the patient experience” aspect; the lowest score is the “attention to patient feel” aspect.

Conclusions
Under the influence of declining birthrate, the social demographic structure of Taiwan has been changed. In order to respond to the care of an aging society, we use elder simulation experience to inspire compassionate care of medical staff to provide friendly care services.

Comments
Aging is the process that everyone will experience. The decline of physical activity and cognitive function will inconveniences in life. If medical care workers can provide more understanding and assistance in the process of seeking medical treatment when ill, they can create a safe and professional medical treatment site for the elderly to feel respectful and safe.

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Immediate Effects of walking assist device with auxiliary illuminator on patients with subacute and chronic stroke

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Introduction
Many patients after acute stage of stroke present with abnormal gait pattern due to weakness or hypertonicity of the affected limbs. Facilitation of normal gait is a primary goal of rehabilitation on these patients. We aimed to investigate whether walking assist device with auxiliary illuminator (quad-cane with laser) providing visual feedback during ambulation could improve parameters of gait cycle immediately among patients with subacute and chronic stroke.

Purpose/Methods
All the participants walked along a straight corridor with even surface for 20 meters without and with using a quad-cane with laser, respectively. A gait analyzer (Reha-Watch1 system) was used to measure the changes of the parameters of gait cycle, including stride length, cadence, gait speed, stance phase, swing phase, duration of single support and double support, the angle between toes and the ground at the time of toe-off (toe-off angle) and the angle between calcaneus and the ground at the time of heel-strike (heel-strike angle), before and with the use of a quad-cane with laser.

Results
Thirty participants (male 23, female 7, group 1) with mean age 60.20 ± 11.12 years were recruited. Among them, 22 used ankle-foot orthosis ([AFO], group 2) and 8 did not use AFO (group 3) at usual walking. We observed a trend of decrease in stride length, cadence, walking speed and the duration of stance phase while a trend of increase in the swing phase and the toe-off angle in all the three groups. The increase in the heel-strike angle reach a significant difference in both group 1 and 2 (p=0.02 and <0.01). Moreover, the percentage of stance and swing phase in the gait

Improvement in Correct Use of COPD Inhaled Medication by Patients

HUANG SHU-WEN, WANG MEI-HUI, HSIEH PEI-CHI, CHUANG SHU-TING, CHIEN SOU-HSIN

Introduction
Chronic Obstructive Pulmonary Disease (COPD) is a common chronic disease in the elderly. The guidelines for the treatment of GOLD indicate that inhaled medications are the main axis of treatment, but many patients derive incomplete benefit from their inhaled medication because they do not use inhaler devices correctly.

Purpose/Methods
The health education teacher uses the information management system to teach the use of inhaled medication one-on-one. The teaching provides a health education leaflet with a large font, a picture of the operation steps, and a QR code video education link. The patient’s family members are also invited to participate in the case study, using the teaching evaluation reply method to understand the practice.

Results
The patients who used inhaled medications were MDI (Metered Dose Inhaler) 136 subjects, Ellipta 49 subjects, and Respimat 87 subjects from April to December, in 2017. By using paired sample t test to conduct the analysis of before-and-after inhaled medication education, it reached a significant level of paired sample t test (P <0.05). It shows that through the individualized health education and the teaching evaluation reply method can improve the operation of the inhaled medication correctly.

Conclusions
The health education teachers provide one-on-one teaching, using diversified video education tools and invite family members to participate in caring learning. They use integrated information systems to track and manage patients so that the patients are not suspended from caring and making the effectiveness of learning inhaled medication improved.

Comments
COPD medical treatment is mainly based on inhaled medication. Health education teachers design information management system and use diversified health education to analyze before- and-after inhaled medication education, finding that the paired sample t test reached a significant level. This experience provides a reference for COPD care.

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cycle was approximately normal by using quad-cane with laser in group 3.

Conclusions
Since lower gait speed and cadence might reduce the risk of fall and imbalance, and increase in the heel-strike and toe-off angle might correct gait pattern, patients with subacute and chronic stroke could walk more normal by using a quad-cane with laser.

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Effect of foot health promotion in hemodialysis patients
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Introduction
Hemodialysis patients are plagued by lower limb weakness and impaired peripheral perfusion resulting from anemia, hypoalbuminemia, vascular neuropathy and aging. Listed as high risk groups for foot lesions, foot health awareness is extremely urgent in such patients.

Purpose/Methods
From January to October 2018, foot health promotion was conducted on 146 cases, the methods used are as followed. First, to establish inter-departmental communication between hemodialysis physician, nurses, physical therapist, diabetes case manager and nutritionist by holding regular meetings; Second, to create patient foot care standard procedures and assessment tools; Third, to add training courses for all staff members, basic training for new nurses lasts for one hour per year; Fourth, to provide multimedia platform via iPad and QR code, through which educational videos can be easily accessed by patients and healthcare professionals; Fifth, to follow the implementation rate, overall accuracy, patient satisfaction, and tracking of statistics by annual screening results.

Results
Results revealed: the implementation rate, accuracy of senior staff, attending rate, and media platform access all achieved 100%; patient satisfaction of foot care is 90.6%, foot health awareness of 96%. 40 cases of hemodialysis patients are randomly assigned in two groups: 9 in control group (CON), 10 in exercise group (EX). The exercise class was twice a week for 12 weeks. In exercise group, we used group circuit training therapy (CCT) to control movement speed and repetition in an hour aerobic exercise. The exercise program included movements with body coordination and strengthening for legs. We measured work time and load by cycling exercise, 6MWT, 5-m walking speed test, and TUG.

Conclusions
Early detection, early treatment. Providing individualized care for high-risk groups will increase the quality of foot assessments and tracking by annual screening results.

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Rhythmic Functional Exercise in Subacute and Chronic Hemiparetic Stroke
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Introduction
People after stroke most had sedentary lifestyle and lack of exercise in daily living, so they maintained their health difficulty. In order to prevent risks of fall in daily activities, people after stroke need better balance, muscle power, stability, agility and coordination than normal people. To achieve the goal, we should improve ambulation ability for people after stroke.

Purpose/Methods
There were 19 pots-stroke patients are randomly assigned in two groups: 9 in control group (CON), 10 in exercise group (EX). The exercise class was twice a week for 12 weeks. In exercise group, we used group circuit training therapy (CCT) to control movement speed and repetition in an hour aerobic exercise. The exercise program included movements with body coordination and strengthening for legs. We measured work time and load by cycling exercise, 6MWT, 5-m walking speed test, and TUG.

Results
In EX group, it has statistical significance in exercise time (503.5±106.0, 552.0±128.8; p<0.05) and peak workload of graded submaximal exercise testing (51.0±16.0, 62.0±18.7; p<0.05). The exercise time significantly improved in the exercise group compared with the control group (+12.1%, p=0.009). Peak workload significantly increased in the exercise group compared with the control group as well (+26.6%, p=0.001). This suggested that exercise group had better exercise capacity compared with the control group after interventions. In TUG test, the reaction time is faster in EX group than CON group (-8.47s, p=0.06). There is no statistical significance in 6MWT after intervention in EX group.

Conclusions
12-week rhythmic functional exercise can increase cardiovascular capacity in chronic stroke. The group exercise can increase the repetition for training program and increase the willingness of stroke patients for exercise. People after stroke may do exercise at moderate intensity at least 2 days a week for maintain cardiovascular capacity, functions of lower limbs and walking ability.

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Exploring the spiritual care service of the hospice care unit in the hospital of South Taiwan
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Introduction
Spiritual care is an important part of hospice care. In October 2017, the hospital began to cooperate with the Christian Schweitzer of the Mission, and promoted the spiritual care service for cancer patients in the hospice ward. This service is provided by a qualified spiritual care provider. Spiritual Career accepts the note and provides care. Between October 2017 and September 2018, there were 49 people in the hospice ward, and 39 people received care services. The consultation rate was 79.59%.

Purpose/Methods
The spiritual care service Form includes three parts: basic information, spiritual distress, and care services. Spiritual distress refers to Szu-Mei Hsiao (2010), including the inability to experience love and unforgiveness, the lack of confidence and hope for medical care or God, the inability to safely face death, and the meaning and value of life. Care services include the meaning of life and self-worth, love and being loved, hope and disappointment, forgiveness and forgiveness, and the relationship between faith and supreme.

Results
53.84% were male, aged 66.91 on average, married 50.00%, primary school 40.00%, and fourth stage cancer 72.50%. Religion 37.50% Buddhism, 22.55% Taoism. 46.15% of people with spiritual distress cannot face the most deaths (25.00%) and can't forgive (12.50%). Caring services account for 35.00% of love and love, and second only to life value (25.00%). The chi-square test found that the cancer period variable and spiritual troubles could not be forgiven, and the significance and value of doubt were significant.

Conclusions
This study found that there was no significant difference in basic information in the spiritual care service except for the cancer period. The sample of this study is mainly composed of primary school graduates, Buddhism, and Taoist believers. The spiritual distress and care service connotation may be related to the recognition of life and debts in Chinese culture, which may affect the coping of terminal patients. The limited number of samples in this study performed descriptive analysis and needs further analysis.

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The effect of the Otago exercise program on strength and balance in elders lived in a long-term care setting
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Introduction
Falls are common in the elderly because their muscle mass loss with aging. This problem affects the stability and balance control of the lower limbs in this age group during daily activities. Strength, flexibility, balance and reaction time are considered the most readily modifiable risk factors for falls. The Otago exercise was designed specifically to prevent falls and promoted in the community in people aged 65 years and older for improving balance and strength to achieve stability and avoid falls.

Purpose/Methods
The Otago exercise program consists of a set of leg muscle strengthening and balance retraining exercises progressing in difficulty and a walking plan. We recruited the elderly elders lived in a long-term institution in southern Taiwan. The participants do the Otago exercise program via videotape and were assisted by the physiotherapist and nurse to perform the correct movements. This exercise take about three times a week and need 30 minutes to complete.

Results
Measurements included timed up and go test, balance system limits of stability test, a test with hand-held dynamometer on lower extremity and a 30 second sit-to-stand test. The data collection time was at baseline and 2 months after applying Otago exercise program. Fourteen participants of mean age 80 years completed this study. The results showed that the Otago exercise program improved participants’ strength and balance and maintained their confidence in doing daily activities without falling.

Conclusions
The Otago exercise program is a safe, effective, practical and low-cost falls prevention strategy. These results can be used as a reference for preventing falls and health promotion in elders for clinical practice.

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Investigation of the Effects of an Early Mobilization Post-Acute Care Program for Unstable Intertrochanteric Fracture
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Introduction
Geriatric patients with unstable intertrochanteric (ITC) fracture are at risk of high mortality and permanent disability after surgery. Although extensive evidence has suggested mobilization should begin within 48 hours post-operatively, such practice isn’t consistent for all surgeon, due to the concerns of hardware failure associated with early weight bearing. This has led to an area of heated controversy for the rehabilitation of unstable ITC fracture patients post-operatively. Therefore, the aim of this study was to investigate the effects of a Post-Acute Care (PAC) program involving early mobilization within 2-weeks post unstable Intertrochanteric fracture surgery.

Purpose/Methods
28 unstable ITC fracture patients (65 years or older) were enrolled and followed for 3 months. These patients were allocated to either the PAC group (experimental group) which involved immediate weight bearing interventions or Usual Care Program (control group) which allowed only partial weight bearing starting 4-week after surgery. The outcome measurements were the change in Harris Hip Score (HHS) and Barthel index.
Care and delaying the happening of elderly disability have long-term care will also rise. Therefore, strengthening long-term elderly population rate will continue to rise, and the demand for Taiwan is now facing the issue of rapidly aging population. The Introduction

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Importance of Telecare system is improve health of the elderly who live alone in Taiwan – an exploration into construction and import process of Telecare system


Introduction
Taiwan is now facing the issue of rapidly aging population. The elderly population rate will continue to rise, and the demand for long-term care will also rise. Therefore, strengthening long-term care and delaying the happening of elderly disability have become the top priority. Because of the social changes and the loss of some family functions, the number of the elderly who live alone has increased. Therefore, telecare system is worth exploring to assess its feasibility on improving health of living-alone elders and delaying the happening of disability.

Purpose/Methods
10 elders listed by a regional public hospital in central Taiwan in January 2018 were the small research samples. Telecare devices were as follows: host and information system, video equipment, blood pressure machine, body temperature gun, wisdom bracelet, smart pill box. And health management and video call were used as the interventional projects.

Results
The average measurement rate of blood pressure and body temperature for the past 6 months was 80.5%, and the rate of return to OPD was 100% in the two quarters. The elders with sarcopenia had significant increase in both protein intake and body weight. Through the aid from a smart pill box, medication compliance rate went up to 96%. The effects of this system of giving rewards according to the walking step number prompted healthy elders who live alone to walk more, but only serve to slow the speed of decline for the elders with sub-health and those with poor health.

Conclusions
The effectiveness of various interventions has significantly improved. Therefore, for the elderly who live alone, telecare not only boosted their social engagement but also made them aware of the importance of self-health management. Compliance from them also increased. These changes all exerted a positive effect on the health condition improvement and delaying the happening of disability.

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Client-centered activities design - taking the nursing home as an example

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Introduction
Nursing home residents are mostly disabled. The literature found that music therapy is helpful in physiology, psychology, and society. Music activities promote interaction and enhance the quality of life. The participation of residents in the nursing home is a key factor. Therefore, the nursing home social worker of this article links the social resources of the orchestra, emphasizes Client-centered music activities, and focuses on the participation of residents.

Purpose/Methods
Designed once a month, including orchestra performances, and residents singing together. The orchestra uses a keyboard, flute, violin, cello, harp, drum kit. The performance is divided into two groups: group performance and bedside action. The latter, for those who are unable to participate in the group for a long time in bed, ask for consent and play in the ward. The staff collected songs from residents and their families in advance. Satisfaction survey after the event.

Results
The satisfaction questionnaire is self-filled, and those who cannot fill out are assisted by the staff. From January 2018 to October 2018, a total of 553 people participated in the survey, a total of 221 questionnaires were collected, and the questionnaire response rate was 39.96%. The activity design satisfaction was 93.86%, the activity content was 91.98%, and the overall satisfaction was 94.74%. The questionnaire response rate is low, but it shows high satisfaction.

Conclusions
This activity combines social resources, focuses on individual differences, and is close to life experience, and can indeed achieve the effect of the activity. Designed to consider bed-ridden cases, with bedside action music, can meet the needs of patients. This article focuses on event design and investigates the subjective feelings of participants. In the future, an objective assessment will increase the basis of evidence and contribute to the design of activities.

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Effects of Weight Control Intervention on the Long Term Ventilator-Dependent Overweight Patients

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Introduction

Being overweight is a common problem in patients with long term ventilator-dependent. The clinical care and enteral feeding of long-term ventilator-dependent overweight patients are difficult. The caloric recommendation for non-critically ill patients is 20~25 kcal/kg actual weight (wt.)/day as suggested by the European Society for Parenteral and Enteral Nutrition. The Society of Critical Care Medicine/American Society for Parenteral and Enteral Nutrition suggests a caloric intake of 11~14 kcal/kg actual wt./day. This study evaluated whether a hypocaloric intake can induce weight loss but maintain the nutritional status in long-term ventilator-dependent overweight patients.

Purpose/Methods

Patients who had stayed in a respiratory care unit for over 22 months and that had a body mass index (BMI) of ≥ 24 kg/m² were enrolled. The exclusion criteria included patients with poor kidney function and edema. Data was analyzed using the Microsoft Excel version 2007. Outcomes were combined using the T test method.

Results

Patients were given a modulated, nutrient-complete formula for 22 months. They were checked monthly for weight and nutrition-related biochemical data. In a comparison of 22-months pre- and post-intervention results, patients' BMI values dropped from 29.6 ± 1.2 to 27.0 ± 5.1 kg/m². Albumin increased from 3.23 ± 0.12 to 3.50 ± 0.07 g/dl in 22 months. Other biochemical data such as white blood cells, hemoglobin, blood urea nitrogen, creatinine, sodium, and potassium were maintained within a normal range.

Conclusions

A hypocaloric diet intervention through dietitians monitor can induce weight loss while maintaining the nutritional status in long-term ventilator-dependent overweight patients.

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Living with machines: Study on the life experiences of prolonged ventilator-dependent patients at home

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Introduction

In Taiwan, the number of prolonged ventilator-dependent patients has increased for years. With the subsidies of the National Health Insurance Program, more ventilator-dependent patients choose to receive home care after discharge. However, little is known about their daily life experience. This study aims to explore the life experiences of ventilator-dependent patients as a reference for improving the quality of long-term care.
Purpose/Methods
In this study, a qualitative interview was conducted to interview five patients who were able to detach from the ventilator for a short period of time, including three males and two females, aged between 24 and 74, and three elders. Interviews were recorded throughout the interview. After the interview, the recorded materials were converted into verbatim scripts as texts for coding and analysis.

Results
Participants experienced improvements in two dimensions: 1. Physiological function: including improving breathing problems, and increasing lung expansion and reducing sputum accumulation. 2. Quality of life: including the ability to eat normally, improving physical fitness, increasing the scope of activities, engaging in leisure activities, and reducing the number of medical treatments. However, there are some uncomfortable reactions of the body, like changing the rhythm of speaking, easy choking when eating, a runny nose, and sleep disturbance.

Conclusions
Based on the results, the ventilator has beneficial effects for the patients, but its side effects cannot be ignored. To improve patients’ quality of life at home, we suggest that providing health education or operational instruction for patients and their family to fully understand the possible side effects of the respirator on the body functions and daily lives, and to teach them how to cope with these problems.

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Using Flipped Classroom to analyze the outcome of homecare safe medication program

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Introduction
According to health insurance statistics, the drawback of this system is the lack of feedback, it is impossible to evaluate the drug storage conditions or proper handling skills. Therefore, we expect to explore the safety/risk assessment and analysis of the indoor drug administration through the flip teaching model in short, to improve the quality of the homecare integration team, assuring long-term medications safety.

Purpose/Methods
This project adopted cross-cutting correlation research. During the period a total of nine months were used to conduct visits and case data analysis 30 subjects were selected from new homecare cases average age of 78 years old. Data collection was conducted using questionnaires including basic information home care case medication safety risk assessment scale and Beer’s Criteria In the flipped classroom mode the healthcare professional filled in the home care case medication safety risk assessment scale.

Results
There were an average of 2.2 chronic diseases and 11.33 types of medications per patient, of which 16.6% are in medical institutions and 20% in more than 2 medical specialties. The number of medical treatment recommendations with physicians was 86.8%, which emphasizes the effectiveness of homecare medical team. From total number of 369 medication problems, 252 or 94.38% had improvements after assessment. The ability to store medicines and take knowledge has improved by about 30%, with a 35% improvement in skills assessment.

Conclusions
2016 our integrated care team used the integrated care model to improve the rate of correct home-based medications. We found out that potential problems still persist and can be further improved. These problems were topped by self-care related 59%. According to the results of the scores, understand the current status of implementation through flip teaching model intervention, adopt individual guidance, maximize the improvement using ipad video, graphic and text, discuss the difference between traditional method and flip classroom, increase medication safety.

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Promoting cognitive health of older adults with non-pharmacological intervention in a community of Shilin district, Taipei

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Introduction
Cognitive impairment is one of the most important clinical features of neurodegenerative disorders in the elderly. Current pharmacological treatment for cognitive impairment is limited and may not be tolerated by some patients. Therefore, alternative therapy may have a role in memory problem. However, only limited evidence of non-pharmacological intervention (NPI) has been shown to be beneficial in cognitive impairment. This study was aimed to investigate the efficacy of NPI in community-dwelling older people with cognitive impairment.

Purpose/Methods
Older people with clinical dementia rating scale 0.5-2 were invited to our NPI program in a community of Shilin district, Taipei. The content of NPI program included “animal-assisted therapy”, “horticultural therapy” and “holistic cognitive rehabilitation therapy” were held to maintain the cognition and to reduce behavior, psychosocial symptoms of people with dementia. There were 6-hours per week, 8-week course of NPI program. MMSE (Mini-Mental State Examination), CDR (Clinical Dementia Rating) and IADL (Instrumental Activities of Daily Living) were assessed before and after 8-week intervention.

Results
A total of 25 participants (female/male, 18/7; mean age 78 year-old) with cognitive impairment were invited to our NPI pro gram from Oct. 17 to Dec.16 2018 in a community of Shilin dist-ric, Taipei. 15 (60%) from hospital and 10 (40%) was referred from community respectively. 90% participants were mild de-mentia and mild cognitive impairment (CDR 0.5-1).
There was no significant change of cognitive function (MMSE, CDR) after NPI program. We only found improvement of IADL for community-dwelling elderly.

Conclusions
Health promotion with NPI program is effective and could improve the health outcomes of older people with cognitive impairment.

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Using Small Class Size Group Courses to Improve the Independence in Activities of Daily Living for Residents in Nursing Home

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Introduction
The independence in activities of daily living (ADL) for residents in nursing home often affects by changes in their age, illness, and care environment. The risk of being bedridden indirectly increases as their willingness of activities and physical exercise decreases with aging Therefore, it is important to postpone the rate of degeneration for residents in nursing home.

Purpose/Methods
We recruited residents in nursing home who have a clear sense of consciousness and willingness to participate this study. The physiotherapists conducted individual limb function assessments for participants, and developed muscle strength trainings of group courses. Participants were arranged to join group course once a week. In order to improve the motivation of joining activities, the reward tokens for redeeming prizes in the courses were applied.

Results
A total of seven residents were recruited with an average age of 83.4 years. The attendance rate of group courses was 100%. The average score of the Barthel Index for ADL was 48 points before joining group courses. One year after joining group courses, the average score of the Barthel Index for ADL was 65 points with a progress rate of 35%.

Conclusions
After applying small class group courses, the independence in ADL for residents improved effectively. The group courses also prevented deterioration in living function due to sedentary lifestyle for residents in nursing home. Even if they are living in a nursing home with severe degree of dependence at the beginning, the independence in ADL can be improved through group trainings.

Comments
Developing individual muscle strength training courses based on assessing individuality can not only improve the independence in ADL, but also indirectly improve care burden and quality for their caregivers.

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The Effectiveness of Pharmacist Medication Safety Management Quality in Long-term Care Institutions-Using a Cooperation Institution of a Regional Teaching Hospital in Northern Taiwan as an Example

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Introduction
According to the statistics of the Ministry of the Interior, Taiwan officially entered an “aging society” in March 2018, with the elderly population (≧65 years old) accounting for 14.05% of the total population and the aging index reaching 107.4. Long-term care institutions increased from 1,067 in 2015 to 1,100 in 2017, with the accommodated elderly/disabled elderly requiring long-term care reaching 27.98%. Medication use by admitted residents were complex and with varieties, but there is little emphasis on medication use safety management at present.

Purpose/Methods
This study adopted the “Assessment tool on the quality of medication safety and management in Long-term Care Facilities” established by Taiwan Pharmacist Association. After implementing reliability and validity tests on the assessment form, assessments were carried out in two institutions. After each assessment, advice and improvement suggestions were given. After three assessments, the pharmacists’ differences were compared before and after the intervention.

Results
The expert validity of the assessment form reached 0.99; as for the scorers’ consistency reliability after modifying the scoring method and adding the new scoring standard, the CVI value increased from 0.625 to 0.890, indicating high reliability and validity. After the pharmacists’ intervention, Institution 1 improved by 9.87% (p=0.008) and Institution 2 improved by 32.00% (p=0.003), indicating high significance of changes.

Conclusions
The results show that the pharmacists proposed recommendations using the assessment form. With the support of the institution medical teams, the institutions’ medication quality can be effectively improved.

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A Nursing Experience of Medication Adherence by an Independently Living Elderly Diabetes Patient

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Introduction
This article describes clinical nursing experience in the case of an independently living elderly diabetes patient with poorly controlled blood sugar levels due to noncompliance (a failure to comply with the drug treatment). Nursing took place from March 16th to May 15th 2017.

Purpose/Methods
With regard to noncompliance, during the nursing process, the researcher used communication to come to a consensus with the patient on understanding the drugs, and then together, a goal was set. A suitable nursing program was provided, including daily encouragement, reminder phone calls, auxiliary devices, etc., in order to help the patient overcome the obstacles associated with taking the drugs. In addition, the patient was given a certain amount of autonomy and decision-making power in order to enhance his self-efficacy.

Results
Through interaction with the patient, the goal of drug compliance was attained.

Conclusions
We hope that this nursing experience will act as a reference for colleague nurses in clinical care.

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Applying Diabetes Conversation Maps as an Intervention to Improve Nurses’ Diabetes Awareness, Insulin Injection Techniques, and Health Education Implementation

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Introduction
Nursing personnel are taught diabetes care primarily through books and experience sharing. The literature reveals that patients with diabetes learn self-care knowledge and skills through Diabetes Conversation Maps, which are unique learning tools; such learning tools not only provide visualizations but also involve group conversations, thus stimulating learning. In this study, we used Diabetes Conversation Maps as intervention tools to improve the learning outcomes of nursing personnel, thereby enhancing the quality of care for patients with diabetes.

Purpose/Methods
This research was an intervention study. Nursing personnel were selected from a medical ward. Diabetes Conversation Maps were used as the intervention tools, and the instruction period was 7 hours. A scale was used to evaluate the nursing personnel’s diabetes awareness, insulin injection techniques, and diabetes health education implementation before and after the intervention.

Results
A total of 19 nursing personnel from a medical ward were recruited. The participants were instructed through the Diabetes Conversation Maps. Comparing the pre- and post-intervention scores revealed that the score for diabetes awareness increased from 69.3 to 98.5 (P < .00), that for insulin injection techniques increased from 95 to 99.7 (P < .00), and that for diabetes health education implementation increased from 55.9 to 97.2 (P < .00), all indicating significant differences.

Conclusions
Instruction provided through Diabetes Conversation Maps considerably improved nursing personnel’s diabetes awareness, insulin injection techniques, and diabetes health education implementation. Such instruction methods can be used to facilitate nursing personnel in learning about and implementing diabetes health education.

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Long-term oral care for elderly people and people with long-term bed rest

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Introduction
Long-term care nurses play a key role in providing high quality of home care for the elderly and bedridden disabled people. Because of their incapability of maintenance of oral hygiene, the elderly and bedridden disabled people have difficulties of keeping dental health.

Purpose/Methods
The elderly and bedridden people who received home care services were invited to participate in a 2-hour experimental service. A trained oral care nurse taught the basic concepts of oral cavity and the importance of oral hygiene. This allowed caregivers to understand the benefits of oral dental care and give feedback afterwards.

Results
There were 19 long-term care workers participated in this study. All of them showed satisfaction with these experiences. They often encountered patients who were not willing to cooperate with brushing. As a result, these patients’ mouths often smelled bad and had high probability of hospitalization due to pneumonia. By participating in this study, caregivers were more confident to clean the oral cavity for the cases.
Conclusions
As cognitive and daily life functions gradually degenerate, patients may lose their ability and interest in brushing. Their teeth may need to be cleaned under supervision, or by the caregivers. The improvement of dental care and promotion of the effective use of medical services could reduce medical costs and shorten the predicament of health inequalities.

Comments
The study is a part of Health Promoting Hospitals and Health Promotion Plan in Taiwan, supported by Ministry of Health and Welfare. The goals of this study are to delay the onset of disabilities, provide Age-Friendly environment and increase the quality of long-term care. Our intervention of oral hygiene is a sub-project of Health Promoting Hospitals and Health Promotion Plan in Taiwan.

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Taiwan’s Experience on the Care Process of Foreign Caregivers

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Introduction
The demand for in-home companion care for the elderly has increased substantially as Taiwan became an aging society in 2008. To meet this increasing demand, the Ministry of Labor has introduced foreign family caregivers into Taiwan. There exists a need for further understanding on the dilemma of foreign family caregivers. This study was conducted in long-term care institutions that employ foreign caregivers.

Purpose/Methods
The interviewees were caregivers and the elderly being cared for at the institutions. The study enrolled 10 cases and the data were collected in a semi-structured manner. The study spanned from May to August of 2018.

Results
The average age of the elderly in this study was 80, most having 1 to 2 type chronic diseases. The foreign caregivers were mainly females (80%) with an average age of 26. The adaptation time after arrival ranged from 6 months to 2 years. Some of the major reasons for failure of adaptation included: being reprimanded for not understanding the elderly’s needs or original behaviors (30%); suspected of stealing (20%); panicking when the elderly suddenly becomes ill (30%); extra expectations from the family members (20%); and unaccustomed to dietary habits (40%).

Conclusions
There should be a comprehensive training and adaptation planning process in place for newly employed foreign family caregivers. The process may include a counselor system, regular meetings with the employer family, problem-solving and counseling assistance at any time, and setting up a dedicated telephone hotline. Additionally, the foreign caregiver human resource companies should continue to collect reasons for resignation of foreign caregivers, and to improve accordingly to raise the satisfaction of foreign caregivers and care receivers.

Predicting the readmission rate of hospitalized patients by using the clinical frailty scale: an empirical discussion

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Introduction
In Taiwan, a total of 5.4 persons per 100 older adults aged over 65 years develop frailty. Clinically, patients who are able to man-age daily activities experience rapid decline in their health during hospitalization because of falls or colds and thus may subse-quent develop frailty and functional deterioration and be at in-creased risk of readmission to institutions or hospitals, or even death. Accordingly, the present study predicted the possibility of each hospitalized patient being readmitted to hospital by using the clinical frailty scale (CFS) to evaluate his or her daily-life function-al and cognitive style.

Purpose/Methods
According to the 5A steps in evidence-based medicine, we used medical subject heading terms to retrieve keywords and Boolean logic to join synonyms to search databases including PubMed, Cumulative Index to Nursing and Allied Health Literature, Cochrane, and Airiti. The Critical Appraisal Skills Programme checklist for cohort studies and the Strengthening the Reporting of Observational Studies in Epidemiology checklist were used to assess the quality of our selected studies.

Results
Walls et al. (2015) revealed that the CFS could be used to predict the mortality rate of hospitalized patients (odds ratio [OR] = 1.60, 95% confidence interval [CI] = 1.48–1.74, p < 0.001), the number of older adults admitted to hospitals (OR = 1.33, 95% CI = 1.24–1.42, p < 0.001), and the number of patients hospitalized for 10 days or more (OR = 1.19, 95% CI = 1.14–1.23, p < 0.001). How-ever, the CFS did not facilitate prediction of patients’ hospital re-admission within 30 days (OR = 1.04, 95% CI = 0.99–1.10, p = 0.101). Belga et al. (2016) found that the most frail patients as determined by the CFS had a relatively high 30-day hospital re-admission rate and mortality rate (p = 0.005). After adjusting for age and sex, they found such rates among older adults (OR = 3.20, 95% CI = 1.55–6.60) were higher than those among adults (OR = 2.02, 95% CI = 1.19–1.41).
Conclusions
The CFS can distinguish ethnicities, which were used as an independent predictor for mortality rate and the number of extended days of hospitalization. However, hospital readmission rates can be difficult to predict because of diversity among individual patients (e.g., atypical body structure and living habits).

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Effective nutrition care for nursing home residents
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Introduction
Malnutrition affects the risk of physical function, length of day in the hospital, and increases mortality rate in older people. It’s important to monitor the nutritional status of older people in the nursing home. This study uses the Body Mass Index (BMI) and energy intake to assess the nutrition status of nursing home residents.

Purpose/Methods
1. Personal diet was planned by dietitian when residents entering the nursing home. 2. Residents’ weight was monitored monthly. If his/her weight changed more than 1 kg, dietitian assessed whether a dietary modification was needed. 3. Diet plan was reassessed after discharging. 4. The residents were divided into four groups by the BMI: obese group, overweight group, normal weight group and underweight group. Energy intakes were evaluated for total calories and macronutrients.

Results
1. There were 89 residents, the average age was 82.7 years, BMI was 22.1kg/m², average energy intakes were 1,445kcal/day and the average proportion of proteins, fats, and carbohydrates from total calories was 16.5%, 31.6%, and 53.6%. 2. The intake of calories and macronutrients among these four groups had no significant difference. 3. In the underweight group, the BMI and weight between the previous 3-6 months and the past 3 months did not show significant difference.

Conclusions
Insufficient calories intake can lead to weight lost. Among the 12 underweight residents, whose average calories intake was 1,465kcal/day, the body weight did not change significantly during the past six months. Some literature suggest the most appropriate BMI range for the elderly is 24≤BMI <27kg/m². The average BMI for overweight and obese groups in this study was 24.8 and 28.1, respectively, and caloric intakes were 1357-1436kcal/day. In conclusion, residents of nursing home in this study all received adequate nutritional care.

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The elastic band can effectively improve the functional health and daily life activities of the elderly in wheelchairs.

MINGLING CHEN

Introduction
Taiwan 2017 the elderly population aged 65 and over accounted for 13.9% of the total population. Most elderly people are often placed in nursing home after their physical functions are affected. Wheelchairs have become the biggest tool for the elderly to move. The result of long-term immobility is that the elderly have muscle atrophy and poor behavior. How to choose the right exercise for the elderly to walk in a wheelchair is also relatively important.

Purpose/Methods
PubMed database query → select Clinical Queries → Search (Therapy / Narrow [filter]) AND (elastic band and elderly in wheelchairs), a total of 4 articles → read the abstract and select 2 documents.

Results
Chen KM uses the elastic band to exercise for the elderly in wheelchairs to assess the physical function of the elderly. The results that all functional fitness indicators of the experimental participants were significantly improved. Chen MC scholars studied and tested the effects elastic band exercise program on functional health and activities of daily living in cognitive impairment of wheelchair elderly patients. The results that the experimental group participants showed significant improvement in ADL and functional fitness indicators.

Conclusions
The elastic band can effectively improve the functional health and daily life activities of the elderly in wheelchairs. The elastic belt is convenient and cheap, and there is no need for special venues and equipment. After training, dvd can continue to maintain the training of the elderly, and its effectiveness can still be improved. It is recommended that this campaign be included in the hospital so that more elderly people can benefit.

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Post-stroke with robotic gait training
CHIENMI CHANG

Introduction
About 70% of patients were affected after stroke, including physical activity and sensory dysfunction. How to improve the function of patients’ activities is a topic that is currently paid attention to in clinical practice. Can robot gait training really improve the patient’s walking ability compared with traditional physical therapy?
Purpose/Methods
PubMed database query → select Clinical Queries → Search (Therapy / Narrow [filter]) AND (robotic gait training AND walking and stroke), a total of 14 articles → publish within 5 years and limit systematic review → get 10 articles, take 3 articles related to the topic article.

Results
Bruni et al. the study of robotic rehabilitation was systematically evaluated. The result, robotic rehabilitation significantly accelerated the improvement of daily functions and local acceleration of walking. Mehrholz et al. Compare the effectiveness of robot-assisted gait training for walking after stroke. The results that robotic gait training can improve the recovery of independent walking after stroke. Stephenson explored the motor function of robotic gait training of stroke patients. For patients with severe lower limb injuries, the experimental group was statistically different.

Conclusions
Post-stroke rehabilitation therapy with robotic gait training can effectively improve walking function, increase lower limb joint mobility, maintain normal muscle tension, and thus achieve optimal rehabilitation treatment, allowing patients to restore independent independent functions.

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Improving the prevention of elderly urinary incontinence by intervene with pelvic floor muscle exercise: Experience in Taiwan
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Introduction
A random survey has done to 100 patients from the Gynecology and urology clinic, 66% of those aged over 50 has suffered from urinary incontinence(UI). Study shows that UI can be prevented and cured by introducing the pelvic floor muscle exercise. Therefore, we expect to improve the health of the elderly by forming an UI prevention group where pelvic floor muscle exercise could be taught and life quality, UI prevention related knowledge and skill could be improved.

Purpose/Methods
Elderly patients (aged over 60) with UI. The intervention was be held once a week, and once 120 minutes. There were be altogether 8 courses. Demonstration and returned demonstration were be adopted, every movement was be filmed step by step and uploaded to internet for the students to practice at home. Pre-test and Post-test on the knowledge, attitude, behavior regarding UI and quality of life was taken, while statistic and analysis ran by Paired t test.

Results
1.14 patients participated. Evaluated by Sandvik severity index, 50% of them claimed to have no UI, 42.9% have slight UI while 7.1% have severe UI. After a month of training, 71.4% claimed to have no UI and 28.6% have slight UI. 2. After one month of pelvic floor muscle training, quality of life improved 20%. The knowledge score improvement reaches 1.29% (SD±1.26) (P<.002), showing statistical significance. Self-care behavior score improvement reaches 16.71 (SD±9.7) (P<.000), showing statistical significance.

Conclusions
By adopting group learning, step-by-step teaching, demonstration/returned demonstration method and educational DVD for students to practice on their own, the students are more encouraged to learn, and aside from the UI relative attitude, the improvement on quality of life, knowledge and self-care behavior toward UI has reached statistical significance. This is a great proof that pelvic floor muscle exercise is worth promoting.

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A KAWA Model-Based Group for People with Post-polio Syndrome: the Life Narratives and Factors Related to Lifestyle
HSIAO Han-Yi, LU Huei-Lan

Introduction
KAWA model takes the river as a metaphor for life. By describing the life experience by drawing the river with water, driftwood, riverbed, and rocks, people's expectations, assets, limitations were discovered. People with post-polio syndrome (PPS) that their physical, functional status was affected by their post-polio condition. Lifestyle factors exploring and health lifestyle intervention is necessary.

Purpose/Methods
This study used the KAWA model as a group intervention and examined their satisfaction of the group experiences. The narratives of their life journey and the issues related to the PPS were also explored. The 6-week group met for 120 minutes weekly. At the first three weeks, participants drew life river and shared life experiences. At the followed sessions, group members established goals for their own healthy lifestyle and made a discussion to develop the plans and implemented them.

Results
11 participants attended the group, after analysis from 11 completed drawing and personal narratives, we found the top 3 incentives to lifestyle (driftwood) were regular/multiple daily life, self-adjustment and the support of peer group. The barriers to lifestyle (rocks) were health, financial condition and family pressure. This research found that group based on KAWA model could improve active participation for people with PPS, and reduce clients' defensiveness demonstrated by willing to tell life story from their perspectives in short term.

Conclusions
The intervention group only had 6 weeks. It may improve the understanding about incentives and barriers of participants' life, but not long enough to develop the healthy habits of the participants. The findings may be insufficient because of the lack of
Dialysis patients perform aerobic exercise to promote body function

YI-CHUN Chen

Introduction
There are many dialysis patients in Taiwan, and the five-year survival rate is only 56.2%. These patients are often forced to inactive due to dialysis treatment. After returning home, they are more likely to be afraid of exercise due to physical discomfort, muscle loss caused by end stage renal disease and excessive fatigue. Inactive living habits, evolve into long-term bed rest, reduce survival, how to promote simple exercise to maintain physiological functions, improve patients’ quality of life is worth pondering.

Purpose/Methods
PubMed database query → select clinical query → search (treatment / reduction [filter]) and (dialysis and aerobic exercise and physical activity) → limit 10 years, randomized clinical trials → a total of 107 articles → read the abstract and select 2 files.

Results
Lima scholars was randomized clinical trial with three exercise sessions per week, completed within the first 2 hours of HD and lasting 8 weeks. Results the aerobic exercise group achieved significant results in terms of physical function, pain, sleep, sexual function, and exhaustion. Cho scholars studied randomized hemodialysis patients for a 12-week dialysis exercise training. It was found that the metabolic capacity of the aerobic exercise group was significantly increased and both daily physical activity and sleep quality were beneficial.

Conclusions
According to the above studies, aerobic exercise training can aerobic metabolism, cardiovascular function and quality of life in hemodialysis patients. However, at present, the training guidelines for dialysis campaigns have not yet been developed in Taiwan, and patients who have undergone dialysis still have no sports concepts and stereotypes. How to exercise in dialysis patients is a problem that must be solved in the future. Dialysis hospitals can incorporate exercise training into routine care. Make exercise a life style for patients.

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Evaluation of motivation for short-term grouped exercise for community-dwelling frail and sub-healthy elderly

LIN CHUN-YU

Introduction
Frailty can increase risk of falling, disability, hospitalization and mortality. As Taiwan is an aging society, the health department of New Taipei city had been screening for frailty in the annual health examination for the elderly over 65-year-old for years and providing exercise program for those who are pre-frail or frail. Previous study also showed improvement in muscle strength, frailty, or risk of falling after grouped exercise program. However, there is lack of motivation in joining the program.

Purpose/Methods
The participants are selected from annual health examination for elderly in Taipei Tzuchi hospital. The elderly were screened for frailty with a total score of 5 including body weight loss, exhaustion, hand grip strength, 6-meter walking speed and low physical activity. Those frailty score more than 1, the person will be given a exercise recommendation and refer to the exercise program. There were 1005 elderly had annual health exam in Taipei Tzuchi hospital in 2018. There were 164 people eligible to join the program.

Results
Only 5.7% of elderly participate in the program. There is statistically significant improvement in frailty score, muscle strength and walking speed for elderly who joined the program. When comparing differences between groups with and without intervention, there is no statistically difference in age, gender, or frailty score. We evaluate the reason for refusal and categorized into five fields: traffic problem, time issue, patient preference, physical condition and lost follow up. The percentage in each category were 26.2%, 17.8%, 18.7%, 10.3% and 27.1% separately.

Conclusions
Short-term grouped exercise showed improvement in frailty for community-dwelling elderly. There is lack of participation toward exercise program. Most elderly don’t come to program and up to 27% were lost follow up after signing up. Second most reported reason was due to traffic problem. We could refer those with traffic problem to nearby community center for exercise program. Other measures to improve motivation is required.

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Building an interdisciplinary geriatric assessment team to assist a nursing home resident with multimorbidities in recovery of activities of daily living function

YANG Kuei-Hsien, HSU Chun-Hsien

Introduction
The trend of aging population has become an important issue of great urgency in contemporary society. Aging and disability, along with long-term care, are causing a huge burden that will seriously affect our economy. The prevention of disability in the elderly should be placed great emphasis on. Here, we presented
The Social Determinants of Health among community members joining to “Hankai” in Hew Co-op Japan.

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Introduction
One of the strategies for the development of the community-based integrated system in Japan is active social participation. The Ministry of Health, Labour and Welfare pointed out its importance. Many medical cooperatives belonging to the Japanese Health, and Welfare Co-operative Federation(Hew Co-op Japan) manage “Hankai” groups as a primary social activity unit for the social participation. We revealed the current status of social determinants of health seen in “Hankai” participants and showed the associations of participation and health inequality.

Purpose/Methods
A 86-year-old man had a past history of hypertensive cardiovascular disease, type 2 diabetes mellitus, and benign prostatic hyperplasia. He fell down two years ago, which led to left patella fracture, and he received operation. Since then, he seldom went outside, and depressed mood was noted by his family. In recent 6 months, he had presented with functional decline of ADL, including personal hygiene, toilet hygiene and functional mobility. He was admitted to a nursing home for a better care. Our interdisciplinary geriatric assessment team consisted of a geriatric physician, a geriatric nurse, a pharmacist, a dietitian, an occupational therapist, a physical therapist, a speech therapist, a health psychologist, a geriatric social worker, and a religious teacher. We executed comprehensive geriatric assessment for this patient. He had geriatric syndromes such as dementia, depression, malnutrition, body weight loss, polypharmacy, dysphagia, frailty, and pressure sores.

Results
After management by each team member, the declined ADL improved much. We also taught his family about the care techniques. Then, he went back home 1 month later.

Conclusions
Multimorbidities are very common in the elderly, and are highly associated with functional decline of ADL. Building an interdisciplinary geriatric assessment team is essential for taking care of this kind of patients.

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Healthcare and Community-Love in Datong Dist University

CHEN ching-lin, CHEN ming-chih, LIN yang-chao, LIU Chih-Kuang

Introduction
Provide a home-based integrated care model in a single service window Taipei City estimates that by 2020, the population over 65 will exceed 20%, becoming a super-age city. In order to meet the long-term care needs arising from the increase in disability and dementia, Taipei City United Hospital Zhongxing District took over Taipei in 2016. The community-integrated care plan planned by the municipal government, with a single service window, integrates the community’s long-term care resources, constructs a care concept that takes home care as the main axis from birth to death, provides a close-to-use and immediate multi-care service, and enables disability cases. In the process of changing demand, medical and life care are obtained, and the goal is to reach the elderly.

Purpose/Methods
This work is a cross-sectional questionnaire survey. The registration criteria are; Hew Co-op community members who wished to take part the study and received no long-term care services. The questionnaire was 12 major items and over 50 minor items. We selected people of 65 years or over who could calculate Geriatric Depression Scale(GDS) and examined the relevance of GDS with four issues of self-reported health(2,518 cases), educational history (2,503), income (2,377) and “Hankai” participants (2,371).

Results
In the relation between GDS and each item, the lower the self-reported health level and the less the educational history, the higher the score of GDS tended. Moreover, there was a significant correlation between GDS and annual income. In a comparison adjusted for age, sex, academic background, income, times of participation in “Hankai” and social participation other than “Hankai,” involvement in “Hankai” for one year or more showed an increase in self-reported health (mean score 1.95 vs. 2.01).

Conclusions
The relationship between GDS and self-reported health showed a predicted correlation. We confirmed the differences in GDS by educational history and income. This result shows SDH in Japan. The “Hankai” meetings have active involvement of medical professionals. Residents improved their self-reported health by participating in the meetings for more than a year.

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Results
1. 25% of care cases are referred by the lieutenant, and neighbour- 
hood care explores potential cases. 2. 20% of cases went out of 
the house to participate in community activities after assis-
tance. 3. To take care of the elderly living alone, the 25% of 
the elders in Peking University have received services.

Conclusions
Different from the past, medical personnel passively waited for 
patients in the hospital. Case managers with backgrounds in 
medical and social work, etc. went to the community to move 
daily work place from the hospital to the community, in the 
parks and lanes in the community. 

The effectiveness of automated weaning and SBT systems on wean-
ing time in mechanical ventilated critically ill adults
LI Yia-Ting, LAI Hung-Yuan, LEE Chung-Wen, CHEN Yi-Fang, HUANG Hui-Min, LU Min-Chi, WANG Yao-Chen

Introduction
An automated weaning system could continuously analyze pa-
tient’s weaning parameters and automatically adjust on ventila-
tor settings to provide the most optimal ventilation pressure. In 
this study, we seek to compare automated weaning system with 
conventional weaning strategies, on whether mechanical venti-
lation duration could be shortened and improve prognosis in me-
chanical ventilated critically ill adults.

Purpose/Methods
Adult critically ill patients who received mechanical ventilation 
support for more than 24 hours and ready for weaning were re-
cruited in our study. They were randomized to either automated 
weaning system or conventional weaning strategies group. Pa-
tient’s prognosis and all adverse events were recorded.

Results
A total of eighteen adult patients were recruited with nine in 
each group. There’s no statistically difference in patients’ base-
line characteristics and weaning parameters. Weaning period
could be effectively shortened in the automated weaning system 
group (Log-rank test, 5.91; p=0.015). The time needed for suc-
cessful extubation and ICU length of stay were however not af-
fected. Automated weaning system did not raise the need of 
noninvasive ventilation support or reintubation after extubation, 
and mortality rate was not increased.

Conclusions
Automated weaning system could effectively shorten mechani-
çal ventilator weaning period but not the time needed for suc-
cessful extubation. It was because extubation time was usually 
procrastinated by physician’s decision. Therefore, a constructive 
communication with physician is indeed important. Although, 
more case number is required for further evaluation on the ef-
fectiveness of weaning, our results still support adopting auto-
mat ed weaning system for weaning in critically ill adult patients.

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Application of Interprofessional Team Services to Reduce the Inci-
dence of Falls in Chronic Wards—Taiwan experience
YEN Kuei Hua, HUANG Jia Wen, CHANG Jui Feng, KAO Li Chueh

Introduction
The fall rate was 0.13% in our ward from June 2016 to February 
2017, which exceeding the threshold our hospital 0.08%. The 
strategies of preventing patients from falling are to reduce the 
incidence of falls and the rate of injury. We analyzed the reasons 
of fall by means of fall notification, quality control audit, field vis-
its and medical records. The main problems were found to pre-
vent falls, lack of understanding, lack of interprofessional team 
services and inadequate environmental equipment.

Purpose/Methods
(I) Purpose: To reduce the rate of falls from 13 to 8%. Fall injury 
rate from 33 to 8 %. (II) Methods and measures: 1. Establish 
an improvement team. 2. Hold teams education to raise 
awareness of falling prevention. 3. Strengthen patient’s and 
caregiver’s education. 4. An interprofessional team is 
formed which consists of physicians, nurses, rehabilitation prac-
titioners, dieticians, and social workers. 5. Bedside potty chairs 
and updated electric bed are provided for patient convenience.

Results
(I) In the past 8 months, 15 falls prevention in-service education 
and 9 patient-family groups education were held. (II) The fall rate 
decrease to 0.07% from 0.13%, the target rate reached to 
120%, the improvement rate was 46.2%. Fall injury rate from 
33.3% to 0%, the target rate reached to 128%, the improvement 
rate was 100%. (III) Improving the prevention of fall agility by 
team members and patient families. (IV) Discharged to the gov-
ernment for long-term service, care is not interrupted.
Conclusions
This improvement plan effectively reduced the incidence of patients fall and injury, and enhanced attention and acuity of preventing falls in the medical team and the patient’s family. Transfer through government long-term care services, from hospitals to establishing a comprehensive home safety net, and providing safe patient-friendly medical environment for better health.

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The improvement on the nutritional status of long-term care residents by nutritional intervention

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Introduction
Based on recent studies, most long-term care residents could easily cause gastrointestinal problems because of insufficient supplementation and bedridden or lack of activity. Poor nutrition status could increase the infections, re-hospitalization, and mortality.

Purpose/Methods
50 participants were included in this study. According to the subjects of the anthropometric status and activity, the dietary nutrient requirements were well assessed. The goal is to achieve target calories and protein intake. Biochemical analyses and body mass index (BMI) were measured at the beginning, and the end of intervention, then use paired T-test to evaluate its effectiveness.

Results
Results showed that residents after nutritional intervention, body weight, and BMI were significantly increased. In addition, albumin, total protein, pre-albumin, total iron-binding capacity (TIBC) and transferrin in serum were also significantly increased. Blood electrolytes were in normal range, hepatic and kidney functions were normal.

Conclusions
In conclusion, after nutritional intervention, not only improve patient’s nutrition status, but also maintain the patient’s general anthropometric status, and increase residents muscle synthesis. By the way, this study could not raise liver and kidney load without electrolyte imbalance. Then promote resident’s health.

Comments
If we can provide appropriate nutrition intervention for residents, it could reduce the infections, re-hospitalization, and mortality and lower the medical cost.

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Factors associated with missed resident care in Taiwan nursing homes

TOU Yung Hsin, LIN Pi-Chu, LIN Hui Fen

Introduction
The amount of elderly people living in nursing homes has increased by the year. Nursing aides account for 56% of nursing home staff and directly provide nursing care. They are deemed the key in offering quality nursing care. As the complication and dependency of nursing home residents rises, rushed or missed nursing care occurs. This lowers job satisfaction and retain rate. The effects of missed nursing care on nursing quality has already been subject to discussion in foreign emergency medicine but very little literature reviews the nursing care that is missed by nursing home aides.

Purpose/Methods
Adopts cross-sectional study and uses the nursing aide, nursing personnel and nursing home management surveys designed by the researcher. The survey include basic personal information, job satisfaction chart and missed care chart (The MISSCARE Survey), nursing home attributes and five quality indicators. The research studies a total of 10 nursing homes in Taiwan, 184 individuals whom are nursing aides, nursing personnel and nursing supervisors; 80 people who are nurses, as well as 10 nursing home management personnel.

Results
In all missed nursing care item “Body cleaning” (30.4%) was the highest, followed by “Wash their hands.” (22.7%) and “Daily rehabilitation activities” (22.4%). 90.2% of nursing aides and nurses deem improper communication to be the cause of missed nursing care. 89.8% claimed lack of manpower, and 64% claimed lack of resources. The missed nursing rate has minimal correlation with “average pressure sore prevalence rate” (r=.131, p=.034) and has low negative correlation with “current job satisfaction”, “satisfaction for group cooperation”.

Conclusions
1. Improvement of work procedures, such as having a fixed time period for rehabilitation activities, encouraging nursing aides to conduct two-person body was for residents, as well as frequent examination of hygiene of the hands. 2. The main reason for missed nursing care is “The job could not be handed over to the next shift”. Electronic bedside systems can be implemented to rapidly inform nursing aides on the current nursing needs of the residents. 3. Through the study’s MISSCARE Survey, one can grasp a better understanding of the items and causes of missed nursing care, thereby amend nursing procedures and regulations, thereby enhancing nursing quality and the allocation of personnel.

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Electronic Poster Session

Evaluation of a multifaceted teaching program for patient education on hyperphosphatemia for hemodialysis patients on nursing staff outcomes.

WENG Min-Hui, YEH Shu-Min, HUANG Hui-Ting

Introduction
This study aimed to evaluate the effectiveness of a multifaceted teaching program of patient education on hyperphosphatemia for hemodialysis patients on nursing staff outcomes in hemodialysis center.

Purpose/Methods
A one-group pre-test and post-test study was conducted using a purposive sample to recruit nursing staff working in hemodialysis center. Twenty-one nurses were trained with the multifaceted teaching program for hemodialysis patients with hyperphosphatemia. Nurses were trained to use red, yellow, and green colors to indicate dietary phosphorus levels and to design high phosphorus diets when they implemented patient education. Nurses also received scenario-based simulation, peer practice, and a teaching video. This study administered self-developed scales “Hyperphosphatemia Patient Education Checklist Scale” and “Hyperphosphatemia knowledge Scale” was modified and established reliability and validity. “Hyperphosphatemia Patient Education Checklist Scale” the content validity index (CVI) of this scale was 0.94, the Cronbach’s alpha was 0.90, and that of the “Hyperphosphatemia knowledge Scale” the content validity index (CVI) of this scale was 0.97, the Cronbach’s α coefficient of the questionnaire on knowledge was 0.91.

Results
The study results showed evaluation of a multifaceted teaching program that the improvement of knowledge on hyperphosphatemia for hemodialysis patients was improved from 60.4% at baseline to 96.7% at post-test. Nurses’ completeness of implementation of this patient education was improved from 53.1% to 96.5% after six months. Hyperphosphatemia over 6.0 mg/dl dropped from 30.7% to 19.3%.

Conclusions
Nurses can also provide consistent, complete, and correct nursing instructions to help patients with hemodialysis control the serum phosphorus levels.

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Enhance the satisfaction of the medical environment for the elderly in the medical clinic

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Efficacy of walking assist device with auxiliary illuminator on stroke patients

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Introduction
Many patients after stroke suffered from weakness or hypertonicity of the affected limbs that resulted in abnormal gait pattern. Ambulation training after stroke focused on strategy providing biofeedback had been proved effectively and was promising recently. We aimed to investigate the clinical effect of a walking assist device with auxiliary illuminator (laser quad-cane) in patients with chronic stroke.

Purpose/Methods
Patients in the two groups both received a rehabilitation program. The program consisted of 15 minutes of walking training and 15 minutes of traditional physical therapy. All the patients received the program twice per week, for a four weeks. Patients in the experimental group used laser quad-cane during walking training while patients in the control group were trained conventionally. We measured gait parameters by gait machine analyzer as primary outcomes and used (1) Berg’s balance scale (BBS), (2) timed up and go test (TUG) and, (3) barthel index (BI) as secondary outcomes. The outcomes were measured before training (week 0), the week 4 (week 4), and 4 weeks after completing the training program (week 8).

Results
Intergroup analysis of the experiment group showed significant improvement of (1) stride length, (2) cadence, (3) stance phase and swing phase of both sides, (4) heel strike angle of the sound side, (5) BBS, (6) TUG, and (7) BI at both week 4 and week 8 as compared to the baseline. Intragroup analysis between the experimental and the control group showed that stride length increased and stance phase of the sound site (p=0.048) decreased significantly more in the experimental group than the control group between week 4 and the baseline. Stance phase of the affected side decreased significantly in the experimental group than the control group between week 8 and the baseline. Though there was no significant difference of secondary outcomes between the two groups, a trend of improvement in BBS, TUG, and BI was observed.

Conclusions
Ambulation training with a laser quad-cane could improve the balance, activity of daily living, and gait parameters of patients with chronic stroke.

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The recruited participants are female nurses who worked according to a three-shift system. The participants were divided into two groups through random. No treatment was provided to the blank group. These participants dripped three drops of lavender essential oil into an aroma stone diffuser before going to bed each day. The intervention was 4 weeks long, and the CAIS and Nurse Stress Checklist were employed for preintervention and postintervention evaluation.

Results
The CAIS results indicated that the essential oil group exhibited a significant difference regarding improvements in insomnia. The NSC results indicated that the essential oil alleviated the stress experienced by the participants in the essential oil group. There were reduced from an average of 11.67 points to 4.57 points and 179.9 points to 145.22 points. Regarding the hypnotic medication intake of the participants, they reduced their hypnotic medication dose after the intervention.

Conclusions
Inhaling lavender essential oil before sleep significantly improved the insomnia and stress experienced by female nurses on shift schedules.

Comments
This essential oil that are convenient and involve no risk of drug addiction can serve as an alternative to insomnia treatment for female nurses.

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Trend in Health Behavior among Korean Adults: 2008-2014

KIM Kue Sook, LEE Yu Jeong, PARK Yong jin, LEE Ji Hong, CHOI Dae Jong, CHO Seung Yeon

Introduction
The purpose of this study was to investigate the changes of major health behaviors by using the survey data of community health surveys conducted in Korea over the past 7 years.

Purpose/Methods
This study used the National Health and Nutrition Survey data from 2008 to 2014. The data were analyzed for 44,419 adults aged 19 and over. The chi-square analysis of major health behaviors by year [1-year drinking frequency, 1-week moderate physical activity, 1-week walking days, and the trend of the number of days confined to bed in the last month were analyzed by ANOVA.

Results
The statistical significance of 2008 was higher than that of 2014 were the frequency of drinking (p<0.001), weekly moderate physical activity (p<0.001), weekly walking days (p<0.001), and health checkup status (p<0.001). Compared in 2013, the mean body mass index decreased in 2010 and increased again in 2014 (p =0.048). The average the number of days confined to bed decreased from 5.69 days in 2014 compared with 7.27 days in 2008(p<0.001).
Follow The New Dietary Guidelines and Eat Healthy

TSAI YI-TING, LI Yu-Ching, LIU YA-MIN, LAI CHIA-WEN

Introduction
Modern people’s eating habits have been different from the past. Today’s living conditions are getting better and better, and it is easier to have malnutrition problems. Malnutrition includes undernutrition and overnutrition. According to the National Health Service, more than 70% of the elderly in Taiwan are malnourished, and the rate of obesity among adolescents is nearly 30%. A healthy lifestyle includes a balanced diet, and a balanced diet is the foundation of health.

Purpose/Methods
The daily dietary guide is a daily dietary guide that is based on the dietary habits of national nutrition surveys, the international diet indicators and the latest epidemiological research results, and the prevention of nutrient deficiencies in healthy adults. This guide clearly tells people the classification of foods and the proportion of suitable three major nutrients.

Results
Promote nutrition knowledge by the county and city government health bureaus, and invite professional dietitians to enter the community center to help the people develop a balanced and appropriate diet, lead the community to manage a healthy and healthy life, and find the best way to eat.

Conclusions
Balanced intake of beneficial healthy foods not only keeps a healthy shape, but also reduces the prevalence of obesity and chronic diseases. According to the World Health Organization, insufficient intake of fruits and vegetables will lead to an increase in gastrointestinal cancer, heart disease and stroke mortality, while adequate intake of vegetables and fruits can prevent chronic diseases such as cancer, cardiovascular disease and diabetes. Therefore, to develop a correct balanced eating habits in order to have a healthy lifestyle.

Comments
The National Health Service of the Ministry of Health and Welfare can design an app to increase the access of modern people to knowledge in response to the booming era of information.

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Health education on elderly-care through community hands-on experience and active learning

CHEN Ming-Xiang, HOU Yi-Cheng, WU Jing-Hui, CHENG Chu-Hsuan
Introduction
Due to the aging society and the prevalence of the eating-out culture in Taiwan, community knowledge on diets suitable for the elderly population has a big impact on the community health.

Purpose/Methods
This study uses an interactive teaching method and provides hands-on experience to a community for a duration of two months. This study uses Japanese style measurements (Omron) to collect data from the participants before and after the activities.

Results
The average weight reduced by 0.66 kg. BMI decreased by 0.23. Body fat decreased by 0.25. Skeletal muscle increased by 0.12. Society-age decreased by 0.65 years. Finally, the participants were eager in the active learning and participation, generated diet models for the elderly, and actively explored the dietary needs of the elderly. This article can be used as a reference for the middle-aged and elderly experience activities in the context of design and discussion.

Conclusions
The result shows the effectiveness of community education through hands-on experience and active learning. The middle-aged and elderly participants also provided excellent feedback about their needs in a healthy lifestyle.

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Physical Activity, Sedentary Behavior, and Sleep of Working Age in Health Region 9, Thailand
SUMONNOK Suchitra, LOTHAWEEMONGKOL Piyamaporn

Introduction
The current working-age population is overweight and obesity problems. Including chronic illness.

Purpose/Methods
This survey study aimed to explore physical activity, sedentary behavior and sleep of working age in Health Region 9, 2017. The samples were population aged 18-59 years in the health of 9 amount 404 people by random stratified provincial level, district, urban and rural. Data were collected by questionnaires and was analyzed by percentage, mean, standard deviation and chi-square test.

Results
The sample had normal body mass index amount 37.9 %, obesity 27.7 %. The association about occupation and physical activity showed that high level 15.1 % moderate level 315.1 % and the number of working days Job-related physical activity by walking 68.1%. The average of sedentary behavior on working day 32.6 % and on weekend 30.9 %. The time averaged 8.2 hours of sleep and normal sleep 58.7 %.

Conclusions
The health providers should consider about the coverage of services, advise for working age were accessibility and convenience to health activities, as well as modify health activity based on the community needs.

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A friendly catering module for long-term care: Taking Taipei Tzu Chi Hospital’s health medical catering group as indicator
CHEN Ming-Xiang, HOU Yi-Cheng, WU Jing-Hui, CHENG Chu-Hsuan

Introduction
Due to the aging society and the prevalence of the eating-out culture in Taiwan, community knowledge on diets suitable for the elderly population has a big impact on the community health.

Purpose/Methods
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Correlation of Health Perception and Health Promotion Activities of Certain College Students
PARK Kyuri, KIM Hanna, JANG Musang, LEE Subae, HYUN Kiboung, CHAI Jong-Yil
Introduction
According to the 2016 National Health Nutrition Survey, for those between the ages 19 and 29, 25.1% of male and 22.0% of female consumed 500g or more fruits and vegetables per day. Therefore, it is the purpose of this study to identify the determinants of health promotion activities including nutrition, health status, and stress, encourage self-directed health promotion for college students, and use the findings to develop an effective arbitration program.

Purpose/Methods
The purpose of this program is to identify the degree of health perception and health promotion activity of college students and uncover the factors for the promotion of their health. To measure health perception and health promotion activity, a survey questionnaire developed for Korean was used, which provided body composition analysis, nutrition counseling, vital sign (pulse/brain wave) analysis, dried fruit, my bottle and a calorie handbook.

Results
If we look at the items of highest account, of the 1,659 college and graduate school students current attending 16 universities nationwide, and participating in this program, frequency of dining out was 30.5% for ‘more than once a day’, frequency of consumption of fruit was 35.9% for ‘once or twice a week’, and 44.5% answered to have high level of stress in daily life, disclosing that college students are mostly stressed about grades, career and employment.

Conclusions
In order to promote the health promotion activities of college students, it is important to develop programs on health perception and health knowledge.

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Effects of Volunteering for Individual with Mental Illness in Psychiatric Center
HUANG Wen-Yi, LU Huei-Lan, CHENG Ching-Ming

Introduction
Results showed that volunteer services helped to improve the wellness. Therefore, occupation therapist courage individuals with mental illness to volunteer patient safe in a psychiatric center in Taiwan. This study tested the effects of volunteering on the quality of life for individual with mental illness, and the effects of volunteer experience.

Purpose/Methods
Individual with diagnosed Bipolar is 40 years old. He started to volunteer to perform patient safety work in a psychiatric hospital in Southern Taiwan in December 2016. He volunteer five times a week for 2 hours per session between December 2016 and April 2017. After he working in April 2017, he volunteer twice a week for 2 hours per session. Quality of life was measured every six months by the Taiwan version of the WHO questionnaire on the Quality of Life (WHOQOL-BREF).

Results
During his time in volunteer work, results from the WHOQOL-BREF showed that his quality of life was slightly worse in April 2018, but his quality of life was good in July 2018. He was not hospitalized for emotional instability. During his time in volunteer work, he was employed for half a day, what is more, he was admitted to the caregiver’s license on November 3, 2018. Volunteer service helped individual with mental illness to become work role from sick role.

Conclusions
Based on our findings, volunteering was effective. Therefore we would continue promoting the volunteer service for people with mental illness.

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Analysis of Zip Codes influencing the Pain Score of Patients with Chronic Pain in Massachusetts, USA
RITMAN Stephanie, BHANDARI Ashish, LEE Ji Hong, BOMALIYAMU Aimaiti, LEE Yu Jeong, GILLIGAN Christopher, ROSS Edgar

Introduction
Societal factors play an important role in our personal health and among these is where an individual lives. According to the CDC, zip codes are a greater indicator of our health than our genetic code. The prevalence of this factor to our health leads to our study of the effect of zip codes on pain scores. Chronic pain is another prevalent issue and affects 20-30% of the population in Western countries. By assessing the pain scores of individuals with different zip codes, we can determine how zip code’s median income affects the pain of individuals.

Purpose/Methods
A group of 200 patients, half women and half men, were analyzed in this study. Patients who were over 18 years of age, and had pain for three months or longer were included in the study. The variables used in this study were zip codes, baseline pain scores, BMI, race, gender, primary diagnosis, secondary diagnosis, smoker/nonsmoker, and prescribed medication.

Results
We expect to see a difference in pain scores based on where patients reside, with a higher pain score in lower income neighborhoods.

Conclusions
We hypothesize that low socioeconomic area in and around Boston will have more pain scores when compared to the high socioeconomic areas. Also, we would like to see any other differences we might find while the data analysis.

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**Using Bingo Games to Encourage Employees Developing Good Habits of Health Promotion**

**CHEN MEI-LING, LIAO HSIU-MEI, LEE MING-TSUNG, LIN CHANG-SHENG, LIU YA-MIN**

**Introduction**

As the daily lifestyle changes, the amount of physical activity gradually decreases. Insufficient exercise is one of the major risk factors for chronic diseases. In recent years, empirical medical data has shown that regular exercise is very important for physical health. Increasing physical activity is the core of health promotion.

**Purpose/Methods**

The activity uses a 3x3 bingo game card. To finish the game, one has to complete three grids in a row (horizontal, vertical, and oblique). The nine items are as follows:

1. Complete the annual physical examination;
2. Walk 8,000 steps per day;
3. Complete the occupational safety questionnaire;
4. Gymnastics;
5. Participate in health promotion activities;
6. Complete cancer screening;
7. Participate in health promotion lectures;
8. Participate in employee weight loss classes;

**Results**

This hospital is a teaching hospital in central Taiwan. We use bingo game cards to encourage employees to develop good habits that promote health. There were 173 participants during the period from 2018/09/01 to 2018/10/31. There were 8 people who use the bingo game card to form a line, 43 people completed two lines, and 122 people finished three lines.

**Conclusions**

Developing good exercise habits is helpful for physical and mental health and is widely discussed and confirmed. Most people know the importance of exercise to the body, but there are very few people who really have exercise.

**Comments**

The health bingo game held this time is short-term and free to participate. For the medical staff in shifts, only a small number of people participated. The authors suggest that a 24-hour sports venue can be set up to promote the health of the medical staff, and the habit of frequent exercise is encouraged.

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**Exploring the Correlation between Self-rated Health and Health Promotion Behavior among Nurses**

**LAI Hsueh-Chen**

**Introduction**

Nurses are frontline workers in the hospital who must endure higher stress levels in maintaining and promoting public health. Nurses play a critical role in health promotion, and their self-rated health is closely related to individual health promotion behaviors.

**Purpose/Methods**

Exploring the correlation between nurses’ "self-rated physical health," "self-rated psychological health" and health promotion behaviors. The study has adopted the cross-sectional research design, utilizing structured questionnaire as the measurement instrument, producing an effective sample size of 511. Pearson correlation coefficient analysis was carried out.

**Results**

Self-rated health dimensions such as physical health and psychological health exhibited positive correlation ($p < \alpha = 0.01$), while the correlation coefficient between different items is greater than 0.4 ($0.451 \sim 0.738$), therefore it can be used to evaluate and explain its correlation with health promotion behaviors.

**Conclusions**

Self-rated health affects an individual’s faith and willingness in health promotion behaviors; self-rated health is closely related to a person’s ability to adapt to pressure, interpersonal interaction, support system and health promotion behavior.

**Comments**

Nursing practitioners are one of the important human resource assets of the Hospital and they are successful leaders in health promotion with actual practice and provision of high quality healthcare services.

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**Exploring Factors Affecting Nurses’ Health Promotion Behavior**

**LAI Hsueh-Chen**

**Introduction**

Nurses are the most numerous and most important human resource in hospitals. As the guardian and promoter of health for people, they must lead by example with their health promotion behaviors in order to become successful health promoters and provide high quality healthcare service.

**Purpose/Methods**

Exploring which demographic variables affect nurses’ perception of health promotion behavior. The study has adopted the cross-sectional research design, utilizing structured questionnaire as the measurement instrument, producing an effective sample size of 511. One-way ANOVA was carried out.

**Results**

In terms of age, health promotion behavior differs significantly between those aged 40-49 and those aged 20-29; in terms of marital status, health promotion attitude differs between those who are married and those who are single; in terms of hospital service seniority, daily work conditions in the work environment
Conclusions
Out of 12 demographic variables in the research sample, 6 variables affected the nurses’ perception of health promotion behavior, including age, marital status, job category, job title, service seniority in the hospital, and average monthly salary.

Comments
Nursing practitioners are one of the important human resource assets of the hospital and they are successful leaders in health promotion with actual practice and provision of high quality health care services.

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E-Posters: Integrating health services and social services

The City Hospital Home-based Care: Your trust, our love, home-based palliative care connects our hearts

WU MENG-PING, FENG RUNG-CHUANG, WOUNG LIN-CHUNG, HUANG SHENG-JEAN

Introduction
Since 1992, The Hospital has started to establish the home-based nursing, and those who accept the service are the patients discharging from the hospital, residences living in the long-term care facility and have been expanded into long-term care 2.0, and the patients referred from home-based medical integrated care. In light of the fact that Taiwan has been an aging society in 2018 and has found that the needs of home-based palliative care have reached 90%.

Purpose/Methods
The planned a series of seamless connecting home-based palliative care service to understand the follow-up care needs of the patients through the discharge planning service. Before discharging, the care team and the family members will have a discharge planning meeting altogether to reach a consensus concerning the connecting follow-up care. After returning home, according to the patients’ needs.

Results
We had trained 267 integrated professionals to obtain Class A and Class B home-based palliative care licenses. Through family communication meetings promote the signed DNR ratio is 84.78% for home care cases in 2017. We The care team provides the patients with comfortable nursing and symptom relief during the stable stage, increasing home visit frequency during the end-of-life stage, 24/7 phone consultation service and continuous care in order to relieve the patient’s discomfort before the patients pass away.

Conclusions
With the 5W care, the patients and their family members’ physical and psychological burden can be reduced and let the patients accomplish their dreams to have a death at home with their family members and the team by their side.

Comments
We had trained 267 integrated professionals to obtain Class A and Class B home-based palliative care licenses. Through family communication meetings promote the signed DNR ratio is 84.78% for home care cases in 2017. We The care team provides the patients with comfortable nursing and symptom relief during the stable stage, increasing home visit frequency during the end-of-life stage, 24/7 phone consultation service and continuous care in order to relieve the patient’s discomfort before the patients pass away.

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Establishing a Home Care Medical system in the community for ageing the different culture

CHENG-CHIH Kao, WE-FENG Wu, CHIEN-LIANG Lin, XING-RONG Song, YU-TING Chen, FEI-YEN Tsai

Introduction
Pingtung county geographically long and narrow with its population aging up to 16.34% (135127/826779) in October (2018). Pingtung population consists of different ethnic groups such as the aborigines (Paiwan and Rukai), Minnan / Hakka with different cultural backgrounds. Each ethnic group have different ways of treating diseases. Through community clinics, medical support, the patients could get the right medicine with increased accessibility at the same time.

Purpose/Methods
Pingtung Christian Hospital connects 50 clinics and 18 home care centers, spread over the townships. Through these cooperation points, we provide continuous medical care for patients with different cultural backgrounds after returning home from acute post-medication together. Because the community clinics work with home care clinics based on patient needs and provide home care and provide appropriate and diverse cultural home care services. We uploaded medical information to the health insurance cloud and provide the patients with different culture care.

Results
Our Home Care Medical system is provided, and the patients in the remote areas and Aboriginal tribes got continuous medical and good medical care. Therefore, we completed to support a total of 416 cases in 2018. It was mainly distributed in 6 Aboriginal towns and towns, 178 (42.79%, 178/416), and 24 in remote areas (5.77, 24/416). This medical network provides medical and health education help them to get continuous medical care. They are more likely to have health promotion opportunities.
Conclusions
The medical process may be the same, but the most important is to provide appropriate medical care based on different cultural backgrounds, especially at the Home Care Medical. Beside the community medical care according to different cultures, our association wish to cooperate and set the health literacy. In addition to disease improvement, they can also give them and their families health promotion opportunities.

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"Let Me Tell You About My Working Experience": Health Care Provider's Self-Disclosure as a Mentor in Career Development Education in the Elementary School

LEE Jaekyung, OH Bumjo , HEO Eun Young, KIM Sookyung, SON Jiyeon

Introduction
Community hospital is required for more roles in social services and active participation and communication is essential. Career development education from an early age is becoming more and more important in South Korea, and field participation at all schools is welcome. In addition to health care services, we face challenges as role models and mentors for the next generation in our community.

Purpose/Methods
A lecture for career exploration was requested from an elementary school in Geumcheon-gu district, Seoul, South Korea. Forty-three healthcare professionals in Boramae Medical Center participated in the preparation of self-disclosure materials for elementary school students in the lower grades. Participants understood the purpose of the lecture and the audience character and voluntarily filled out the questionnaire with subjective questions. The questionnaire was recruited without nomination but with brief description of the work experience they are currently on.

Results
30 physicians, 9 nurses, 3 medical technicians, and a pharmacist participated. The average working experience was 11.0 years (2-21 years). Participants set the vital qualities for healthcare professionals such as endurance, prudence, compassion, precision, endless learning and agility. They valued the medical job as altruistic, professional, rewarding and high in job satisfaction. Disadvantages were high labor intensity, overtime, mental/physical stress, work and stress out-of-hours, heavy responsibility and the sacrifice of family and free time. They also delivered encouraging message to the young would-be medical personnel.

Conclusions
In this program, we prepared mentoring from experienced medical personnel by collective self-disclosure materials for the children's career development education. It not only provides vivid counseling on the profession, but also provides the objective and balanced self-image of healthcare professionals at the eye level of lower grade elementary school students.

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The prevalence of skin disease in prisons in Taiwan: A Nationwide Population-based Study

TUNG Tao-Hsin, HSIAO Yi-Ying, CHI Ching-Chi

Introduction
The prevalence of skin disease among prisoners has been re-searched in some countries around the world but never previ-ously in Taiwan. This study is conducted to estimate the preva-lence of skin disease by gender in a nationwide sample of prison-ers in Taiwan.

Purpose/Methods
This was a descriptive and cross-sectional study. The sample was composed of sentenced prisoners in Taiwan, who insured a sin gle-payer National Health Insurance program and sought medical advice during January 2013 to December 2013. 82,650 prisoners were eligible for the study; 8,520 (10.31%) prisoners were female and 74,130 (89.69%) prisoners were males. Skin disease were assessed with the clinical version of the International Clas-sification of Diseases, Ninth Revision. Statistical analysis was con ducted using the SAS version 9.4 (SAS Institute Inc., Cary, NC, USA).

Results
The prevalence of skin disease was estimated 57.47%, and the prevalence of skin disease among female prisoners was 51.42% and 58.16% in male. Among all cases that were diagnosed with the contents of skin disease, contact dermatitis and other ec zema was the most frequent disorder (total: 38.54%, female: 3.27 %, male: 35.27%) followed by other cellulitis and abscess (total: 13.76%, female: 0.63%, male: 13.13%), pruritus and re-lated conditions (total: 12.52%, female: 0.8%, male: 11.72%), carbuncle and furuncle (total: 9.92%, female: 0.29%, male: 9.63%), urticaria (total: 9.3%, female: 1.05%, male: 8.25%) and diseases of hair and hair follicles (total: 8.69%, female: 0.66%, male: 8.03%).

Conclusions
A substantial proportion of prisoners reported having skin dis-eases. The results suggest that a much wider need for improving services, including community services for this group.

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The application of acupuncture in International medical service during Mexican earthquake

JUAN YINGHSU
Introduction
Medical supplies for patients should not be confined in the hospital. Every time, when the disaster happened, Buddhist Compassion Relief Tzu Chi Foundation immediately provide material and medical assistance, including emergency department, physician and surgical departments, the most special is that we provide acupuncture treatment. Acupuncture is a kind of treatment recognized by the WHO. It is characterized by cheap and fast curative effect.

Purpose/Methods
An earthquake with a magnitude of 7 on the Richter scale hit Mexico in 2016/09/19. Many buildings were collapsed, and many local residents were crushed by the collapse of brick and cement, resulting in joint pain, muscle soreness, and even mood disorder, insomnia, headache and other symptoms of post-traumatic syndrome.

Results
Tzu Chi Hospital has organized a number of large-scale free clinic to help the victims. We provide integrated medical care for Western medicine, dentists and Chinese medicine. Treatment experience in Mexico has symptoms such as headache, insomnia, muscle pain, joint soreness, gastrointestinal discomfort and so on. We also go to the houses to visit the patients who cannot go out but need help.

Conclusions
The safety and efficacy of acupuncture plays an important role. Acupuncture can help to treat diseases by only one needle. In the process of acupuncture, acupuncturists can spend a lot of time listening to the victims. The Tzu Chi Foundation has provided humanitarian assistance in a wide range of countries on 5 continents, with international experience in disaster relief.

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Establish a strategic alliance cooperation model to build a comprehensive medical health care network

LI Wan Chen, CHEN Yi Ching, TSAI Chun Chi, LIN Ching Cheng

Introduction
In order to ensure the effective distribution of medical resources and the convenience of treatment, the Ministry of Health and Welfare promotes the implementation of medical grading and strengthens the referral system. Our hospitals provide innovative and specific modes of collaboration by integrating different levels of medical institutions in the community, including regional hospitals and clinics.

Purpose/Methods
The integrated information system was set up in the cooperative medical institution to allow physicians to directly inquire about patient-related inspection reports or disposal. Through drug integration assessment, it can ensure that people can get high-quality medication and consistent care even if they’re treated in different medical institutions. Additionally, operating in an open hospital model, the clinician can offer the integrated outpatient service for patients in the hospital and use the hospital resources to perform surgery and examination.

Results
The new strategic alliance cooperation model has gradually introduced various promotion measures since 2018, and regularly monitors and reviews the effectiveness of two-way referral and resource utilization. The results showed that the referral person of Q1-Q4 in 2018 increased by 75%, 103%, 77%, 169%, compared with the same period of last year. Furthermore, contract physicians open two outpatient service a week, each clinic is about 23 outpatients, with an average of 3 operations per month.

Conclusions
Through the strategic alliance cooperation model, chronic patients with stable disease can be transferred to a nearby primary medical institution for treatment; clinicians can use the hospital resources for surgery, and patients can be referred to a nearby clinic after discharge, will achieve medical treatment convenience and graded medical win-win effect. Through the hierarchy of medical care support model, medical resources can be more effectively utilized to provide patient-centered overall care services.

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The Impact of Clinical Pathways Applied in Thyroidectomy on Medical Resources Utilization

PAN Li-Fei, CHENG Jin-Shiung, LIN Wender

Introduction
Impact of Clinical Pathways Apply in Thyroidectomy on Medical Resources Utilization. We performed the analysis by controlling the effect of the characteristics of the patient, disease and physician. Aimed to evaluate the utilization and the variance of the medical resource after the application of the clinical pathways for the thyroidectomy.

Purpose/Methods
A total of 376 case-payments of the thyroidectomy were evaluated. Study resource was retrieved using the claims database of a medical center including the information of the hospital insurance payment, the detail of the medical records and the physician profile. This observation study of repeated design was performed to compare before and after the application of the clinical pathways with the department of the General Surgery and the control group, the department of the Otolaryngology.

Results
After the application of the clinical pathways, the reduction in length of stay (51.3%) and in medical expenditure (14.9%). Moreover, the medical resource utilization in the department of otolaryngology without application of clinical pathway was significant higher than the department of General Surgery with the application of clinical pathway. In thyroidectomy with application of clinical pathway significantly decreased than before the
application of clinical pathways and was also lower than the otolaryngology group without application of clinical pathways.

Conclusions
That after the application of the clinical pathways, there was a significant decrease in length of stay and in medical expenditure. Further studies are suggested to look more in-depth into the relevant issues on the real cost-effectiveness and the cost transfer to the Outpatient Department.

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"Cardiac rehabilitation exercise combined care" enhances the effectiveness of cardiac rehabilitation exercise during the cardiac surgery post-operative care in the intensive care unit

CHEN Hui-Ching, SHIH Meng-Ling, LIAO Yu-Mei, HUANG Qiao-Ying, CHEN Yi-Jen, CHENG Cheng-Chang

Introduction
Low physical fitness often leads to poor prognosis and longer intensive care unit (ICU) stay after cardiac surgery. During year 2017, observed low performance of cardiac rehabilitation during the cardiac surgery post-operative care in the ICU of our hospital. The percentage of patients achieving exercise equivalent of 3.0 METs was low as 20%. We aim to design a cardiac rehabilitation exercise combined care plan to improve the effectiveness of cardiac rehabilitation performance during the post-operative care in the ICU.

Purpose/Methods
Through the decision matrix analysis and multidisciplinary care to re-adjust the care process, the cardiac rehabilitation exercise combined care plan was implemented. The following strategies were used: (1) The physiotherapist teaches the nurse how to perform the bedside cardiac rehabilitation exercise program; (2) Establish the "postoperative cardiac rehabilitation exercise program care guide delivery schedule" for clinical use; (3) purchase relevant equipment to facilitate the nurses in assisting rehabilitation exercise program; (4) hold education courses and group education activities monthly.

Results
From January to June 2018, 65 open-heart surgery patients received post-operative cardiac rehabilitation exercise combined care. The results showed (1) The achievement rate of 3.0METs exercise tolerance increased from 20% to 92.3%; (2) The patient's blood oxygen saturation at room air improved from 90%~92% to 97%~99%; (3) The average length of ICU stay decreased from 8.5 days to 5.7 days, and reduced medical cost approximately USD 370 for each patient.

Conclusions
Post-operative cardiac rehabilitation exercise combined care can significantly improve the clinical outcomes of open-heart surgery patients in our hospital during the post-operative ICU care, increase the quality of care, shorten the length of ICU stay and reduce the medical expense.

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A Model to Curtail Interval Between Discharge and Long-term Care-- In a Regional Hospital in Southern Taiwan

LIN Chun-Ling, HUANG Yi-Ju, CHEN Pi-Hsueh, TSAI Ming-Wen, CHEN Ia-Ling

Introduction
65-year-old elderly and above, 88.7% of them are suffering from a type of chronic disease, and, generally, they are also faces dysfunctions of their body. (Health Promotion Administration, 2015). Long-term care is one of the main objectives of our policy, but patients can only apply for long-term care after being discharged. The waiting time for long-term care is up to 4 weeks, so it prevents the services of long-term care from achieving the expected benefits.

Purpose/Methods
Case manager asessment long-term demand, medical care group initiates a discussion and integrating discharge plan, and then is submitted to an information platform. The patient can acquire Care service within 1 to 3 days after discharge. After discharge for 1 week, the case manager will follow, through telephone interview, the situation of the patient and investigation and advice by family about the execution of long-term care. All of this is to curtail the interval between discharge and long-term care.

Results
From June to December in 2017, there are 26 referred patients who took part in the interval-curtailed model. The services provided mainly include 26 home care cases, 5 home medical service cases, 6 home recovery cases, 11 respite care cases, and 8 meal provision cases, and the rate of implement is 87.5%. After the intervening, the loading degree of caretaker decreases from 8.4 to 4.2, and the satisfaction index for the interval-curtailed model is 4.3.

Conclusions
The model since August 2017, not only provides availability, usability, selectivity, and acceptability, but also provides continuous long-term care, shortens waiting time, improves quality of life, decreases the opportunity of unnecessary return to the hospital, enhances the basic medical care, and raises the capability of home care. Also, it realizes the aging in local place and increases the health and quality of life of the patient and family.

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Medical arrear and associated factors of bad debts in hospital

WANG Chia-Hui, CHEN Tzu-Ying, SHEN Szu-Ching

Introduction
The medical arrear is an important issue for the operations management in the hospital sector. The hospitals should be find an effectively method to reduce bad debts; Otherwise the hospitals might appear operational risks. Therefore, the hospitals should be change operating model and master new management trend and thinking as well as how to improve traditional operating model will be critical for the hospitals to achieve success.

Purpose/Methods
This research was to describe the status of medical arrears of patients, and try to put forward corresponding measures. The main of this research was conducted to document relations between on medical arrears and revisits of patients. This research was using the retrospective analysis, and the database was focus on 2011-2012 outpatient and inpatient at regional hospital in southern Taiwan.

Results
The results of this study showed that the repayment rate of females and elderly people were higher than males and young people. The results also showed that the patient arrears should be not affect revisits to the same hospital, but the patient may be possible consider the location or convenience of the hospital.

Conclusions
This research suggested the administrators of hospital should be developing strategies for medical arrear of males and young people. The results also showed that the patient arrears might appear operational risks. Therefore, the hospitals should be change operating model and master new management trend and thinking as well as how to improve traditional operating model will be critical for the hospitals to achieve success.

Report on our efforts of child abuse control team for one year since our inception in our hospital

TANAKA Yoshie, ARAKUMA Tomohiro, AKIYAMA Ayako, HIDEOKA Wakako, TAKADA Ayano, SATO Mizuki, TAKEMOTO Kozo, ITO Chiaki, KOMORIYA Michiko, HIRASAWA Kaoru

Introduction
In Japan, the number of child abuse case has increased year by year, and finally exceeded 120,000 cases in 2016. The number of consultation cases of abuse in Saitama prefecture is the fourth most in Japan. Our hospital is located in Kawaguchi city, Saitama prefecture (population is about 600,000), has 12 beds of pediatric department, about 1,800 outpatient in the pediatric department and about 500 pediatric inpatients a year. In Jan. ‘17, our hospital launched a child abuse control team and report activities for one year.

Purpose/Methods
In addition to responding to cases of child abuse occurring in the hospital, the team actively intervenes in the families who the staff are concerned about. We prepare a checklist of the children and their families who the staff are concerned about and examine the cases at the team meeting held every month. The subject of the checklist are families who the staff are concerned about, those who are suspected abuse, accidents at home that we cannot deny the relation with abuse, and the cases that we need to support child rearing.
The Effects of the Spinning Exercise Intervention among Hospital Workers with Metabolic Syndromes in a Medical Center

TSAI Pei-Shan, HSIEN Tsai-En, CHIU Hui-Ping, MA Hsienjy-Jy, LIN Weir-Sen

Introduction
Many surveys indicate that a majority of hospital workers do not take part in vigorous physical activity, are overweight or obese, and have metabolic syndromes. How to improve this problem more effectively has become an important issue in health promotion hospitals. Spinning is identified as an effective exercise for burning calories. The purpose of this study is to explore impacts of spinning exercise intervention among hospital workers with metabolic syndromes in a medical center.

Purpose/Methods
Thirty hospital workers with metabolic syndromes in a medical center were recruited to participate in the program. Spinning exercise twice a week, nutrition and healthy food promotion courses were included in the program. The intervention was implemented continuously 12 weeks, from April to July 2018. Physical fitness tests and biochemical examinations including cholesterol, triglyceride, HDL-C, SGPT, Ac sugar, creatinine, and uric acid of hospital workers were investigated before and after the program. Comparisons of pre- and post-data were analyzed by proper statistical methods.

Results
Results of this study showed that eleven hospital workers reduce their problems with metabolic syndromes. Biochemical indexes of blood pressure, cholesterol, triglyceride, HDL-C, and Ac sugar significantly reduced (p < 0.05). BMI (Body Mass Index), skeletal muscle weight, body fat percentage, back strength, grip strength, a minute bent-knee sit-up, sit and reach, 3-minute step test were significantly improved (p < 0.05) after the intervention of the spinning exercise program.

Conclusions
Spinning exercise intervention has a significant effectiveness to improve physical fitness for hospital workers with metabolic syndromes. We suggest the program should cooperate with nutrition professionals to control diets. A health promotion program with multiple disciplines can promote hospital workers with metabolic syndromes workers to set up a healthy lifestyle. Through communication, cooperation and integration can make individual health worker change his health promotion behaviors.

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E-Posters: Mental health and psychiatric care

The Effects of oral health promotion program on chronic psychiatric patients: The case of a regional teaching hospital in Taiwan

KUO MEI-WEN, CHANG HENG-MING

Introduction
Oral hygiene is often ignored by psychiatric patients. Studies indicate that poor oral hygiene is a common and serious problem among psychiatric patients and is needed to be prevented and intervened. The purpose of this study is to explore oral hygiene health promotion programs for the effect of improving the dental plaque index, oral hygiene health promotion knowledge, and attitude and behavior in chronic psychiatric patients.

Purpose/Methods
This study used quasi-experimental research design by cluster sampling in a regional teaching hospital, divided into two groups. The experimental group (n = 35) has involved oral health promotion program for three months. The control group (n = 32) only received routine care. The plaque index was recorded with the Plaque Control Index, and the structural questionnaires were collected. The content of the questionnaire was evaluated know the difference between before and after oral hygiene health promotion knowledge, attitude and behavior.

Results
The Plaque Control Index of the experimental group (42.59 ±12.10 %) was significantly improved than the control group (68.93±11.25 %); the knowledge score of experimental group (8.48±1.19) was significantly higher than the control group (4.65 ±2.02, p < 0.001); the attitude score of experimental group (58.59±5.21) was significantly higher than the control group (45.77±5.83, p <0.001); the behavior score of experimental group (8.11±1.28) was significantly higher than the control group (3.84 ±2.13, p < 0.001).

Conclusions
There is a statistically significant difference between experimental group and control group. Indicating that the oral health of patients with chronic psychiatric disorders promote the intervention of the program is indeed effective.
The Effectiveness of Applying Ottawa Charter Five Key Action to Improve the Diabetes Mellitus Problems of Chronic Psychiatric Inpatients

KUO Ya-Jen, TSAI Hui-Ling, LU Huei-Lan, CHENG Ching-Ming

Introduction
The international studies have shown that about 40-62% of psychiatric patients suffering from metabolic syndrome, 38% of patients have diabetes related health issue. The hospital has been continuously monitoring the health status of 289 psychiatric rehabilitation inpatients for a long time, and found that a total of 37 (60.7%) patients' fasting blood glucose was higher than 126mg/dl, 24 (39.3%) patients' HBA1C≧6 or more. The five major action of Ottawa chapter was designed for these 61 patients, and provided effective strategies and education strengthen the ability of patients to recognize health, establish correct healthy living behaviors.

Purpose/Methods
The subjects were fasting blood glucose above 126 and HBA1C≧6 total of 61 psychiatric inpatient. The Ottawa chapter effective strategies included 1. Diabetes policy announcement, to implement various diabetes programs; 2. Applied daily sports table for regular exercise; 3. To handle diabetes health speech in community; 4 incentives for holding activities; 5. To provide individual health meals and diabetes prevention and health education by nutritionist; 6, design healthy exercise; 7. Set up group therapy; 8. Provide regular physical health check; 9. Regularly test physical fitness; 10. Store food calories in the hospital; 11. Provide health check-up services, cross-disciplinary consultations and dietary counseling services. Monitoring data of blood glucose and assessment of the effectiveness of the strategy after 1 year of intervention.

Results
Since September 2016, the five major action plans of Ottawa have been used to improve the effectiveness of diabetes in chronic psychiatric inpatients. Comparison between September 2016 and September 2017, the overall number of patients with HBA1C (glycated hemoglobin)≧6 or above decreased from 24 to 18, a decrease of 25%.

Conclusions
Applying the concept of health literacy to curriculum design through health education, group activities and other strategies, it has positive benefits for diabetes patients' health literacy, health behaviors and self-care ability, in addition to increasing the treatment compliance of diabetes, good control of the disease, chronic diseases prevention, can also reduce the waste of medical resources.

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The healthy consequence of Dissociative Disorder patients: A 14-years Study of 318 Cases in Taiwan

TSENG Yuan-Tsung, TSAI Cheng-Jung

Introduction
Mental diseases and Pain symptoms frequently occur together. The objective of this study was to investigate the effects of Dissociative Disorder and pain on the impairment of daily functioning and pain of Dissociated patients.

Purpose/Methods
From the National Health Insurance Research Database (NHIRD) of Taiwan, we identified 318 Dissociative Disorder patients newly diagnosed from 2000 to 2013 between non-mental Disorder comparisons frequency matched with age, sex, and Charlson comorbidity index; CCI, excluding those with confounder factor at the baseline. Among the Dissociative Disorder, 318 patients were Dissociative Disorder and the rest of 1272 cohort without mental Disease. Data were collected from the treated cohort for a mean period of 7.25 years and from controls for 7.50 years.

Results
In comparison to the non-Dissociative Disorder group, the Dissociative Disorder group had a increased risk of developing Half body paralysis [the adjusted relative risk (RR): 1.76and 95% confidence interval (CI) = 1.24–2.48]. The lumbago had a RR of1.33(95% CI=1-1.75). The Back pain had a RR of 1.62(95% CI=1.18-2.24). The Migraine disease had a RR of 2.5(95% CI=1.55-4.03). The sleep disorder had a RR of 4.13(95% CI=3.2-5.34). The Carpal tunnel syndrome had a RR of 1.61(95% CI=0.94-2.74).

Conclusions
Analysis of daily functioning risks showed that Dissociative Disorder groups with elevated higher risks of daily functioning living. No studies have investigated the risk of developing Dissociative disorder between daily functioning consequences in social communication. The aim of our study was to evaluate the association between Dissociative Disorder and Pain using national database of outpatients. It may help us to determine direct influence on the impairment of daily function.

Comments
We confirm that this abstract has not been submitted elsewhere and all authors have approved the abstract and agree with submission to HPH.

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The Long-term Risk of Suicide and Self-harm with Dissociative Disorder Patients: A Retrospective Study of 318 Cases

Introduction
In Taiwan, few studies explored the morbidity of mental disorders among Dissociative Disorder patients. The purpose of this study has conducted the information on the relationship between Dissociative Disorder and postdischarge suicide.

Purpose/Methods
This study aims to identify the risk factors for suicide among Dissociative Disorder patients in the postdischarge period. We identified 318 Dissociative Disorder patients newly diagnosed from 2000 to 2013 between non-mental Disorder comparisons frequency matched with age, sex, and Charlson comorbidity index(CCI), excluding those with confounder factor at the baseline. The control cohort consisted of non-Dissociative Disorder patients discharged from inpatient care in the same period and were matched to cases for age, gender, and date of discharge.

Results
There were 318 and 1272 cases in the study and control cohorts, respectively. The adjusted Relative risk(RR) for committing suicide during the postdischarge period were 28.61(95% CI=3.51-233.37) greater for patients without previous psychiatric admission. The Drug poisoning had a RR of 4.01(95% CI=0.26-64.28). The Environmental accident had a RR of 1.16(95% CI=0.59-2.3). The Uncertain accident had a RR of 1.16(95% CI=0.59-2.3). The Alzheimer had a RR of 2.82(95% CI=1.19-6.66). The Dementia had a RR of 4.42(95% CI=2.9-6.75).

Conclusions
The higher proportion of Dissociative Disorder patients reported having emergency treatment for suicide and the incidence. The results suggests the necessity of comprehensive assessment and more treatment programs that offer alternatives to mental health for them. With appropriate treatment, they could be successful in addressing the major symptoms of dissociative identity disorder and improving their ability to function and live a productive life.

Comments
We confirm that this abstract has not been submitted elsewhere and all authors have approved the abstract and agree with submission to HPH.

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Working with mental illnesses
LEE Chi Jen, LEE Chia-Sung

Introduction
Working with mental illnesses might mean I have a mental illness or my colleagues have. If it is true, could you accept this situation? In this case report, the author tried to help his colleague who was troubled by the mental illness. This report was suggested the process that was built to help the colleague return to his work. The process was built by an occupational therapist and an occupational safer.

Purpose/Methods
This research was designed as the case report. In this case report, the researcher tried to express the process that was built to help the colleague return to his work. In the process, the therapist helped the colleague back to the stable mood by seeing his psychiatrist regularly. Then, the safer began the interview with the colleagues who worked in the same office with him. After all, they design a training course for setting him in the new work.

Results
At last, the colleague is working on the new work. It might be mean the case success. Then, the researcher suggested two points that are needed to consider. One is the relationship between the case and the case’s colleagues. The other is the case’s abilities and interest.

Conclusions
In many references, the scholars suggested the meeting with returning to work was needed to make the consensus between the departments, but how to do? No clear ideation was suggested. In this research, the author wanted to suggest the process that assists to makes the consensus between departments and to help the colleague who has an occupational disaster.

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Factors affecting time to suicidal resolution for depressed inpatients during acute treatment with fluoxetine

LIN Ching-Hua, SU Shu-Fang, CHOU Li-Shiu, WANG Fu-Chiang, HSIEH Shing-Chen

Introduction
Suicide is the most serious complication of a patient with major depressive disorder (MDD). Determination of predictors of suicidal resolution can enhance the effectiveness of suicide prevention. We aimed to determine which baseline clinical variables affected time to suicidal resolution for MDD patients during acute treatment with fluoxetine.

Purpose/Methods
A total of 131 acutely ill MDD inpatients were enrolled to receive 20mg of fluoxetine daily for 6 weeks. The level of suicidality was rated using the HAMD-17 suicide item (Item 3) at each visit. Subjects reporting at least one post-baseline assessment and a suicide item score >= 1 were included for analysis. The Cox regression analysis was used to analyze factors associated with time to suicidal resolution (i.e., suicide item score = 0) after 6 weeks of acute treatment.
Discussion on the process of improving the quality of nursing care for the elderly in the psychiatric Geriatric Day Care

SHU-FEN Chen, HUEI-LAN Lu

Introduction
Psychiatric elderly patients in addition to mental illness affect life, more importantly, more than 95% of a variety of physical diseases require treatment; the function of elderly hospitals during the day includes maintaining stable disease, slowing down functional deterioration, improving quality of life and providing family members to wheezing. This study explores the related effects of the psychiatric elderly during the day to improve the quality of hospital care.

Purpose/Methods
A sample of 85 elderly people in a psychiatric teaching hospital in southern Taiwan was selected for a day-to-day study. The data from January 2017 to June 2018 were collected by cross-sectional study. At the beginning of the period, the quality of care indicators and quality monitoring were implemented. During this period, the medical team discussed the quality of care topics on a case-by-case basis, and discussed various medical care issues in southern Taiwan was selected for a day-to-day study. The data from January 2017 to June 2018 were collected by cross-sectional study. At the beginning of the period, the quality of care indicators and quality monitoring were implemented. During this period, the medical team discussed the quality of care topics on a case-by-case basis, and discussed various medical care issues with family members based on the principle of medical decision-making sharing. The data were regularly tracked and collected, and the SPSS18.0 software descriptive statistical analysis was used to analyze the average number, percentage, standard deviation, T-test, and to sort out the quality index results and adjust the intervention plan.

Results
After 1 year and 6 months of hard work, the results of the quality indicators are monitored every 6 months: the number of violent attacks dropped from 2 to 0, the number of falls fell to 3, and the problem of physiologic problems in the discharge of foreign doctors was reduced from 55% to 46%, the number of infectional contral groups was 0, the number of non-fake hospital lost was 0, and the number of misplaced drugs was 0.

Conclusions
Routine suicide risk assessments and determination of predictors of suicidal resolution may result in earlier intervention with appropriate therapy to increase the likelihood of a successful outcome. More studies are needed in other real-world settings to generalize our results.

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A Preliminary Study on the Application of Horticultural Therapy for Stress Relief of Rehabilitative Psychiatric Patients

LIN Yi-Chun, LIN Yi-Jhen, LI Pei-Shan, LU Huei-Lan, CHENG Ching-Ming

Introduction
This study probes into stress relief skills by using horticultural therapy in a psychiatric rehabilitation ward.

Purpose/Methods
The subjects of the study are ten rehabilitative psychiatric patients. They were led by a horticultural therapy group twice a week in two months. Through hands-on gardening experiences and guidance of the group, the cohesiveness of group members was fostered, the learning motivation was strengthened, and stress relief skills were enhanced. The research instruments included the personal information form, the table for curative factors of group therapy, and group satisfaction survey. Meanwhile, stress index questionnaire, self-learning satisfaction scale were employed to assess the effects of horticultural therapy. The course of each therapy group session was recorded and analyzed. Therapy plan was modified so that the horticultural therapy could meet the needs of the clinical treatment.

Results
After eight-week horticultural therapy, the results show: 1. The participation rate was 100%. 2. Stress index among group members decreased from 33.8% to 16.8% after 2 weeks. 3. The group satisfaction rate rose from 80% to 90.2%. The members provided positive feedback like “As the plants grow, I seem to have a new lease of life.” “Gardening makes me relaxed.” “I can be the master of my own life.” “I have a sense of achievement and I want to share with others how I relieve my stress.” The group leader also noticed the mutual support and learning within the group. The application of horticultural therapy not only helped members develop...
self-awareness, confidence, but also indirectly enhanced medical nursing quality. The horticultural therapy has a positive effect on clinical medical care.

Conclusions
The horticultural therapy motivates the members to participate and review their mental status. The group enables the members to strengthen ability to handle stress, to develop self-acceptable and confidence. The members are thus relaxed and surrounded by good emotions. The overall progress is conducive to the enhancement of psychiatric nursing care. Also, it is beneficial to rehabilitative psychiatric patients' happiness and health.

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Exploring the effectiveness of the emotional management training group on the day of hospitalization in the psychiatric department of Taiwan

TSAI YA-PING, CHEN SHU-FEN, LU HUEI-LAN, CHENG CHING-MING

Introduction
To explore the relevant effects of participation in emotional management groups in a day-to-day hospital in a psychiatric hospital in southern Taiwan

Purpose/Methods
21 cases of self-identified self-emotional management ability, from April 7 to June 30, 106, every Friday from 10:00 to 11:20, participation rate: 91%, high homogeneity, including: Sharing, demonstration, situational exercises and role-playing methods to develop response strategies

Results
The case is "I often know that my emotional changes, I think that bad mood is related to my thoughts, that any bad things have a good side, and that I have a way to effectively improve my bad mood." Significant progress before group training

Conclusions
Through such group training, we help cases develop self-management emotional methods so that they can better manage their emotions, foster higher social adaptability, promote interpersonal and family harmony, and smoothly return to the community to implement the community medical spirit

Comments
This article is written by myself, without plagiarism

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Use Music as Means and Ends for Adults with Mental Illness

KAO Ting, LU Hui-Lan, JHENG Jing-Ming

Introduction
Studies have shown the power of music in the rehabilitation process to help clients with neurological impairments to cope with anxiety, depression, and cognitive decline. Playing musical instruments in a group not only helps self-expression and stress releasing but also provides an opportunity for social interaction. However, evidence is scarce on use of music as a therapeutic medium in occupational therapy intervention for client with mental illness. This study aimed to use a ukulele band as a therapeutic medium to understand psychosocial determinants of occupation and to explore the therapeutic effects of adults diagnosed with serious mental illnesses.

Purpose/Methods
This study used mixed methods. Six participants aged between 30 and 50 were recruited from the psychiatric center in Taiwan and participated in the ukulele band once a week for six months. Each session included an 80-minute lecture and a 60-minute practicing time with group members. Post-tests were administered after they completed 24 sessions. Assessments included a satisfaction questionnaire, the WHOQOL-BREF-Taiwan Version to measure quality of life, Rosenberg Self-esteem Scale, and Chinese Version Yalom's group Therapeutic Factors. Semi-structured interviews were conducted individually to understand participants’ experience.

Results
Results showed that the participants’ quality of life was at a moderate level and their self-esteem was better than the norm. Based on Yalom’s inventory, majority of the participants ranked the interpersonal output the highest therapeutic factor followed by instillation of hope and group cohesiveness. Interestingly, family re-enactment was ranked the lowest factor. In the individual interviews, they pointed out that they enjoyed playing ukulele with each other, made good friends in the group, and could use ukulele to release stress.

Conclusions
This study highlights practitioners’ creativity in the process of using music in therapy and demonstrates the way our profession helping people engage in valued occupations that contribute to their health and well-being. However, the limitation of the study lacks the pre-test to compare the post-test, which could be improved for further research.

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The Research on Relationship between Demoralization and Suicide Tendency In HIV-infected People

WANG Mei-Shu, TSENG Haunn-Tarng, FANG Chun-Kai, LEE Shu-Chen
Introduction

Studies indicate that in the after-HAART period, the rates of suicide actually increased in HIV-infected population. The biggest problem currently faced by HIV-infected people have been medication adherence, psychological stress, and social adjustment problems issues due to AIDS. The main purpose of this study was to understand the relationship between medication adherence, social support, demoralization and suicidal tendencies in HIV-infected people to achieve suicide prevention.

Purpose/Methods

This is a cross-sectional study, the participants are adult HIV-infected people over the age of 20 from the hospital infection outpatient in northern Taiwan. The structured questionnaire content contains basic demographic attributes, medication adherence and social support characteristics, demoralization scale and suicidal tendency scale. Data is analyzed by descriptive statistics, T-test, ANOVA, pearson’s roh correlation with SPSS 19.0.

Results

This study found that HIV-infected people generally have a higher degree of demoralization. HIV-infected people who female, have commodities, hepatitis C and depression have higher rates of demoralization and suicidal tendency, and people who were infected HIV by drug addiction had higher suicidal tendency. Those who lower medication adherence and social support had higher demoralization and suicidal tendency. There was a moderate positive correlation between demoralization and suicidal tendency, and which has the most relevance of meaninglessness.

Conclusions

HIV-infected people who female, have comorbidities, hepatitis C, depression and infected by drug addiction have higher demoralization and suicidal tendency, and lower medication adherence. The recommendations can be classified as clinical preliminary screening of the reference basis to achieve suicide prevention.

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The Effects of Forest Healing Activities on Rehabilitation of Chronic Mental Illness Patients

LIN L.-E., TSAI M.-H., PENG Y.-C., CHEN P.-J. MA C.-Y.

Introduction

Chronic mental illness patients suffer from prolonged disease courses, functional deterioration, and negative perceptions from others, rendering them unable to complete self-integration in their life development tasks and affecting their physical and mental illness. Thus, this study mainly explores the effects of forest healing activities on the physical and mental rehabilitation of community chronic mental illness patients.

Purpose/Methods

A quasi-experiment design was adopted; and patients at two rehabilitation homes affiliated with a psychiatric hospital in Taiwan. Forest healing activities were formulated referencing the principles proposed in the literature and rehabilitation connotations. Included contents were forest activities and structural guidance, as well as 12 weekly group sharing sessions on feelings of health, psychology, social relations, and self. Evaluation was used of structured questions before enrolment and at the 13th and 17th weeks. Data analysis use generalised estimating equations.

Results

During the enrolment period from June 2016 to December 2017. Seventy people completed the measurement, 35 in each of the experimental and control groups. The experimental group had significant between the two groups in the interaction of “resilience” among the three time points pre-test, post-test (B = 14.57, p< .01) and follow-up test (B = 22.89, p< .001).

Conclusions

Forest healing activities have positive influences on health. With guided sharing through group activities, chronic mental illness patients can undergo physical and mental rehabilitation. Forest healing activities are conducive to the self-integration of chronic mental illness patients, thereby enhancing their self-acceptance, and can be used as a reference for Hospital Health Promotion Policy.

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Reduce the rate of violent injury in psychiatric acute wards

TASI Shu-Fen, CHIOU Hsiao-Tan, LU Huei-Lan

Introduction

2017 Taiwan Sickness Announcement, most of the psychiatric hospital injuries, the unit’s psychiatric acute ward, 107 years from January to April, the report of illness, 63 cases of violence, in the process of violent medical treatment, the patient and employees reached a moderate injury rate of 0.32% 12 pieces, which is higher than the hospital’s target of 0.13%.

Purpose/Methods


Results

In May-November, 107, the number of violent cases was 25, and the injury rate was 0%. Compared with the 1-4 month, the violent injury rate was 0.32%, which significantly improved the violent incident injury rate.

Conclusions

In May-November, 107, the improvement strategy was carried out. The patients learned by relaxing techniques, and the team members improved the violent prevention and disposal process to effectively reduce the rate of violent injury.
To Reduce the Incidence of Violence in Psychiatric Acute Ward by Using Hendrickson's Relaxation Method

TASI Shu-Fen, CHIOU Hsiao-Tan, LU Huei-Lan

Introduction
Taiwan patient-safety reporting system revealed psychiatric patients' violence was the first in 2017. Violence in our ward, a psychiatric acute ward, was 63 and the incidence was 17.34‰ since January, 2017 to August, 2017. The data in 2017 was higher than the data in 2016 which violence was 41 and the incidence was 3.79‰. Therefore we used Hendrickson's Relaxation Method in our ward to reduce the incidence of violence.

Purpose/Methods
Hendrickson's Relaxation Group: 1. 6 inpatients whose violence checklist was more than 1 point participates the group twice a week, total was 8 times. 2. The group uses Hendrickson's Relaxation Method. 3. We use Beck Anxiety Inventory to explore the difference before and after and the incidence of violence in our ward.

Results
The violence in our ward was 25 and the incidence was 5‰ from May, 2017 to November, 2017. Compared with the data from January, 2017 to August, 2017, the incidence of violence from May to November deduced significantly; Beck Anxiety Inventory showed the overall average score reduce from 25 to 10 which revealed the anxiety and reaction was improved effectively.

Conclusions
We used Hendrickson’s Relaxation Method to reduce incidence of violence in May, 2017 to November, 2017. Patients improved anxiety and violence behavior effectively by learning relaxation skill and the incidence of violence in the psychiatric acute ward deduced significantly.

Using Self-Management to Improve a Return to Work Preparation for Breast Cancer Survivors

MO CHUN-HAN, LEE LI-CHUN, WANG MEI-HUI, HSIEH PEI-CHI, CHUANG SHU-TING, CHIEN SOU-HSIN

Introduction
Breast cancer is the most commonly occurring cancer in women and the top ten cancer overall. With the medical progress, breast cancer patients have a survival rate of about 84% in five years. However, it was found that many things need to be adjusted when breast cancer patients return to the workplace. This study used a variety of assessment scales to identify patients’ problems and stress.

Purpose/Methods
This study was evaluated by the Ferrans and Powers “Quality of Life Index, QLI” scale project. We found that the patient’s three assessment scales in BFI-TaiwanForm, Body Image Visual Analogue Scale (BIVAS). All the three assessment scales of FoP-Q-SF were abnormal. Therefore, then we evaluated the patient’s physical, psychological and social issues of the case. After the assessment, we referred the case to the Department of Health Education and Supportive Group for counseling.

Results
In the evaluation case, the BFI-TaiwanForm score decreased from 6.6 to 2.9, the BIVAS score increased from 25 to 80, and the FoP-Q-SF score decreased from 46 to 24. The patient was followed up by the clinic. The patient said that she has returned to the workplace, receiving both psychological satisfaction and financial support.

Conclusions
Having the patient learn self-planning skills for preparations for returning to the workplace. Thus, patients gradually reduce physical fatigue and establish a positive mental state of returning to the workplace, enabling patients to learn the knowledge and ability of cancer coexistence, getting their life on the right path and returning to the workplace.

The effectiveness of case management using Ripple cards on the prevention of suicide reattempt within three months during crisis intervention for suicide attempter in community

HSU Fu-Nung, LU Huei-Lan

Introduction
There are many factors that can cause middle aged women to commit repeated suicide. Emotional sensitivity, low frustration tolerance, economically disadvantaged, and broken marriage. The hospital has been connect with local health authorities to work together for suicide prevention and health promotion since 2010. The full-time community caring visitor began to involve in
Purpose/Methods

This is a randomized controlled trial designed to evaluate the effectiveness on the prevention of reattempted suicide in the case management without Ripple cards cases (n = 30) compared to case management with Ripple cards cases (n = 30) over a 3-month intervention. Research started from July, 2017 to Aug. 2018. The measurement included the Beck Depression Inventory (BDI), Suicide Attitude Questionnaire (SAQ), and the value of the statistical analysis of suicidal behavior in 3 months before and after the case management.

Results

Result indicated that subsequent suicide behaviors, severity of suicide risk, depression, anxiety, and hopelessness were reduced more in the Ripple card intervention cases compared to the case management only cases. 1. In the part of SAQ, the case management with Ripple cards cases test the protest is 41, compared with the pretest, all decreased by 65%. 2. There is not much difference between the two values of case management without Ripple card cases (protest is 62, pretest is 69)

Conclusions

Through the application of Ripple cards, the researcher tried to help the people suicide reattempt with confused and perplexed in personal problems. Guiding cases to support themselves, creating confidence, strengthening problem-solving skills, and finding the meaning of life. As a method to case management, the Ripple cards have a significant positive effect on reducing the risk of repeated suicide.

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Preliminary Study on Barriers to End-of-Life Care and Facilitating Factors of Nursing Staff in Intensive Care Units

HSIEH PEI-CHI, WANG MEI-HUI, HO YU-PING, WANG CHAO-LIN, HUANG MEI-LING, CHUANG SHU-TING, CHIEN SOU-HSIN

Introduction

Taiwan has spared no efforts to promote Hospice Palliative Care. When the nursing staff in intensive care unit faces the end-of-life patients and their families, they must bear a lot of complex inner feelings and a lot of pressure. Therefore, understanding Barriers to End-of-Life Care and Facilitating Factors of Nursing Staff in Intensive Care Units can provide the quality of Hospice Palliative Care.

Purpose/Methods

Using Descriptive Cross-Sectional Study of Chinese version of “ICN Nurse-Perceived Facilitators and Barriers to End-of-Life Care Scale”. There were 150 intensive care unit nurses participating in the questionnaire survey. The questionnaire data were averaged, standard deviation, and ranked to describe the strength of
The nursing staff of the intensive care unit scored from 0 to 5 points on the end-of-life care. In terms of obstacles, “family members’ perceptions of end-of-life care” (4.01 points) was the biggest obstacle, followed by “inconsistency of end-of-life care” (3.69 points) and “social and cultural background” (3.66 points). The facilitating factors were “environment” scored (3.93 points), “experience of end-of-life care” (3.82 points) and “consistence of end-of-life care” (3.71 points).

Conclusions
The major obstacle to the end-of-life patients for nursing staffs in intensive care units was the “acceptance of family members to the end of life.” If family members could not accept that their family members are facing the end of their lives, their attitudes may affect the caregivers’ care for patients, which may prolongs their suffering or pain. The promoting factor is to provide a separate private and dignified environment.

The Empirical Study of Yoga Adjunctive Therapy to Improve Positive and Negative Syndromes of Schizophrenia

TSAI Chia-Ling, HWU Yueh-Juen, YANG Tzu-Ching, YU Chia-Jung, HWU Yueh-Juen, YANG Hsin-Shu

Introduction
The purpose of this study was to investigate the effect of yoga adjunctive therapy on the improvement of positive and negative symptoms of schizophrenic disorders. In the systematic reviews examine the training prescriptions and meta-analysis of yoga adjunctive therapy in schizophrenic patient to compare the effects of yoga, exercise, and conventional treatment on positive and negative symptoms of schizophrenia.

Purpose/Methods
According to empirical research, we process from the formation of problems, literature search, screening of literature, literature quality evaluation, extraction integration and evaluation of results. And search for related literatures in The Cochrane Library, PubMed, CINAHL, Medline and Taiwan Master’s Thesis System, Taiwan Journal Paper Index System, Airiti Library Huayi Online Li-brary, etc. before May 2018. Search for keywords: Schizophrenia or schizoaffective or psychosis or psychotic, yoga or yogic or yogi, also search for literature published in Chinese and English jour-nals at home and abroad, to find out that it is relevant for the purpose of this study. The article was included in the review for analysis. A total of 12 research samples were included for sys-tematic reviews. The yoga training was guided by a yoga profes-sional or coach. The short-term intervention was 4-8 weeks. The frequency of yoga was 3 to 7 days per week and each session no more than 60min.

Results
Seven of the study samples entered the meta-analysis and found that 8-week yoga adjunctive therapy had a significant effect on improving positive symptoms compared with conventional therapy (p=0.05), but did not achieve significant effect on improving negative symptoms (p=0.40). Compared with conventional treatment, the 12-week comparison of yoga adjunctive therapy had a significant effect on improving the PANSS total score (p=0.00001). There was no significant difference between the improvement of positive symptoms (p=0.08) and negative symp-toms (p=0.55) between the yoga group and the exercise group at 16 weeks.

Conclusions
The comprehensive conclusion is that yoga adjunctive therapy is still superior to conventional treatment in reducing the severity of positive symptoms and negative symptoms, so it can be used as a reference for clinical practice and research.

Treatment of incompleted mourning with EMDR - A case report

LIN Chun Jun, CHANG Yu Chang, HWANG Hsin-Shu

Introduction
Unexpected death of a loved one, causing a loss in the relationship often causes major problems, including persistent emotional problems. If the mourning process is not successfully passed, it will cause emotional, cognitive and social dysfunction. This study used EMDR therapy to treat irrational beliefs, excessive anxiety and sadness in patients with morbid mourning.

Purpose/Methods
The patient is a middle-aged woman who lives in a community with her family and grandmother. Suddenly lost grandma twenty years ago. The patient thought that she did not fulfill her responsibility to take care of her grandmother. Excessive self-blame prevented her from successfully completing her mourning. After that, there was anxiety, persistent grief, and restrictions on family members taking public transportation. Worries about excessive complaints, out of control anxiety and easy to cry at the time of the visit.

Results
After sixteen complete EMDR sessions, her emotional distress has declined. Her irrational beliefs have improved significantly, distinguishing between appropriate and excessive fears, and have the ability and skills to adjust emotions, such as: even in the face of family health checks can adjust the emotional comfort

Comments
Drug therapy is the major treatment for schizophrenia, and adjunctive therapy has been widely recognized for improving drug side effects and soothing symptoms.

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through cognitive adjustment. In this case, EMDR can be seen to help patients with morbid mourning have a significant effect.

**Conclusions**

This study found that in addition to the EMDR treatment of patients with irrational beliefs and excessive anxiety, the support of family members is equally important. In the process of patient change, learning to deal with emotions in an appropriate way, at this time the family can accept different emotional expressions of the case, which is an important support for the case and also makes the effect more stable.

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**Efficacy study of EMDR on traumatic memory - a case study**

**LIN Chun Jun, CHANG Yu Chang, HUANG Hui Ting**

**Introduction**

After an accident, people often have strong pain and physical pain, and traumatic memory is the biggest obstacle that usually cannot be successfully recovered. Trauma memory usually contains pictures of the traumatic events, emotions, thoughts and physical reactions, and is the most difficult part of the treatment. This study analyzed the efficacy of EMDR in the treatment of traumatic memory.

**Purpose/Methods**

The case is a woman who has a car accident in the process of going to work. After that, she often has nightmares, anxiety and irritability, and she is deeply afraid of the traumatic memories of car accidents. She escapes from the accident, does not dare to ride a locomotive and affects daily life functions. The main complaint when the case came to the clinic was post-traumatic syndrome. The EMDR treatment was used to help solve the traumatic memory.

**Results**

After six EMDR treatments, the negative impact of the traumatic memory of the car accident on the case has been significantly improved. The subjective report no longer has strong fears and a significant reduction in painful feelings when remembering the memory of the car accident. The event impact scale score and the anxiety scale score also decreased significantly.

**Conclusions**

The EMDR approach to traumatic memory has the advantage of being fast and efficient. Using EMDR to deal with severe traumatic memory requires a dedicated effort and courage from the case, and helps the case to establish emotional stability skills, as well as a good therapeutic relationship in order to successfully complete the EMDR treatment.

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**Effectiveness of Using Art Therapy as an Intervention to Increase the Psychological Comfort of Hospitalized Children with Cancer**

**LIU HSIU-MEI, LI CHI-HUNG, CHEN HUEI-LING**

**Introduction**

Children with cancer may require long-term hospitalization and several courses of treatment, during which their activity space may be restricted in order to prevent infection. Such restrictions influence their interactions with the outside world and may exert psychosocial effects in the long run. Art therapy as an intervention can serve as a channel for such child patients to express their emotions. Moreover, the sense of accomplishment gained from completing artworks and opportunities for peer interaction may alleviate the psychological discomfort caused by the disease.

**Purpose/Methods**

Based on specific Taiwanese festivals, this study designed art therapy activities for hospitalized children with cancer. The completed artworks were photographed as tokens of remembrance, and the children could keep the artworks for themselves or display them in the display window of their hospital ward specifically designed for the children. To encourage the children, the photographs were also uploaded to Facebook upon their family's consent.

**Results**

A total of 6 activities for 48 child patients were conducted in 2018. The activities were: (a) making hongbao (red envelopes) during the Chinese New Year; (b) creating jewelry out of polymer clay during the Lantern Festival; (c) making reusable bags during Children’s Day; (d) preparing greeting cards during Father's Day; (e) designing storage boxes using decoupage during the Mid-Autumn Festival; and (f) creating pen holders out of paper clay during Christmas. Thirty-two children reported a distress thermometer score greater or equal to 5 (a high score indicating a high distress level) on the day before the activity. The number of children with such a score was reduced to 7 after the activity. On average, the satisfaction scores of the child patients and their family members also improved from 78.4 to 97.8.

**Conclusions**

The results show that art therapy activities can alleviate the negative emotions experienced by child patients during hospitalization and treatment and improve peer interaction, in turn provide psychological comfort to children with cancer.

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**To promote life quality of terminal patient with their own pets in hospice ward of medical center.**

**LIN Shin-Yi, SHIH Peir-Ay, CHEN Chih-Dao**
Introduction
Hospice care aims to improve the medical care and life quality of the terminal patients. For mental health, animal-assisted therapy can provide comfort, peace, and soothing companionship. Far Eastern Hospital held 26 animal-assisted therapies during 2016-2018 in hospice ward, with a total of 283 participants, but some patients still missing their own pet. Therefore, we define “the process of pet visit in the hospice ward”, hope that patients could have a warm companionship with their pet on the end-of-life journey.

Purpose/Methods
The patient or family can apply pet visit in the hospice ward. In order to avoid hindering other inpatients, the regulation must be agreed, including: 1. A vaccine certificate is required. 2. A basket or cage must be placed during transportation in the hospital. 3. At least one family member must company. 4. The pet companion space in ward must be an independent space such as “single ward”, or out in the garden. 5. The companion duration would be up to 4 hours during 08:00-20:00.

Results
This regulation has been implemented once since July, 2017. The patient and her family has been together with their dog in spiritual care room and garden about 30 minutes. Although the patient was weak to sit on bedside, she smiled and hold the dog in her arm. The patient felt comfort and happiness even the dog just sitting there.

Conclusions
Considering the mental health of the terminal patient and maintaining the rights of other inpatients, the patient can have the direct companionship of their own pet under some restriction in the time and space. This kind of companionship is more close other than certified therapy dogs, and can’t be replaced by Artificial Intelligence.

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The Effectiveness of Using high-level Empathy in Repeated Suicide Attempters Caring Visiting
HSU FU-NUNG, LU Huei-Lan

Introduction
Empathy is a necessary condition for the formation of the alliance. The parties can experience good results in the relationship with the consultants, especially using high-level empathy for repeated suicide attempters. The hospital has been connect with local health authorities to work together for suicide prevention and health promotion since 2010. The full-time community caring visitor began to involve in community mental health promotion activities. The purpose of this study was to explore an effectiveness of using high-level empathy for repeated suicide attempters.

Purpose/Methods
Invited 66 subjects to the research. The caring visiting once a week, 45 minutes a section, including home visits, and telephone interview. Every case cared with 3 month based on high-level empathy during March to August in 2018. High-level empathy proposed by Carkhuff. It means that professionals can correctly reflect the feelings of all parties. The measurement included the Beck Depression Inventory (BDI), Suicide Attitude Questionnaire (SAQ), and the value of the statistical analysis of suicidal behavior in 3 months before and after the Caring Visiting.

Results
1. The result showed 17 case from Major depression (BDI ≦ 14) to Depression (BDI ≦ 19), and 31 members from depression to normal (BDI ≦ 13). 2. In the part of SAQ, the average of protest is 54. Compared with the pretest, all decreased by 71%. 3. Only 4 member had repeated suicidal records 3 months after the end of the caring visiting.

Conclusions
Empathy aimed at helping counselors understand the meaning, function and limit of empathy so that they can appropriately apply empathy to therapeutic relationships. As a skill to the caring visiting, the purpose of empathy is helping clients increase their self-knowledge to promote their transformation and empowering clients in self-help. Caring visiting with high-level empathy has a significant positive effect on reducing the risk of repeated suicide.

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The vocational rehabilitation of computer-related program
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Introduction
Vocational rehabilitation training is very important for mental patients. Drug therapy can improve the “mental symptoms” of patients, but there are still deficit in cognitive function, interpersonal interaction function, daily life function, self-adaptive function, adaptation function. The vocational rehabilitation of computer-base program can help patients return modern work model and fit social need. According to the study, although the symptoms of schizophrenia improved by 40%, they only increased the employment rate by 8%. “Occupational rehabilitation” has a certain effect to improve patients function. The psychiatric professional members to implement a comprehensive professional assessment, arrange the patient step’s sheltered vocational rehabilitation for reducing recurrence, improving or slowing functional degradation, motivating patients to work, cultivating work habits and interests.

Purpose/Methods
In the course of vocational training, the provision and learning application of the equipment is an indispensable part of vocational training. Happy Shop was founded in 2015 at the beginning of the introduction of POS system, in-store cargo management is the use of POS system, patients in this workshop vocational training must learn POS system operation skills, familiar with POS system has a variety of sales methods, in the operation can be selected according to the needs of various sales methods of the following special functions: preferential, discount function: Discount goods or trading itself special license, etc.
Results
The patients partake in this program increase computer-relative complex work skills and enhance community interpersonal interaction and community adaptation. They can work a day at 8 hours. There are 22.68% return to community at competitive work in the community.

Conclusions
With the development of modernization, work need computer-base skills. Computer-related skills training, such as bibliographic Word file, disk, EXCEL builds, and so on is very important application at vocational rehabilitation in mental health.

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Symptom Distress Affects Cancer Patients’ Purpose in Life after Radiotherapy
WANG Chi, CHOU Fan-Hao, LIN Huey-Shyan, CHENG Jin-Shiung, TANG Pei-Ling

Introduction
Given the health impact of symptom distress and PIL, it is of particular importance to explore the association between them. We decided to use a well-validated measurement of PIL with control for a wide range of covariates, including several sociodemographic and biological factors that had been linked to symptom distress. We aimed to assess changes in PIL and symptom distress and to reveal associated factors in cancer patients after radiotherapy.

Purpose/Methods
This was a longitudinal study. One hundred and sixty-four cancer patients from the radiotherapy clinic of Kaohsiung Veterans General Hospital (VGHKS), Taiwan were recruited to the study in 2014 based on the following criteria. Surveys were conducted one week before and one week after the patients had radiotherapy by the questionnaire. Paired-samples t test, independent samples t tests, and multivariate regression analysis was performed with the patients’ demographic data and SDS as independent variables to explore factors related to PIL.

Results
The predictive factors for changes in PIL were post-RT SDS, stage IV, surgery, and the treatment site of the abdominal cavity and pelvis. These four variables accounted for 34% of the total variance in PIL changes. The patients had lower PIL if they were at stage IV, unable to receive surgery, and had tumors in sites other than the abdominal cavity and pelvis, and had higher post-RT SDS scores.

Conclusions
That both SDS and PIL scores were significantly higher after RT than those before RT, suggesting a strong influence therapy had on the patients. We also found that patients had lower PIL if they were at stage IV, unable to receive surgery, and had tumors in sites other than the abdominal cavity and pelvis. Meanwhile, SDS was shown to be an independently significant factor to predict PIL in that one faced with higher distress after therapy had lower PIL.

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Using the BSRS-5 (5-item Brief Symptom Rating Scale to Reduce the Suicide Risk of Psychiatric Rehabilitation Inpatients
TSAI Hui-Ling, LU Huei-Lan, CHENG Ching-Ming

Introduction
The psychiatric mental health care aim of Taiwan Clinical Performance Indicator (TCPI) has been paid more attention to reducing the degree of patient suicide risk. The clinical survey in August 2016 found that there were 19(6.15%) of 309 chronic psychiatric inpatients with the BSRS score 6 or above had suicidal ideation. In March, 2018, suicidal ideation rose to 15.3%, could not discharge was the first and major reason (42.9%), and the symptom interference was the second (28.6%), which did not reach the target of patient safety care quality. Therefore, the construction of more comprehensive preventive intervention, safety care environment and suicide risk assessment is an issue that cannot be ignored.

Purpose/Methods
Subjects were 308 chronic psychiatric inpatient with score 6 or above of BSRS-5 in 2018. These patients with suicidal ideas arranged supportive and mindfulness groups and implemented a comprehensive prevention strategy. After 6 months, they compared and analyzed the strategies to reduce the effectiveness of suicidal ideation.

Results
The result showed that the diagnosis of schizophrenia accounted for 85.7%, organic mental disorder accounted for 4.9%, bipolar disorder accounted for 4.6%, and affective disorder accounted for 2.8%. After intervention, patient with suicide idea was decreased from 15.3% to 3.8%.

Conclusions
Psychiatric patients are prone to self-injury when they are unable to discharge, and the symptoms are disturbed, resulting in self-injury. Only by screening early high-risk suicidal patients and immediately intervening in appropriate strategies to reduce the severity of suicide can the patient’s safety be achieved.

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Stake-holder participation to improve mental health care inside a psychiatric hospital - good practices
BRAEKERS Katrien, VAN REETH Esther
Introduction
Our hospital, UPC KU Leuven pays a lot of attention to how the quality of our health care can be improved, and this from a bottom-up perspective. Therefore our patients, their family, the hospital staff and other health care users are stimulated to speak up in many different ways. This not only to provide feedback on how they experience the services which are provided, but also to give suggestions on how the hospital’s care can be improved.

Purpose/Methods
Since January 2018 the information has been reviewed in a systematic way by a steering committee. The data have been gathered via 6 different channels. 1/ Patient Advisory Committee 2/ Recovery Oriented Practices Index (ROPI) 3/ Ombudsman services 4/ Your opinion counts – project: 5/ Peer support group (E-forum): 6/ Satisfaction Questionnaire - Government (VIP)

Results
Based on the feedback the possible areas of improvement were narrowed down to 5 categories: 1/ Quality of care 2/ Access to health care 3/ Patient and family participation 4/ Peersupport 5/ Infrastructure and comfort Each year action plans are selected for each subarea. After the approval of the executive board the hospital tries to implement these actions. Every action plan is directed to a staff member who follows the process and reports about it to the steering committee ‘Equity’.

Conclusions
The implementation of six feedback channels leads to a broad perspective on our organization and gives us a good and substantiated view on what and how we can improve our services. This more systematic way to collect information gives us a clearer view on areas of improvement, helps us to prioritize and to take action. By gathering the information one action plan can be developed that addresses many issues and therefore this method leads to a more efficient approach.

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Acute psychiatric ward without cigarette – outcomes of pilot study.

PETR Tomas, GUTOVA Lenka

Introduction
A new anti-smoking law was introduced into practice in the Czech Republic in 2017. The law banned smoking in all healthcare facilities, excluding closed psychiatric wards. These psychiatric wards have an exception and patients may use designated smoking areas. However, management of psychiatric ward in Military University Hospital has decided to launch a pilot project and verified the possibility of creating a non-smoking environment even in a closed psychiatric ward.

Purpose/Methods
The closed psychiatric ward has 15 beds. More than 300 patients are hospitalized annually with an average hospital stay of 10 days. All patients were informed at the time of admission to the psychiatric ward that smoking in all areas is prohibited. This information is also available on the websites and in information leaflets. The nurses perform a Fagerstrom test to determine the degree of patient’s dependence. Patients are offered a suitable form of nicotine substitution in the form of patches, chewing gums and lozenges. Special interventions are provided at least 2 times weekly by a specialist focused on support and motivation for non-smoking. Patient’s medication is consulted regularly with a clinical pharmacist.

Results
All patients - smokers are asked to complete a short questionnaire one day prior to the discharge, asking questions about how they experienced the absence of smoking and what helped them best to cope with the situation.

Conclusions
The results of this pilot study after the first 6 months will be presented on the poster.

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E-Posters: Migration, equity and diversity in health care and health promotion

Use of day surgery to improve patient satisfaction and turnover rate

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Introduction
Medical quality improvement and medical technology advancement, a comfortable environment for medical treatment, faster service efficiency, and shorter average hospitalization days for surgical patients, which not only saves hospitalization costs, but also does not affect the daily routine, so the hospital uses the daytime. The promotion of day surgery was carried out on the day of surgery, providing complete pre-operative evaluation and post-operative care, which improved the satisfaction of the patients and the turnover rate.

Purpose/Methods
The promotion of day surgery shortens the waiting time of patients’ surgical procedures, maintains medical quality and patient safety, and enables family members and patients to receive medical service quality attention and efficiency. After the postoperative health education and home visits in the day surgery ward, a well-established daytime surgical procedure was established to improve patient safety and satisfaction and bed turnover.

Results
From April 2018 to October 2018, through the application of day surgery, satisfaction was improved from 83.23% to 96.6% through the satisfaction survey of patients who returned to the hospital. The turnover rate increased from 63.8% to 85.26% in the same period of the previous year.

Conclusions
Effective work processes improve the hospital’s operating rate, and appropriate care allows patients to operate in a safe and fast...
medical environment, achieving patient safety goals and improving hospital medical quality. The application of day surgery can solve the needs of patients' treatment under the condition of cost saving and time. The system of daytime surgery emphasizes efficiency and cost considerations, which can increase the convenience of patients and family and reduce the economic burden. Therefore, patients are greatly accepted.

Comments
Day surgery can significantly shorten hospitalization time, make full use of hospital resources, reduce medical investment, improve patient satisfaction and turnover rate, and recommend promotion to other medical institutions for reference.

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Impact of Cross-cultural Medical Care Model on Medical Compliance and Health Status of Aboriginal people in Wulai District, Taiwan

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Introduction
The Wulai District is a remote aboriginal mountainous area in Taiwan. The proportion of aborigines living in it exceeds 50%. Our hospital provides home healthcare in this district and finds that most of cases are economic weakness, poor communication between doctors and patients, and unhealthy behavior, as well as the low rate of returning to medical care and the poor control of chronic diseases. This study explores the use of cross-cultural medical care models by medical staff to integrate cultural sensitivity and cultural inclusiveness in the service process to improve the behavior in seeking healthcare and self-health care.

Purpose/Methods
We surveyed home care cases regarding regular visit rates through cross-cultural medical care models from 2016 to 2017. Based on the cross-cultural health care model, cultural sensitivity: providing culturally sensitive education, hiring an aboriginal medical care staff, interviewing at home to understand cultural background and life, providing religious and spiritual needs. In cultural inclusiveness: using image explanation or aboriginal communication, seeking medical care with a person to provide trust and security, service process has patience and respect for cultural differences.

Results
A total of 116 chronic disease cases, 49 of which were diabetes, were interviewed, 57 males and 59 females with an average age of 60.43 years. With home visits, televised visits and outpatient visits, the rate of regular return-visit increases from 0.49% to 0.71% (p<0.05); the HbA1C values decreased from 8.13 to 7.62 (p<0.05). Statistical analysis of the return-visit rate and HbA1C values using the paired sample T test were statistically significant.

Conclusions
In the medical service process, the cross-cultural medical care model is used to understand the medical needs of aborigines and the medical experience to provide flexible and individual health care programs. The results showed a significant increase in the control of regular visit rates and blood sugar.

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Life-Enjoy of Migrants Through Sports

HOU Jung-Ying, WANG Jian-Yu, HUANG Paul, HUNG Shan-Ching, CHEN Wei

Introduction
There were around 670,000 low-tech international migration workers in Taiwan, 1 in every 35. These southeastern foreigners live with local people in Taiwan, yet never had communication in life and involvement in activities with local people. We included the Chiayi area migrants in the “Sports i Taiwan” project. Through promoting migrant sports activities, we facilitated migrants culture exchange with local people, and enjoying the fun of sports and promoting health as well.

Purpose/Methods
With the cooperation of local churches and migrants association, the Chiayi Christian Hospital (CYCH) initiated “Sports i Taiwan” in Chiayi. Based upon the objectives of “Making Friends Through Basketball”, the project hosted basketball games promoting migrants having culture exchange with local people. We set the target of 2,000 participants in the project period of 2018. We had “Set up church caring network”, “Pre-events promotion”, “Connection with church leaders” and “Post-events internet marketing” as strategies for success.

Results
There were over 2,000 participants in five basketball games. There were over 500 basketball players, each game had over 100 audiences for all five games, and over 500 Facebook live broadcast viewings during the game periods. As we provided weekday practice venues for the participated basketball teams, there were over 600 weekday practice participants. There were 7,234 migrants in Chiayi, 2018. The CYCH 2018 “Sports i Taiwan” results represented 27.6 % in participation rate in Chiayi’s migrants.

Conclusions
In CYCH 2018 “Sports i Taiwan” project, The sport games not only provided physical exercises, but also relieved their hard work in foreign country. We proposed the following action plans ensuring the future success: 1. Organizing committee and single contact widow is required, 2. The pre-game contest is also required in establishing consensus for the formal games. 3. Providing English information in the migrant Facebook fans is necessary for attracting more migrants participating the migrant sports exchange platform.

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Supporting and promoting health among atomic bomb survivors (Hibakusha) in Hiroshima

EZEKIEL WONG Toh Yoon, AOKI Katsuaki

Introduction
Under the Atomic bomb Survivors Medical Care Law established in 1957, certified survivors receive coverage for their health expenses as well as free medical checkups up to four times per year. Hiroshima Kyoritsu Hospital, which caters to a community of more than 250,000, belongs to a medical cooperative that actively supports atomic bomb survivors (Hibakushas) through various activities such as providing medical health checkups as well as helping survivors receive certification.

Purpose/Methods
We aim to give a presentation regarding the current state of health care and support available to Hibakushas in Hiroshima. We will also describe the various undertakings of our medical cooperative to support Hibakushas living in Hiroshima as well as abroad.

Results
The different types of health promoting activities related to Hibakushas include: 1. Providing medical health checkups to local Hibakushas (4% of total in Hiroshima) 2. Providing medical health checkups to Hibakushas residing abroad (South Korea, Brazil, U.S.A, Canada, Australia, Taiwan etc) 3. Providing medical health checkups to 2nd generation Hibakushas (28% of total in Hiroshima) 4. Helping survivors obtain certification (419 cases, 60% success rate) 5. Providing interactive education regarding Hibakushas to new employees.

Conclusions
As a health promoting hospital within Hiroshima city, the first city to come under the attack of a nuclear weapon, we have been actively promoting health among this population subset. As the number of Hibakushas decline, it is important to continue caring for them as we nurture the concept of peace playing a crucial role in health promotion. (No more Hibakushas!)

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E-Posters: Monitoring quality, patient safety and health promotion objectives

HSU Chih Hsiang, HUANG Hsiu Yun, TSENG Yueh Mei

Introduction
Improve the quality of case management services by employing the case management mode

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guidelines for cancer cases during treatment and complete treatment rate of first course treatment (3) Resource navigation rate for cancer cases

**Purpose/Methods**
Using the international classification disease(ICD-9), search cases which meet the criteria during 2013~2017 from the case manager system. First, conduct statistical analysis from the treatment plan consistency,and the rate of complete treatment. Secondly, compare the above with cancer screening system positive cases,social service,hospice care,clinical psychologists and dietitian systems. Finally, contribute a statistics of the positive case navigation rate, diagnostic navigation rate and resource coverage rate.

**Results**
1. positive case navigation rate: colon cancer screen was 4.3% in 2015, 9.5% in 2016, 5.5% in 2017; oral cancer screen was 3.1% in 2015, 2.3% in 2016, 1.9% in 2017; breast cancer screen was 3.91% in 2014, 7.7% in 2015, 7.3% in 2016, 7.5% in 2017; cervical cancer screen was 0.59% in 2015, 0.65% in 2016, 0.58% in 2017. The rate of follow guide line in whole cancer was 94.8% in 2015, 97.3% in 2016, 99.2% in 2017; and complete treatment of first course was 97.9% in 2015, 98.1% in 2016, 97.6% in 2017. Resource coverage rate were 48.2% in 2015, 40.3% in 2016, 38.2% in 2017.

**Conclusions**
In response to the government’s cancer screening policy, the screening rate is gradually increasing. When diagnosed, the case manager can also help cancer patients to receive the correct treatment and give appropriate resources. Cancer patients have different resource needs for different stage, and case managers will also provide different services according to individual needs to keep a better quality of care.

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Increase bladder cancer patients’ cognitive rate on received intravesicle chemotherapy

**WANG Tsai Chen, HSU Chih Hsiang, YAO Nai Ching**

**Introduction**
Bladder cancer (BC) is the second most common malignancy of the genitourinary tract in Taiwan. The major treatment of BC is intravesicle chemotherapy (IC). But take a medical center of Southern Kaohsiung City as an example, we found BC patient do not clearly know the treatment purpose, process and self-care of IC. The aim of this study is to increase patients ability to understand the purpose and the procedure of IC, and know how to self-care

**Purpose/Methods**
Thirty BC cases were collected during Jun to August, 2017. Those patients were transferred to when treatment plan was confirmed. Then case manager: 1. Explain again the purpose of treatment 2. Demonstrate the IC procedure with models and Foley 3. Use the balloon to educate patients the side effects and self-care items of IC 4. Confirm the patient’s understanding of the treatment by questionnaire during the following outpatient clinic visit

**Results**
1. Patients’ understanding on purpose of IC raised from 36% to 76%. 2. Patients’ understanding on procedure of IC increased from 34% to 90%. 3. Patients’ understanding on self-care of IC increased from 30% to 99.3%

**Conclusions**
Data from a medical center in southern Taiwan indicated that most cases of bladder cancer are males aged 70-79. They have difficulty realize the health education. Field operation demonstration is more effectively allows the patients to understand the purpose of treatment and self-care

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Use of Interdisciplinary Model to Reduce Rate of Urinary Tract Infection

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**Introduction**
Risk factors associate with urinary tract infection (UTI) include long-term catheter placement, inappropriate catheter care, bacterial colonization, and long-term bed rest. Severe urinary tract infection may cause systemic infection, resulting in prolonged hospital stay and increased medical expenditure. In addition to have an added effect on the physical suffering of the patient, UTI may also poses threats mentally, shorten life expectancy, and have a significant impact on the patient’s prognosis.

**Purpose/Methods**
The employs the method of adopting of the interdisciplinary team care model, the catheter bundle care approach to evaluate the impact in urinary traction infection reduction. The catheter bundle care interventions include: 1. Assessing compliance with catheter placement indicators 2. Performing hand hygiene prior to the catheter insertion 3. Adopting aseptic technique during insertion 4. Securing the urinary catheter appropriately and 5. Performing hand hygiene immediately after insertion.

**Results**
The interdisciplinary model is effective in decreasing the rate of urinary tract infection to an average of 2.36% to 0.375%. The patient population with highly complicated medical conditions. The goal of effectively reducing the rate of urinary tract infection can be achieved via the implementation of suitable improvement strategies include the urinary catheter bundle care and monitoring protocol, the addition of appropriate care equipment, and the continuous communication with the interdisciplinary care team members.
Conclusions
The rate of urinary tract infection can be effectively reduced by incorporating the interdisciplinary team care model and urinary catheter bundle care interventions.

Comments
With the increase catheters is increasing, while the population of high age and immune dysfunction is gradually increasing. It is becoming more and more difficult to prevent infections related to medical care. Effectively improving medical care-related infections through interdisciplinary models has now become an important indicator of medical quality and patient safety.

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Improvement Plan for Reducing the Physical Restraint of Patients in the Nursing Home

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Introduction
25%-54% of the patients in the long-term care institution were subject to physical restraint mainly for the prevention of falls and extubation. Improper physical restraint can cause discomfort and comorbidities, such as bedsores, limb edema, confusion and restlessness, and may even result in medical disputes. In 2017, the rate of physical restraint in the institution was 2.14%, which was higher than the threshold (1.5%), mainly due to the prevention of extubation and falls.

Purpose/Methods
The medical records of 99 patients in the affiliated nursing home of a municipal hospital in South Taiwan were collected through the methodology of medical record review for statistical analysis. The countermeasures for physical restraint were drawn up for the patients who extubated themselves frequently or whose extubation was life-threatening to reduce the rate of physical restraint from 2.14% to 1.5%.

Results
After the project intervention, the rate of physical restraint reduced from 2.14% to 0.51%. Currently, a total of 9 patients are pre-extubated to undergo swallowing training.

Conclusions
For the elderly residing in long-term care institution, the need for professional care is of great urgency. Quality indicator monitoring should be implemented in practice to offer the patients a safe and quality environment without unnecessary physical restraint.

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Reducing the Incidence of Infection Caused by External Surgical Instruments through PDCA

SHU-HUI Wu, JUI-CHU Huang, CHIA-CHI Yen

Introduction
External surgical instruments refer to surgical instruments provided by dealers for temporary use, such as implants and tools for fixation. They are the product of the market economy. Due to the rapid development of technology, the types and specifications of implants are changing rapidly and expensive. To save money and prevent backlogs, expiration or obsolescence of implants, the hospital uses surgical instruments provided by dealers. How to manage external instruments is an important issue for the operation room management. The purpose of this project is to reduce the incidence of infection caused by external surgical instruments.

Purpose/Methods
In March 2017, Department of Urology reported one urinary tract infection after laser surgery. The project team collected data from March 2017 to April 2017 for analysis and found that nurses had no awareness of crisis management and that the external instruments provided by the dealer on the day were sterilized without cleaning. Used PDCA for improvement.

Results
Used PDCA for improvement, including: (1) stressed the importance of fully cleaning instruments and unsuccessful sterilization caused by incomplete cleaning in morning meetings; (2) set out the Regulations Governing External Surgical Instruments, which specifies that nurses should clean external surgical instruments using enzymes before sterilization to reduce unsuccessful sterilization caused by incomplete cleaning and that instruments should be cleaned using enzymes after use to prevent the spread of diseases during transportation of the instruments; (3) set out the audit system for external surgical instruments to sample 5 instruments for cleanliness every month and immediately improve defects found and to sample bacterial culture every half a year. After the implementation of the project, the incidence of infections outside the operating room was 0.

Conclusions
After the implementation of the project, including: (1) morning meetings; (2) set out the Regulations Governing External Surgical Instruments, (3) set out the audit system for external surgical instruments, indicating that the proposed countermeasures can ensure the safety of medical staff and surgical patients, and can provide reference for other hospitals.

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Electronic Poster Session

Can patient safety education prevent patient safety accident?

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Introduction
The purpose of this study is to present the necessity of patient safety education by understanding prevention effect of patient safety incident on patient safety education and to provide basic data for developing patient safety educational materials.

Purpose/Methods
This study is a descriptive study to investigate the relationship between patient safety education and safety incident prevention of patients and/or their family, and patient safety exclusive personnel. The information and questions to be provided to the medical staff and the patient safety prevention level were analyzed by t-test and the chi-square which is considered to be the most necessary to prevent the patient safety incident in the medical institution.

Results
In the question 'What do you think is the most necessary to prevent patient safety incidents in medical institutions', 35.7% of the patients and/or their family answered 'patients and/or their family participation', and 47.8% of the patient safety exclusive personnel answered 'patient safety culture in medical institutions' (p <0.01). The question 'Did you identified the patient?' was statistically significantly higher patient safety exclusive personnel (4.62 ± 0.72) than the patients and/or their family (4.33±1.13) (p = 0.019). In addition, the question ‘What should the patient do?’ was significantly higher patients and/or their family (4.50 ± 0.91) than patient safety exclusive personnel (4.28 ± 0.76) (p = 0.044).

Conclusions
Patient and/or their family and patient safety exclusive personnel were able to prevent patient safety incidents when they provided information to the medical staff about themselves and when they asked the medical staff the questions they needed. This researcher hopes to use the data developed based on AHRQ, IHI, and CPSI as a national patient safety campaign and standardized education contents to prevent patient safety incidents. This research was supported by a grant of the Korea Health Technology R&D Project through the Korea Health Industry Development Institute (KHIDI), funded by the Ministry of Health & Welfare, Republic of Korea (grant number: H11BC2339).

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Modified Regimens for Cancer Chemotherapy

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Introduction
Currently chemotherapy is one of the main ways for cancer treatment. Nursing staff play an important role in taking care of patients receiving chemotherapy in terms of undertaking nursing assessment and maintaining life safety. In infusion during chemotherapy, terrible accidents are likely to occur - extravasation. Extravasation reduces patients’ satisfaction and increases nurses’ work pressure. Moreover, it may cause medical disputes and lead to an increase in hospitalization costs. As a result, in case of partial tissue injury, multiple and long-term surgical operations will be required to intervene in treatment. If the patient suffers serious injury and hospital stay extends, this will not only harm the patient physically and mentally, but it will also cause a large expense in medical costs. While a patient receives chemotherapy infusion, nurses would suggest he or she wear loose-fitting and comfortable clothing or the patient gown provided by the hospital. Clothes which are too tight should be avoided in convenience of assessing the infusion site at Port-A for signs of discomfort, such as red & swollen and burning pain. In case unsuitable clothes were worn, Port-A and chemotherapy infusion line would often be covered by the clothes. This will cause a break to the patient’s rest or sleep and finally would lower the patient’s satisfaction with nursing quality.

Purpose/Methods
In considering patient’s needs for safety and convenience, we have designed a suit of clothes fit for chemotherapy infusion. This allows nurses to observe the chemotherapy infusion line without interfering with the patient’s rest. Moreover, it reduces unnecessary exposure and keeps the patient warm. The patient can maintain his/her living quality and comfort during his/her stay in the hospital. In addition, this can save working personnel’s time and reduce nursing staff’s workload.

Results
As a result, the chemotherapy clothes employ creativity and ingenuity, to replace unsuitable covers, while giving consideration to clinical practical value and practical treatment in nursing.

Conclusions
It can not only increase medical and nursing effects and nursing accessibility, but it can also raise treatment and caring quality and patient’s use satisfaction.

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New Way to patient care: Individualized diet education with Malnutrition-Inflammation Score

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Introduction
Protein-energy wasting (PEW) is common in patients with chronic kidney disease (CKD). PEW is one of the strongest predictors of mortality in patients with CKD. A large body of evidence has indicated that malnutrition and inflammation are closely linked and frequently present in patients receiving hemodialysis (HD). Health-related quality of life is an important determinant of hospitalization and mortality in HD patients. Diet education
with Malnutrition-inflammation scores is a new way for patient care.

**Purpose/Methods**
The aim of this study was to assess the benefits of clinical outcome with Individualized diet education according to (MIS) in HD patients. Malnutrition-Inflammation Score (MIS) questionnaire which is a more quantitative one has four sections including nutritional history, physical examination, body mass index and laboratory values. Each component gets a score between 0 (normal) to 3 (severely malnourished) in which a higher score means a more severe degree of malnutrition and inflammation. Face to face diet education with dietitian was given after enrolling and 6 months later.

**Results**
25 outpatients on HD therapy for at least 3 months were evaluated at the beginning of this study and followed up for 6 months. The MIS correlated significantly with level of hemoglobin. After Individualized face to face diet education, all data were re-evaluated after six months. Potassium was decreased significantly decreased after our study. MIS, calcium and phosphate level improved without significantly.

**Conclusions**
We assessed the association of malnutrition-inflammation score (MIS) with clinical outcome. Individualized face to face diet education can have more flexible control for Potassium. The collaborating dietitians are the main evaluators and play crucial roles in all aspects of the study.

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**Veteran Counseling Care reduces hospital visits for highly-frequent hospital users**

**CHENG Su-Fen, HUNG Jui-Lan, XIONG Jia-Hui, CHENG Jin-Shiung, TANG Pei-Ling**

**Introduction**
In 2001, the NIH administration in Taiwan initiated a counseling program in order to rationalize the use of medical resources by highly-frequent hospital users. Aside from reducing hospital visits as one goal, how to improve the quality and the convenience of medical service with limited budget is also worth studying. Our study was aimed to evaluate the outcome of conducting the veterans counseling care program in a medical center.

**Purpose/Methods**
We enrolled 837 veterans who were highly frequent hospital users (≥ 90 visits) of a medical center in Taiwan in 2015. Research tools included structured questionnaires, and received three times of telephone or personal counseling. The outcome of the counseling care was measured by the number of outpatient visits made by these patients throughout the whole year of 2016. Multivariate logistic regression models were used to estimate adjusted odds ratios (OR) with 95% confidence intervals.

**Results**
After receiving the counseling, 25% of the subjects with face-to-face interviews remained to be highly frequent users, which was less than those with telephone interviews. After adjusting for age, gender, marital status, religion, living conditions and self-rated illness, the subjects who received telephone interviews had a significantly higher risk of highly frequent use of hospital than those who received face-to-face interviews (OR=1.70, 95% CI =1.04-2.78).

**Conclusions**
Personal interviews resulted in a significant reduction of hospital visits in comparison with telephone communications. It might have helped the patients understand that care provided by one team instead of multiple providers improved the acquisition, organization, and administration of necessary medications for multiple chronic conditions.

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**Research on the factors effected of colonoscopy examination quality-case study of Taiwan hospital**

**YI-SHIUAN CHEN, DENG-CHYANG, WUPING-I HSU**

**Introduction**
Bowel preparation quality and polyposis detection rate are necessary task for successful colonoscopy. If the bowel preparation is incomplete, the colonoscopy time will be prolonged or the completion rate will be reduced and the risk will increase. Enhance patient knowledge with lithographic computer health education video’s intervention education to improve the quality of colonoscopy.

**Purpose/Methods**
The prospective Quasi-experimental design was applied in this study, with the data collected from the hospital in Taiwan. "Tablet Visual Health Education Video" as an intervention measure. The subjects of the case were the patients over 20 years of age, making outpatient appointment for colonoscopy The study divided the patients into two groups in a random and single-blind manner for comparison with random number table. The investigation was conducted from Jul 1st, 2017 to Dec 31st, 2017, with a total of 280 people receiving and filling in the questionnaires. However, actual questionnaires collected were 239, with 106 from the case group and 133 from the control group. SPSS 22.0 was applied to conduct statistical analysis.

**Results**
The colonoscopy of the case group showed a significant difference in terms of health education cognition (p=0.002). As for bowel preparation, case group had a better bowel preparation with OR=0.55 (p=0.044). In gender, male patients had a better bowel preparation with OR=0.49 (p=0.017). Patients aged from 56 to 64 had a better bowel preparation than those aged over 75 with OR=0.28 (p=0.046). In terms of ADR, the ADR found in males was more than that found in females with OR=1.94 (p=0.033). Less ADR was found in patients aged <55 than that was found in patients over 75 with OR=0.27 (p=0.034). Less ADR was found
in patients having meal replacement before examination with OR=0.52 (p=0.045).

Conclusions
The educational mode with mobile tablet was applied to understand the differences of this mode with the original health education mode as well as to serve as the reference for medical institutes to educate patients. By this, the medical staffs can not only take care of patients but also provide patients with better knowledge and health education methods. In the meantime, patients can be more concerned about their health issues, which further improve their satisfaction with and trust in the medical institutes.

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Effect of gamma knife surgery for patients with volumetric classification of nonfunctioning pituitary adenomas.

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Introduction
Gamma knife surgery contains 196 cobalt-60 sources, uses stereotactic radiation therapy, three-dimensional spatial image scanning, computer computing and spot-focusing radiation therapy, works by damaging tumor cells, its outcome is similar to that of a surgical procedure, and no postoperative wound pain problems, the patients can go home next day after treatment. The primary treatment for patients with NFPA is transsphenoidal resection of pituitary adenoma. Rhinorrhea and nasal congestion are often occurs after surgery.

Purpose/Methods
Systematically searched Literature papers published in the Cochrane Library, PubMed, Proquest databases from 2013 to 2018, using key words and strategies, included literature have full text and subjects is human, and screening matching articles. Using the CASP review tool to rigorous evaluation and using the Levels of Evidence (2017) form Oxford Centre for Evidence-Based Medicine approach to rate the quality of evidence. Two studies were found. One is a level 1 systematic review study, and another study is a level 3 retrospective study.

Results
First review showed there was a significant difference between tumor volume <2ml and >4ml in the tumor control rate and the endocrine disorder rate caused by the gamma knife surgery. Second study showed during the gamma knife surgery, there was no significant difference in the tumor control rate and the control rate of endocrine deficit, and was no new neurological deficits between adjuvant (within 6 months after surgery) and delayed gamma knife. But the Incidence of the efficacy parameters of delayed group was higher.

Conclusions
According to the two articles, the larger the tumor volume, the lower tumor control rate, and the higher endocrine disorder rate caused by the gamma knife surgery. Therefore, removing tumor volume to the maximum extent during the operation in order to reduce the residual tumor volume to <4 ml, and have gamma knife surgery within 6 months to remove residual tumors and reduce complication after surgery is suggested.

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Electronic Poster Session

Effect of cross-institutional coaching on the indicator collection

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Introduction
Indicator has been defined as a quantitative guide by United States Joint Committee on Health Care Certification. The quality of medical care can be measured and evaluated through the quantitative measurement of indicators and can be improved by cause analysis. To make data meaningful and comparable, the data collection should be correct and complete. The aim of this study is to investigate the influence of cross-institutional coaching on the indicator collection.

Purpose/Methods
We selected two regional hospitals and ten district hospitals as our targets in 2017. To understand their status of indicator collection and held a meeting to propose strategies. Step 1, to establish indicator record, clarify and confirm the indicator definitions. Step 2, to coach the hospitals the collection methods, indicator verification and data application. Step 3, to hold indicator measurement related education. Step 4, to establish audit form, execute clinical audits and feedback in hospital.

Results
The cooperative hospitals are 25% hospital has independent quality department. We coached 101 indicators and audited 48 indicators. The understanding rate of collector for definition of indicator was 95.83%. Acceptance rate was 85.42% according to the definition of indicator. Most of the collector is clinical staff and up to 75%. Double check for data confirmation was up to 83% monthly. The cooperative hospitals showed a 96.7% satisfaction for coaching content and its practicality, and 98.6% for coach professional ability.

Conclusions
Facing the advent of the era of big data, how to correctly collect data and objectively analyze and improve it has become an important issue for hospitals to improve quality of care. In our study, we coached 12 hospitals to establish indicators and confirm the correction of data collection. Moreover, the data was verified by using audit system. In conclusion, our results demonstrate that cross-institutional coaching is a useful strategy for indicator management in hospital.

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Reduce neurology ward Catheter-related urinary tract infection density improvement project

CHIENMI CHANG

Introduction
Catheter-related urinary tract infections (CAUTI) are prone to medical care and patient safety issues, cause increased medical expenses. Bundle care has been proven to effectively reduce CAUTI through empirical strategies and multi-faceted interventions, including care checklist applications, education training and quality monitoring. The unit is a neurology and a rehabilitation ward. Many patients are indwelled by a neurogenic bladder catheter (17.6% catheterization rate in 2017), and the CAUTI infection density is 6.4‰. Actively stacking bundle care to reduce the unit CAUTI.

Purpose/Methods
Bundle care, including daily assessment of the need for catheter retention, catheter patency, catheter fixation, urine bag lower than the bladder, hand washing before washing and Urethra clean, 10 monthly audits. The planting part is newly added with a sterile surface, and the urine bag and the urinary tube are connected in an aseptic manner before the planting tube, and three planting techniques are audited monthly.

Results
The unit’s CAUTI decreased from 6.41‰ in 2016 to 3.7‰ in 2017, and the daily care compliance rate averaged 91.62% from January to June, and rose to 97.64% from July to December.

Conclusions
Through the improvement project to adjust the catheter placement process from the structural plane, the process strengthens the audit of the bundle care for daily care, and continues to promote the unit to effectively reduce the concentration of CAUTI infection after one year. At the same time, improve the culture of the unit’s infection-related infections, and thus improve patient safety.

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Data-Driven Analysis for the Estimation, Recording and Feedback of Blood Loss for Preoperative Assessment of Patients Undergoing Surgical Procedures

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Introduction
Estimation of blood loss has remained one of the important pre-operative assessments to enhance patient safety during the perioperative period. Previous commonplace is based on the experience of the assessor or the standard background information, but a wide variation of the estimated and actual blood loss had been observed. We proposed that database-driven estimation of blood loss of each surgical procedure might be a feasible solution to this real-world practice.

Purpose/Methods
This work was conducted at a university-affiliated medical center. The amounts of blood loss from the surgical procedures recorded in the operation notes and records of amounts of blood products transfused to the patients were retrieved from the institutional electronic medical records and laboratory information system from January to June 2018. We compared the average blood loss of our hospital with the literature.

Results
Of the 27,500 surgical procedures identified, 5,687 (20.7%) had an operation note depicting blood loss amount. The average amounts of blood loss of caesarean sections, transurethral resections of the prostate and pleural endoscopies of this hospital were significantly less than those described in the literature, where the amounts of blood loss of total thyroidectomies and laparoscopic appendectomies were greater compared with those in the literature. Lung transplant exerted the largest amount of blood loss, with cases greater than 10,000 ml.

Conclusions
Based on these institutional data, preparations to cope with the blood loss such as blood product preparation and modification of surgical procedure, could be performed in advance. Through the big data analysis, estimated, actually reported, and transfused amounts of blood products can be provided to surgeons as references with the aid of this established system. In addition, the estimated blood loss is automatically substituted into the surgical evaluation form before surgery, and the blood volume can be prepared in advance.

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A New Integrated Analysis Method of Emergency Efficiency: Implementing an Intelligence Decision Support System in a Medical Centre in Taiwan

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Introduction
Overcrowding in the Emergency Department (ED) is an important issue that might affect the quality and patients’ access to...
Application of patient-centered care and indicator analysis to improve the quality of health care in Taiwan

FAN PI-CHIN, CHEN HAO-CHENG, FANG YUEH-FU, CHIA WEY

Introduction
There are many clinical indicators to monitor the medical quality that expect to improve the quality of medical care in St. Paul’s hospital. Since 1996, the government promoted evidence-based and used on health care widely in Taiwan. Before we monitor an individual indicator, the mortality rate is higher than others regions hospitals. The purpose of this project used patient flow and the concepts of patient-centered medical services to reduce the mortality in the intensive care unit by composite indicator (CI).

Purpose/Methods
First, we identify the purpose and review the literature. We applied the patient-centered health care and CI method to analysis 25 indicators. We analyzed the data between 1st January 2015 and 31st December 2017. Based on the results, we provided and summarized some articles of evidence-based medicine to the clinical staff. For example, one of the literature shows that infection of CVC that caused 10% mortality. Therefore, we immediately carried out an improvement project to reduce the infection rate.

Results
Through the analysis of composite indicator and evidence-based medicine, we provided standard precautions to clinicians. By the end of the intervention until June 2018. The infection of CVC reduced from 3.21‰ to 0.8‰. It was reduced from 16.04% to 12.46% with mortality rate. Finally, the quality improvement responded to the conclusion and suggestion with the indicators analysis and references. By using the CI method, the availability of indicators will improve in the care process.

Conclusions
Based on our results, we applied the method of the composite indicators by patient flow and evidence-based medicine. The quality managers can provide clinicians the analysis immediately and effectively. Clinical staff can quickly find the problems for medical quality improvement projects. In the future, the quality of healthcare should recheck data, then focused on diseases conditions and user characteristics. We should to build indicator dashboards to allow and respond the clinical problems quickly by systems.

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Reduced urinary tract infection density improvement project related to catheterization in neurological wards.

CHIEN-MI CHANG

Introduction
Catheter-related urinary tract infections (CAUTI) are prone to medical care and patient safety issues, cause increased medical expenses.Bundle care has been proven to effectively reduce CAUTI through empirical strategies and multi-faceted interventions, including care checklist applications, education training and quality monitoring.The unit is a neurology and a rehabilitation ward. Many patients are indwelled by a neurogenic bladder catheter (17.6% catheterization rate in 2017), and the CAUTI infection density is 6.4 %. Actively stacking bundle care to reduce the unit CAUTI.

Purpose/Methods
Bundled care, including daily assessment requires catheter retention, catheter patency, catheter fixation, urine bag lower than bladder, hand washing before washing and urinary tract cleansing, 10 audits per month. The planting section is newly added with a sterile surface, the urine bag and the urinary tube are connected aseptically prior to link, and three planting techniques are reviewed monthly.

Results
The unit CAUTI was 6.41‰ in 2016, down to 3.7‰ in 2017, and down to 3.16‰ in 2018; daily care compliance rate was 94.63% in January-October 2018.Through
Factors affecting the willingness of doctors to use electronic medical record quality review system

TSENG Wan-ting, CHIANG WF, CHANG Rei-tung, ROAN Jinsheng

Introduction
In order to improve the quality and integrity of medical records, and promote health integration services. This study explores factors that influence physicians’ willingness to continue to use the electronic medical record quality review system.

Purpose/Methods
Based on the extended technology acceptance model (TAM2) proposed by Venkatesh and Davis (2000) to explore these influencing factors, a questionnaire was prepared and distributed to physicians, and 39 valid questionnaires were collected. The data collected by structural equation modeling techniques were analyzed, and 92% of the respondents were more than 5 years of medical experience.

Results
The results show that system quality, perceived ease of use, and perceived usefulness of the system have a positive impact on the willingness to continue to use. Avoiding the disclosure of the name of the person being examined, ensuring fairness during the review, and reviewing the comments and suggestions by the reviewer raises the issue of priority for the respondent.

Conclusions
Based on the results of this study, suggestions are made (1) the system design is more beautiful (2) to ensure the system is easy to operate (3) to review the anonymity (4) to establish the penalty for the reviewer not to modify the review opinion.

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The use of Taiwan’s National Health Insurance MedicalCloud in improving medical quality

CHANG Jung-Chun, YU Wei-Ning, HUNG Chien-Hui, CHENG Yu-Kai, WANG Yu-Chun

Introduction
The high density of hospitals in Taiwan allows people to visit hospitals at will; however, the medical information is disconnected

Improvement project to reduce the incidence of falls in stroke patients

CHEN Mei Wen, CHANG Chien Mi

Introduction
Falling is an important issue for patient safety, and the literature confirms that 73% of stroke patients have fallen within 6 months, and the rate of injury after falls is 22 to 55%. Patients with stroke often have an increased risk of falling due to weakness in their limbs. If they can raise the level of attention of patients and their companions, it will help prevent the fall of the patient. The unit is a stroke rehabilitative ward. The incidence of falls in 2016 was as high as 0.248%. A number of education, audits and measures were implemented in 2017 to improve the incidence of falls.

Purpose/Methods
1. Education and promotion of elastic belts; 2. Additional auxiliary equipment, including potty chairs; the transposition belt to provide the use of when the position is transferred; 3. Environmental renovation: adding handrails and replacing electric beds; 4. Promote the use of the “Carer Out Register”, the guardian must complete fall prevention measures before going out; 5. Provide multi-language education leaflets, QR code to learn by film; 6. Innovative development The “Leave the bed device warning” system notifies the caregiver in time.

Results
During the period from January 2017 to December 2017, the incidence of falls fell to 0.167% in 2017 after the implementation of the project, and the incidence of falls fell to 0.114% in 2018. After the project is launched, the nursing staff can appropriately provide a customized fall prevention plan to reduce the incidence of falls and improve the quality of care.

Conclusions
The incidence of falls after stroke is higher than that of the average patient, often due to limb weakness, unaccompanied, and inadequate equipment. The ward effectively reduces the fall rate by providing complete equipment, related education. And reduce unnecessary medical expenses and improve the quality of life of patients.

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Assessing Inpatient Nutrition Evaluation System: based on the Experience of a Regional Teaching Hospital in Taiwan

LIAO MIN-CHI, LIN I-Chun, CHEN Chu-Nien

Introduction
A timely and appropriate dietary support is important for inpatient care, that depending on completely nutrition evaluation. It usually starts with nurses making an initial nutrition evaluation temporarily note for inpatient on the bedside, then nurses returning to station to complete the re-port. Each report in theory will be reviewed by doctors in the next 24 hours, though exceptions do happen from time to time. Past, the completion rate of evaluation was only 76.3% in the case hospital.

Purpose/Methods
The new system is the case hospital’s plan to raise the performance of nutrition evaluation for inpatient.The development of system involved a sample group of end users in concept discussion and interface design, who then also took part in testing, training and problem soothing during the initial stage of system launch. In March 6, 2017 the system was officially installed in 15 care units and 4 intensive care units, with continued further performance assessments.

Results
Using the system to complete nutrition evaluations directly during bedside visits proves to be time-saving and efficient for nurses. Nurses are able to spend more time on patient care, that is the more valuable part of nursing job. The up-to-date nutrition evaluations enable doctors to make immediate and well-informed judgement calls and to consult nutritionists if necessary for improved diets. Statistics showed that the completion rate rose up to 96.3%, save 40,070 papers and reduce cost 24,042 NTD.

Conclusions
The advance of ICT enables hospitals to modernize existing procedures with customized IS. This trend, like the Smart Ward, brings new challenges to nurses and doctors as they learn to adapt. The initial resistance to change can be lessened with user-friendly interfaces and well-designed functionalities which prove to enhance work efficiency and better results.

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The use of physician handover platform system to improve team communication and patient safety culture

CHENG Yu-Kai, HUNG Chien-Hui, PENG Chun-Yi, CHANG Jung-Chun, WANG Yu-Chun

Introduction
About 66% of the medical error events was due to invalid communication, which was also the top three causes of the medical error events in Taiwan from 2013 to 2018. Through the construction and optimization of the handover information system, and the formulation and refinement of cross-team handover process and other specific measures, the effectiveness of the communication among medical teams, the real-time information exchange has been improved significantly.

Purpose/Methods
1. Formulate methods and procedures for medical team handover. 2. Optimize physician handover system platform. 3. Construct cross-team patient transport handover system platform and process. 4. Incorporate medical team handover work into indicator system management. 5. Promote cross-team integration care. 6. Present the achievement of patient safety and encourage inter-hospital communications.

Results
In 2013, the complete handover rate of ICU (Sender) was 62.99%. After the improvement, by September of 2018, it had
been increased to 93.53% (48.50% improvement rate). Handover system have been transformed from paper to electronic system since 2014, and a cross-team handover system platform was built. In 2015, the handover rate of ICU was 79.11% (Receiver). By September of 2018, it has increased to 88.43% (11.80% improvement rate).

Conclusions
It is an important way to convey the patient’s condition and related medical treatment information. In order to fully enhance the effectiveness of communication between medical staff, the CMUH has actively promoted all the project improvement plan of handover class, and has included the related effect of the handover class as the monitoring and management of the hospital quality indicators. Regularly review improved results, correct handover class process, and continuously optimize information platform and system.

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Implementing the monitoring of physiological monitors in intensive care units to improve patient safety

WANG Yu-Chun, HUNG Chien-Hui, PENG Chun-Yi, CHANG Jung-Chun, CHENG Yu-Kai

Introduction
Safety regulations for the alarm system of the equipments are important to patient safety. In 2016, CMUH performed the safety inspection of medical apparatuses in ICU, and found low accu-racy and incomplete records between handoff in the alarm set-tings of the physiological monitors. Identified the main causes as follows: 1. Safety specifications are not detailed. 2. There is no consensus on the upper and lower limit alarm values. 3. The medical staff ignores the importance of alarm safety settings and record integrity. 3. External audit result completion rate was increased to 78.9% to 92.3%.

Conclusions
Safety regulations for the alarm system are important to patient safety. It is expected to enhance the attention and implementation of medical team for instrument safety by incorporating interdisciplinary resources, information assistance, personnel education and audit. Checklist for physiological monitors, including physiological monitor safety device confirmation, upper and lower limits, medical order, Handover and record is necessary.

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A New Strategy to Improve Quality: Increase The Participation of Physicians in The Quality Activities of The Hospital

LI Wan Chen, TSAI Chun Chi, LIN Ching Cheng, TSENG Hung Ju

Introduction
Many quality improvement and patient safety promotion activities often require integrated medical care across departments and disciplines. In many medical service activities, the participation of doctors is promoted and the influence of peers is promoted, thereby improving the overall quality of medical care. Therefore, the purpose of this project is to increase the participation of physicians in the quality activities of the hospital.

Purpose/Methods
In order to involve physicians in quality promotion activities, the hospital proposes various awards programs, including teaching, medical record quality and participation in various quality activities and cross-functional team meetings. Strengthening the propaganda measures, through various conferences, including the hospital executive meeting and the attending physician meeting to strengthen the publicity, so that doctors understand the reward system and application methods.

Results
After the implementation of the countermeasures, the participation of physicians reached more than 95% during 2017/11-2018/10, and only a few physicians did not participate in related activities. In 2018, our hospital has also won a number of medical quality awards, including the use of process to improve the safety and efficacy of physical therapy, reduce the number of emergency violent incidents, and use combined care measures to reduce the rate of surgical site infections, etc.

Conclusions
This project is aimed at increasing the participation of the attending physicians in participating in policy activities. It is also possible to improve the participation of doctors through relevant improvement measures such as evaluation and promotion of assessment projects. The follow-up will continue to strengthen the willingness of physicians to participate in various activities in the hospital and strive to improve the overall quality of medical care.

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Electronic Poster Session
Using a patient decision aid shared decision making for insulin initiation in patients with type 2 diabetes

LIN Yu-Tzu, YANG Yi-Sun

Introduction
Poor glycemic control in type 2 diabetes (T2D) is a global problem despite clear guidelines for T2D management. Patient involvement in the choice of intensify treatment regimens could improve adherence and optimize glycemic control. Shared decision-making (SDM) is receiving increased attention as a way to improve patient satisfaction and value of care.

Purpose/Methods
With the goal of enabling patient involvement in intensify treatment regimens decision making, we developed a decision aid “Do I Need Insulin?”. The tool was designed for use by clinicians during the clinical encounter and describes a range of patient perspectives which emerge in the context of starting insulin for T2D in Taiwan’s cultural setting. To evaluate the efficacy of this tool, we conducted a feasibility study using this tool for patients recommended to receive intensification therapy for glycemic control.

Results
A total of 86 patients were enrolled, mean age 59.4±1 years, diabetes duration of 10.6±7.7 years. After the use of decision aid, 31 (36%) patients decide to receive insulin therapy, 55 (64%) patients decide to strengthen their lifestyle and not to undergo any treatment changes. For those who decided to receive insulin therapy, 21 (67.7%) have their A1c reduction of more than 0.5% at 3 months. Whereas, 15 (26.3%) for those without any treatment changes.

Conclusions
Patients receiving the decision aid found the tool more helpful; had improved knowledge; and had more involvement in making decisions about diabetes management. An innovative decision aid effectively involved patients with type 2 diabetes mellitus in decisions about their medications. Implementing a SDM model in a diabetes care practice is feasible and increases awareness and engagement, as well as satisfaction, among patients needed for need for therapy intensification.

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The Application of ARCI Model : Applying Patient Decision Aids Developing Model in Hospital

CHIH-CHIEH Tsai, PO-YING Chen, SU-MEI Lin, YI-CHUN Chiu, LIN-CHUNG Woung

Introduction
Hospitals mandate good balances between extreme specialization and close cooperation. The ARCI Model by Bolman & Terrence (1984) helps parties in organizations in clarifying their roles and responsibilities to accomplish tasks together. The Patient Decision Aids (PDAs) helps patients to participate in medical decision-making (Megan, C., 2012). Hospitals are required to provide patient specific medical and disease sharing decision-making tools to improve service quality.

Purpose/Methods
The hospital of this case (Hospital) is a joint medical system of 3000 odd beds in 7 hospitals by consolidating 10 public hospitals in Northern Taiwan. In order to develop a PDAs development model it has created a cross-unit task force (CUTF) based on the ARCI model. development model of decision-making sharing tools for medical and disease, we set up an interdisciplinary team according to the ARCI Model. Based on the consensus plan, the PDA research and development workshop is handled, and the differences in the three facets of cognition, ability and willingness are conducted before and after the course.

Results
The CUTF has set up PDAs development model, convened 3 consensus meetings, 26 promotion programs, and came up with 14 PDAs R&D teams (4 of them has good performance in external PDAs race). Overall scores after the workshop up 0.18 (the capacity improvement scores rose 0.19 and top all the categories) while the most significant difference shown in category “the workshop improves my capabilities in selecting right target groups (e.g. age, Illness) for PDAs”. That is, the workshop helps in improving trainees’ choosing appropriate target patients.

Conclusions
This is our first try in developing PDAs model by CUTFs based on ARCI Model. Further tests are mandatory for PDAs developed to contain patient families and hospital colleagues to enhance benefits of patient involvement. These models may need more improvements to become SOPs. The development model of this case may serve as template for our peers in developing PDAs.

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The use of Cross-professional teams to improve the rate of pre-operative visits

LEE Min-Yen, HOU Ya-Ping, SU Yu-Ting

Introduction
Preoperative visit is an important guideline for hospital care quality, and when the patient does not understand the surgical message, the impedance affects the operation. The aim of this project is to improve the implementation rate of preoperative visits by nursing practitioners in operating room, so that patients fully understand the operation situation and successfully complete the surgical treatment.

Purpose/Methods
The reason low rate of visits using a questionnaire to collect discovery visit nurse worry about lack of professional competence can not answer questions of patients, lack of guidance aids and audit system, visit affect the patient rest periods and other issues. Through the education and training and case sharing, the application of multimedia education guidelines, the set up of
Effectiveness of reduction in rate of delayed inpatient consultation to improve people’s medical safety

CHEN Yi-Ching, LAI Fang-Tus, CHEN Jean-Shi, TSENG Yuan-Tsung

Introduction

Inpatient consultation is one of the most frequent treatments during hospitalization, delayed inpatient consultation is defined as the cumulative person-times of the duration from the issue of consultation order by a physician to the reception of the consultation by the patient more than 24 hours in general wards or more than 4 hours in emergency room. This study set up an information system for delayed inpatient consultation to monitor the effectiveness.

Purpose/Methods

Action plan includes: (1) investigation of existing condition of the clinical units; (2) confirmation of the accuracy of every delayed consultation; (3) in-depth interview with the director to find out the difficulties of the department; (4) Committee to discuss the resolution and to extend to the entire hospital; (5) establishing inpatient consultation information system; (6) setting up timely short message system; (7) announcement of inpatient order consultation information system; (8) implementation of physician agent system; (9) inclusion in education and training program for new physicians.

Results

The rate of delayed inpatient consultation reduced from an average of 7.78% before intervention between 2014 and 2015 to an average of 5.14% after intervention between 2016 and 2017. In addition, the rates of delayed inpatient consultation were all within the threshold without exceeding the warning zone (+2 δ) since March 2018. Comparing with peers, it has reduced from an average of 7.78% before intervention between 2014 and 2015 to an average of 5.14% after intervention between 2016 and 2017.

Conclusions

By parallel-apply committee and the medical team integration system to all wards, the effectiveness of reduction in rate of delayed inpatient consultation revealed significantly. The key points to in-time revision and implementation of the information system, improvement people’s medical safety.

Comments

We confirm that this abstract has not been submitted elsewhere and all authors have approved the abstract and agree with submission to HPH.

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Multivariate Quality Improvement Strategies for Enhancing High Alert Medication Safety

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Introduction

High-alert drug administration is a high-risk process. Without perfect management mechanisms and correct medication training, it is easy to cause errors in administration. This study adopts multivariate quality control approaches to improve the process of high-alert drug administration.

Purpose/Methods

In this study, a cross-functional team was set up to improve the high-alert drug delivery operations in intensive care wards with multivariate quality control methods. Using root cause analysis (RCA) analyze the root causes to minimize the incidence of abnormal events, and delve into the process using the preliminary of predicventive QC Story improvement procedures.

Results

The Preliminary of Predicventive QC Story improvement projects identify high-risk values in the process and explore preventive measures according to the principle of prevention of errors to develop 15 man-made negligence improvement programs. They consist of a total of three countermeasures, including: (1) adopting information technology to enhance prescription integrity; (2) establishing drug bar code systems to streamline hospitalization and drug delivery procedures; and (3) applying auxiliary tools and community software to improve administration by nurses. Following the measures taken, the incidence of unusual prescriptions decreased from 0.03% to 0%; the incidence of abnormal drug dispensing fell from 0.03% to 0%; the rate of errors in administration by the nursing staff was reduced from 0.09% to 0%; the inpatient drug administration was simplified from 18 to 12 steps; completeness of prescription dosage went up from 43.8% to 83.3%.

Conclusions

Root cause analysis and preventive quality control techniques can cut down the incidence of abnormal events and prevent recurrence. Countermeasures such as information technology, fool-proof method, color management, and high-fidelity lesson plan training can reduce man-made errors in judgment. Multivariate quality control approaches are worth promoting.
Developed of problem medical device reporting system to improve patient safety in hospital


Introduction

The World Health Organization (WHO) believes that the design, manufacture or use of medical devices must focus on patient safety. Each year, the Food and Drug Administration (FDA) receives several hundred thousand medical device reports of suspected device-associated deaths, serious injuries and malfunctions. Medical Device Reporting (MDR) is the surveillance tools in the FDA to monitor medical device. Therefore, appropriate reporting process for problem medical device in hospital is important. In Taiwan hospital, we use Taiwan reporting system (TRP) which focuses on accident events related to the diagnosis and treatment of patients, such as patient falling, unplanned extubation, mistaken drugs, or the error of surgical position. But do not contain the patient safety events related to medical device associated malfunctions. The objectives of the issue would be integrate defective product and faulty medical device reporting process to improve patient safety.

Purpose/Methods

A problem medical device reporting system was developed and implemented from May 2017 in the University Hospital in north Taiwan. This program included following steps: 1. Find the team member. 2. Survey the reporting process. 3. Integrated the reporting mechanism. 4. Unified criteria for judging the problem of medical device. 5. Regular review of problem medical devices cases. It was a voluntary and online reporting system and the events were all verified after being reported.

Results

By unifying the criteria, if the medical device is used on the patient or non-used on patients but at potential risks would be classified as faulty medical device, the others would be classified as defective product. We focused on the faulty medical device no injury rate on problem medical device events between 2016 to September 2018 gradually elevated from 32% in 2016, 70% in 2017, to 86% in 2018. The near miss events are 0% in 2016, 39% in 2017 and 25% in 2018.

Conclusions

The accidental events which defined as faulty medical device we need to realize the medical equipment interaction with patient and other machine. The Education lessons for medical staff operation of knowledge is enough? The policy avoiding the problem of medical device are ignored by clinical staff and classified faulty medical device as defective product, who only change a new medical machine or products. Regularly reviewing and sorting out problem instruments or medical devices, not only helping patient safety, but also pushed management units to require manufacturers to pay more attention to their product safety.

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Research on colonoscopy pain perception and satisfaction of Colonoscopy Examination-case study of south Taiwan hospital

YI SHUAN CHEN, DENG CHYANG, WUPING-I HSU

Introduction

Pain: the 5th Vital Sign, in recent years, the concept of painless hospitals has followed suit. Colonoscopy is the primary tool for screening colorectal cancer. Colonoscopy is an invasive examination and treatment. Many people have strong pain and discomfort. It is expected to understand the relevant factors of patient pain, and further improve the quality and feeling of medical treatment by further implementing the responsibility of the painless hospital.

Purpose/Methods

The prospective research design, with the data collected from the hospital in Taiwan. The investigation was conducted from Jul 1st, 2017 to Dec 31st, 2017, with a total of 239 people receiving colposcopy examination-case study of south Taiwan hospital. It was a voluntary and online reporting system and the events were all verified after being reported.

Results

1. Female’s perception of pain was higher than that of male (p=0.009). 2. Patients with senior high school education background felt less painful than those with middle school education background (p=0.007). 3. Patients having meal replacement before examination felt more painful than those having foods self-prepared (p=0.014). 4. The longer the total examination time was, the more painful patients would feel (p=0.001). 5. Patients having higher the cognition on health education higher the dissatisfaction with the colonoscopy (p=0.003). 6. Patients having undergoing abdominal surgery felt satisfied (p=0.013). 7. The more painful the patients perceived, the less they felt satisfied (p=0.045).

Conclusions

There were significant differences with in terms of demography and clinical characteristics. As a result, as for females, they should be aware of gender difference, adjust health education information and drugs as preparation. In terms of colonoscopy satisfaction, the higher the patients with cognition on health education, the less satisfied they would be, which might be because their social status and economic conditions were better and they required relatively high standards.
Predictors of short-term mortality in head and neck cancer patients with and without emergency department visits

TANG Pei-Ling, WANG Chi, CHENG Jin-Shiung, CHANG Hao-Sheng, CHEN Hung-Chih

Introduction
Although there has been much research on the treatment of HNC, survival rates have improved little during the past 30 years, and the number of patients presenting to the ED has inversely increased, inducing overcrowding in many countries. In addition, avoiding mortality has always been the ultimate goal in the management of HNC patients with ED visits; We verified factors affecting patients’ short-term mortality in HNC patients who visited the ED, using a national population-based in Taiwan.

Purpose/Methods
In this retrospective cohort study using the Longitudinal Health Insurance Database 2000 (LHID2000) from 2000 to 2012, we compared 636 HNC patients with ED visits and 636 controls without ED visits matched for sex, age, teaching level of hospital, residential geographic area, diagnostic positions of HNC, treatment modalities and comorbidities. The Cox proportional hazards model was used to identify risk factors for all-cause mortality.

Results
The 1-, 3-, 6-, 9-, 12-month overall survival (OS) rates of HNC patients with ED visits was poorer after 6 months, compared with the non-ED visitor group. Crude survival was worse in patients with ED visits (HR=1.31, p<.05) in 1-year mortality. The factors associated with 1-year mortality risk were ages 40-49 years (HR=1.42, p=.0402), medical center visit (HR=1.23, p=.0487), oral cavity cancer (HR=1.5, p=.0045) and received surgery (HR=1.62, p=.0215).

Conclusions
In the present study, HNC patients with ED visits had poorer 1-year OS, especially those aged 40-49 years and those with medical center visits, oral cavity cancer and ever having received surgery. As we know, surgery itself has long been the cornerstone treatment modality for HNC patients, especially for oral cavity cancers. Unsurprisingly, most complications have their origin during surgery. To improve short-term survival, a set of protocols needs to be followed for patients with postoperative hemorrhage in the ED.

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The Effectiveness of Mobile Learning on Hand Hygiene Completion Rate among Nursing staff in a Hematology-Oncology Unit

YEH Chia-Ling, CHEN Hou-Chun, WU Pei-Chi, HOU You-Ru, CHEN Lih-Mih

Introduction
Hand hygiene is the most important and cost-effective way to prevent healthcare-associated infections. In 2016, the average
annual hand hygiene completion rate among nursing staff in our hematology/oncology unit was 45%, which was relatively low and may affect patient safety. The purpose of this study is to explore whether this innovative program can improve the hand hygiene completion rate among nursing staff in the hematology/oncology unit.

**Purpose/Methods**
We analyze the reasons for the low completion rate of hand hygiene, such as insufficient awareness of the exact timing for hand-washing, passive attitude toward hand hygiene, and poor compliance with the hand hygiene protocol. Through diversified strategies, we improve the knowledge and attitude of nursing staff regarding hand hygiene. For example, role-playing and games were taught and discussed; multimedia materials, including videos, jingles, music and dance, were produced and then uploaded to the mobile learning cloud platform.

**Results**
The hand hygiene completion rate among nursing staff can be increased to 94.4% after the implementation of the program.

**Conclusions**
Lively and diverse mobile learning can stimulate thinking and positive behavior of nursing staff. In order to extend the materials to other clinical staff or department, modifying the film according to different clinical environment is recommended, and thus a safer medical environment for patients can be created.

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**Using Multiple Strategies to Reduce the Fall Incidence Rate in an Orthopedic Ward**

**YEH SHU-CHIN, CHEN YI PING**

**Introduction**
Falls are the most common accident among inpatients. This project used a multi-practice strategy to reduce the fall incidence rate in an orthopedic ward. The main causes of high fall incidence include patients’ insufficient knowledge about fall prevention, risk factors present in the environment, and a lack of timely and patient-friendly fall prevention measures.

**Purpose/Methods**
This project established a multifaceted fall prevention strategy, regularly inspected risk factors present in the environment, and introduced personalized reminder mechanisms, allowing patients and their families to participate in the prevention of falls. Furthermore, other medical teams jointly promoted fall prevention measures aimed at inpatients.

**Results**
The results of the project’s implementation were as follows: the number of fall incidents among patients decreased from 16 to 7. The fall incidence rate of the unit decreased from 0.12% in the fourth quarters of 2017 and first quarters of 2018 to 0.06% in the second and third quarters of 2018; as such, the fall incidence rate was far lower than the target value of 0.07%.

**Conclusions**
It is hoped that the project’s results can provide a reference for improving the quality of clinical inpatient care, prevent falls during hospitalization, and prevent extended hospitalizations (due to falls) that affect patients’ quality of life.
Comments
Using a multi-practice strategy to prevent falls, medical team members are invited to participate in the implementation of interventions to prevent falls. The main purpose is to reduce the occurrence of falls during hospitalization, cause secondary injuries, affect the quality of life and prolong the length of hospital stay, so that patients can be discharged early, restore a healthy lifestyle and promote the health of the body and mind.

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Improve the Safety of Chemotherapy in Hospitalized Patients

HOU YOU-RU, ZENG YUE-MEI, LIAO WAN-JYUN, LIAO SU-MIAN, HUANG SIOU-YUN, WANG JIA-HONG, JHENG SIH-PEI, JHANG SIN-YUE, SIAO YOU-SONG

Introduction
Chemotherapy administration is a high-risk clinical work, and the administration process is complicated, error-prone, and has potential patient safety problems. There were 8 cases of chemotherapy abnormalities in our hospital from 2015 to 2016. In order to maintain the safety of patients and clinicians, the oncology team formed a quality control circle in January 2017 to improve the safety of inpatient chemotherapy. The challenge target is zero risk of chemotherapy administration.

Purpose/Methods
Countermeasure group 1: Intensify nursing staff's chemotherapy injection safety cognitive skills. Such as: Making a safety dynamic teaching course for chemotherapy injection. Countermeasure group 2: Increase the diversity of educational tools to improve the integrity of education. Such as: Making a safety dynamic teaching course for chemotherapy injection. Countermeasure group 3: Strengthen pipe fixing and avoid active pulling. Such as: Increase long tail clip to strengthen the fixed infusion catheter.

Results
There were no abnormal events occur in the administration of chemotherapy. The average correct rate of nursing staff infusion safety awareness increased from 84.3% to 98.2%. The average correct rate of nursing staff on chemotherapy safety skills increased from 62% to 96.7%. The patient cooperated with the implementation of the guidance of the health education, the average correct rate increased from 56% to 98.3%. The average correct rate of the main caregiver rotation and signature was increased to 100%.

Conclusions
There were no abnormal events during this project, no additional medical costs, no extended hospital stays, and effective measures to parallelize other inpatient chemotherapy wards. 88.2% of the nursing staff reduced the pressure on the operation of the cancerization work; the cancerization operation included the pre-employment training of the new recruits through the OSCE model, effectively reducing the turnover rate of new recruits.

Comments
I am working as a registered nurse for more than 18 years. Currently, I am working in a hematology-oncology unit since 1998. Promoting the health of patients is my ultimate goal. It is my responsibility to guard against chemotherapeutic safety.

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Assess the Effectiveness of Gesture-based Evaluation in Wearing Isolation Gown

CHEN Shoulan, LIOU Chuen-He

Introduction
Infection control is an important topic in contemporary medicine, and correctly wearing personal protective equipment is the most basic essential skill. Using image recognition system to ensure the adequacy of wearing personal protective equipment could lower labor cost and implement infection control. A pilot study was conducted to investigate the feasibility of using gesture-based technique to aid the interpretation of correctly putting on and taking off isolation gowns, and analyzed its advantages and limitation.

Purpose/Methods
Thirty nurses from the specialty clinics were recruited for the study. Each nurse practiced wearing the hospital-approved gown under the in-house infection control staff supervision and then compared with the gesture-based detection machine (Microsoft Kinect). The course of wearing and removing isolation gown was divided into several movement segments, of each the criteria of time and joint moving ranges were set for machine judgment of procedure adequacy.

Results
The result of the study showed 57.1% correlation between expert eyeball assessment and the gesture-based detection. The major causes of the rest inconsistency came from (1) Kinect’s low sensitivity of movement detection, leading to repeated processes, (2) too early initiation of the detection procedure in movement segments, (3) incomplete movements during each segment, and (4) Kinect’s overtime during tasks. In questionnaire afterward, participates agreed that gesture-based techniques could effectively enhance their learning motivation and interests.

Conclusions
The gesture-based system was an effective assessment tool in the learning course of equipping isolation gown. It showed the advantages of motivating learning and inducing interests. However, there were several limitations that needed to be improved before its incorporation into daily practice.

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Using a case management model to care for a young heart failure patient's nursing experience

CHEN ching ling

Introduction
A young heart failure patients diagnosed with heart failure is economic independence, independent thinking, but because of the lack of understanding of diseases, drug treatment, self-management, etc., there is a year without tracking treatment; and for labor, not paying attention to dietary restrictions. Repeated hospitalization for edema activity such as breathing, difficulty breathing, sitting breathing and other symptoms. Therefore, the medical team used the case management model to explore the factors related to the repeated admission of heart failure cases.

Purpose/Methods
From January 14th to January 18th, 2017, we collected data through history, physical examination/assessment, nursing evaluation and examination analysis. We used Gordon 11 Functional Health Patterns to evaluate the patient overall condition. The result of the patient comprehensive assessment revealed the following health issues as shortness of breath and exertional dyspnea; edema/orthopnea; anxiety. By using document verification, team resource and case management model to decide improvement management and enroll the patient and the main caregiver as joint care.

Results
The during the care period, we used one-on-one education through case management mode and modified care plan, providing home care for heart failure, reduce anxiety and uncertainty about treatment; Through telephone interviews after discharge, and accompany the return visit and health consultation. The patients physical and mental aspects of the family can make the relationship of care more closely and be able to face the future life with a positive attitude when the case is discharged.

Conclusions
According to the above-mentioned case management model, the care is excellent, and the case and caregiver are given the right to participate in clinical decision-making. The medical team can work together to achieve a more complete and effective clinical communication.

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Factors Influencing the 14-day Unplanned Readmission Rate of Taiwanese Children with Cancer

LIU HSIU-MEI

Introduction
Cancer treatment for children requires multiple courses of treatment and readmissions to the hospital. Because such readmissions in the long-term affects the quality of life of the children and their family, preventing short-term unplanned hospital admissions can mitigate their physiological and psychological burden. This study examined factors influencing the 14-day unplanned hospital readmission rates of children with cancer to derive findings that may serve as a reference for mitigating such situations.

Purpose/Methods
This study adopted medical record reviews and caregiver interviews to collect data. Specifically, the medical record contents of a children’s hospital in northern Taiwan were examined, such as disease problems attributable to the unplanned readmissions, and previous implementation of preparation work prior to discharge.

Results
In 2016, 14-day unplanned readmission rate of 5.03%. The disease problems attributable to the unplanned readmissions were identified as fever or symptoms of infection (34.2%), other physical discomfort (28.9%), medication-related problems (21.1%), and gastrointestinal tract care problems (15.8%). Several factors attributable to the problems were discerned from the interviews with the primary caregivers: (a) omissions in discharge instructions by medical personnel; (b) incomplete home care instruction tools contributing to patients’ and their families’ failure to remember the instructions; (c) nonpersonalized discharge instructions; (d) inconsistency among medical personnel regarding the care instructions provided; and (e) nonadherence with medication and self-care principles.

Conclusions
This study suggests that improvements be made to assessments on child patients with cancer and the self-care needs and abilities of the caregivers in order to identify potential problems early on. Through the discharge care plan designed following a medical team meeting and postdischarge telephone follow-ups, child patients and their caregivers can be provided with self-health education related to discharge care, and reducing the 14-day unplanned hospital readmission rate. Accordingly, the postdischarge quality of life of child patients with cancer can be improved.

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Reduce the incidence of intravenous chemotherapy drugs extravasation

TSENG Chia Ting, LIN Chia Chen, CHEN Hung Ting, HOU You-Ru

Introduction
Intravenous chemotherapy is a high-risk clinical work and can’t allow any negligence. If there are any mistakes, may cause irreversible damage, then increase hospital stay and even life-threatening. In 2016 there were three cases of chemotherapy extravasation in our hospital, one of which was severity assessment code level 2. In order to reduce the risk of chemotherapy extravasation and increase patient safety, we set up a quality control team. The goal is to reduce chemotherapy extravasation events.
Purpose/Methods
Analyzed the root cause of the extravasation events. To apply hospital chemotherapy drug management standards and patient education brochure develop a questionnaire survey to find out the causes of extravasation. We provided three interventions: 1. Instructional videos recording, teaching workshops, and clinical test by OSCE to enhance the cognition and skills of staffs. 2. Applying binder clip become the second fixed point. 3. Creating the easy-to-understand and multi-language educational videos and to associate with QR codes for patients and caregivers to enhance cognitive ability.

Results
The average correct rate of nursing staff cognition of intravenous chemotherapy increased from 10% to 100%. The average correct rate of nursing staff skill of intravenous chemotherapy increased from 58.8% to 100%. The average correct rate of patients and caregivers cognition of intravenous chemotherapy increased from 79.5% to 100%. The average correct rate of patients and caregivers cognition of intravenous chemotherapy increased from 10% to 100%.

Conclusions
From 2017 to 2018, there was no chemotherapy extravasation events in the project units. Graphical and dynamic teaching videos can effectively enhance learner cognition. Multi-language educational videos and QR code links not only facilitate to patients, but also reduce nursing work and reach educational consistency.

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An improvement project to reduce the incidence of fall among in-patients in neurological ward by applying teamwork strategies

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Introduction
According to the results of a retrospective study from January 2016 to June 2017, the incidence of fall among in-patients in our neurological ward was 0.25% (33/13310), which was higher than that in peer hospitals (0.09%) (Huang, Hsu, Yuan, Kuo, 2016). At the preliminary admission screening, the study also showed that among patients who had fall incidents (n=33) in our ward, those with high risks of fall accounted for 93.9% (31/33). As a result of high fall incidence, the medical expenses and duration of hospital stay were significantly increased.

Purpose/Methods
After proper literature review, benchmark learning and group discussions, the task force establishes an improvement project to reduce fall incidence. The measures consist of amendments on the contents of the fall prevention education materials; the promotion of fall prevention strategies by adding a QR Code to access to fall prevention videos, or by physician's oral instructions during ward runs; the supplement of a SOF survey to form an interdisciplinary healthcare plan; the establishment of a security network; and the release of a fall prevention education material named "triple safety card".

Results
After implementing the above improvement strategies, the fall incidence of in-patients in our department reduced from 0.25% (33/13310) to 0.08% (4/5054), the incidence of severe injuries caused by fall reduced from 6.1% to 0%, the fall prevention awareness among patients and their caregivers increased from 39.8% to 95%, and the accuracy of fall prevention performance among patients and their caregivers increased from 34.0% to 90%.

Conclusions
This project intends to develop a patient education-, teamwork- and innovation-based "fall prevention security network" by combining the resources and efforts from an interdisciplinary healthcare team, in order to create a fall prevention education material ("triple safety card") to remind the caregivers providing real-time assistance to the patients. As a result of the project, the incidence of fall among in-patients in our neurological ward is decreased.

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Applying Healthcare Failure Mode and Effects Analysis (HFMEA and teamwork initiatives to promote patient safety during intra-hospital transportation

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Introduction
Intra-hospital transportation (IHT) of unstable mechanically ventilated patient is prone to potential risks and adverse events. The application of HFMEA (Healthcare Failure Mode and Effects Analysis) method to examine and improved this complex process of patient transportation might provide value in promoting patient safety.

Purpose/Methods
We conducted an HFMEA program to promote the safety of mechanically ventilated patients during IHTs since September 2015. The efforts of strategy included the standardization of the transportation process, enhancing equipment maintenance, and a new method for the reminder-assisted briefing. We compared the incidence of patient safety events and completeness and correctness of the tasks deemed to be essential for effective teamwork before and after implementing the program since January 2016.

Results
The implementation of improvement strategies of this program significantly reduced the incidence of preventable patient safety...
Prognostic factors for the change rates of symptoms and depressive symptoms among patients with hepatocellular carcinoma

TSAY Shiow-Luan

Introduction
Hepatocellular carcinoma (HCC) was both the common and leading cause cancer-related death of cancers around the world. Although the survival rates of HCC has improved in recent years, patients still suffered symptoms caused by cancer or treatments. The inference of previous studies limited by the sample included different types of cancer and the confounding of comorbidities. The objective of this study was to identify the predictive value of demographic and clinical factors for changes in physical and depressive symptoms among patients with HCC over time.

Purpose/Methods
We conducted a prospective cohort study of 128 patients newly diagnosed with HCC in Taiwan. Patients' physical symptoms were evaluated with the Edmonton Symptom Assessment System (ESAS), and depressive symptoms were assessed with the Chinese version of Hospital Anxiety and Depression Scale (HADS). On the basis of Symptom Management Theory (SMT), patients' characteristics were predictors of symptoms, as estimated by a generalized estimating equation (GEE). The data of each patient were collected at four time periods, including at baseline (T1), 1 month (T2), 3 months (T3), and 6 months (T4) after patients completed the treatment.

Results
We found that patients who had a smoking habit, who were BCLC Stage B, who underwent radiofrequency ablation therapy (RFA) or liver resection, and who had higher GPT levels reported more symptoms from T0 to T1. Additionally, working status, liver resection, and BCLC Stage C disease were predictors for depressive symptoms from T0 to T1.

Conclusions
BCLC Stages and the type of treatment were the mainly prognostic factors with changes in both physical and depressive symptoms over time. Clinical professionals and patients should pay attention to these characteristics that improved the symptoms during treatment.

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Exploring the Effects of Individual Education Program Combine with Nursing Instruction on the Self-Care ability of First Diagnosed Liver Cirrhosis Patients in a Medical Center of Taiwan

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Introduction
Liver cirrhosis was one of important chronic disease and accounted for the tenth cause of death in Taiwan. When patients diagnosed of liver cirrhosis need to complete educate patients and their families on the care of the relevant cognitive and care skills to strengthen the patient's self-care ability is more important. The purpose of this project was to exploring the effects of individual education program combine with nursing instruction on the first diagnosed liver cirrhosis patients.

Purpose/Methods
Through questionnaire survey, actual observation, interview and retrospected medical records to investigated the first diagnosed liver cirrhosis patient's self-care knowledge. The average correct rate of knowledge was 62%, the correct rate of care skills was 56%. We then developed a series improvement strategies included by standardized the mode of individual education program and nursing instruction for patients, developed care Instruction man-ual and leaflet, counseling contact card, the establishment and use of patients self-care learning effectiveness rating scale.

Results
In this project the self-care ability of patients with cirrhosis is improved, the correct rate of self-care knowledge of patients with cirrhosis is increased from 62% to 89%, and the correct rate of care skill and the rate of implementation are increased from 56% to 88% in May 2016.

Conclusions
The results of this project can be used as a reference for nursing staff to carry out the care guidance of patients with cirrhosis, improve the effectiveness of care, reduce unnecessary repeat hos-pitalization, and promote the quality of life.

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The effect of individualized sleep bundle care on sleep quality of critically ill patients.

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Introduction
Patients often experience disruption of sleep and circadian rhythm by sound, light and care activities in the intensive care unit (ICU). These disruptions may lead to patients’ delirium and other complications.

Purpose/Methods
This study aimed to investigate the effect of individualized sleep bundle care on sleep quality of critically ill patients. One-group pretest and posttest design was used. Thirty-five eligible ICU patients participated in the study. The patients received the evidence-based individualized sleep bundle care including environmental regulation strategies (such as reducing lighting and alarm noises, adjusting the nighttime care routine) and non-pharmacological interventions in night time. The patients selected the non-pharmacological interventions according to their preferences (such as eye masks, earplugs, music listening, warm blanket). Patients’ sleep quality and efficiency were assessed by Richards-Campbell Sleep Questionnaire (RCSQ) in the morning after their ICU admission as pretest and by the time their transferring out of ICU as posttest.

Results
After receiving the individualized sleep bundle care, the average sleep quality score was improved significantly from 61.23 at pretest to 76.37 at posttest (p = .004), and the average sleep efficiency score was also increased significantly from 62.43 to 77.86 at posttest (p = .006).

Conclusions
Environmental regulation strategies and non-pharmacological interventions according to patients’ needs and preferences may have the potential to improve the sleep quality and efficiency of critically ill patients in ICU.

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Reduce the incidence of pressure injury for in-patients

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Introduction
For the evaluation of clinical quality care, pressure injury assessment is an essential indicator. If the patient has a pressure injury during hospitalization, it will come with comorbidity such as prolonged wound healing, infection issues, and sepsis, life-threatening and so on. It is also increase medical expenses, prolong the length of hospital stay. The period of Jun to July 2018, we had the pressure injury incidence rate was 0.1%, and the weighted average value $\geq 36$in the control chart compared with peer hospitals.

Purpose/Methods
We used decision matrix analysis, and causes analysis and made solutions: 1. using flip cloth for turning over patient’s position. 2. applying the risk level of pressure injury and conducting preventive measures for patients with pressure injury. 3. designed a changing position sheet for night shift record to confirm change posture care authenticity . 4. reinforce nursing skill on physical assessment and strengthen care giver knowledge on pressure injury care. 5. The leader who work at night shift has to check that care givers do position change care for patients conventionally.

Results
The aim of this project is to reduce the incidence of pressure injury less than 0.05%. The implementation of the Project since August 1 to September 30th in 2018, the incidence of pressure injury was 0.1% reduces to 0.05%. weighted average value was $\geq 36$and drop <1 compared with peer hospitals.

Conclusions
New employed nurses who just graduated from school, they are lack experience and incapable to do right assessment. They need more trained, practice and educated to perform their assessment and nursing skill on clinical professionally. Thus, to enhance the nurse staff’s assessment skill on pressure injury, established their confidence and achievements meanwhile the outcome would be display on low incidence rate of pressure injury and shorten hospital stay.

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Reduce the incidence of falls in patients with acute wards - Taiwan experience

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Introduction
Prevent patients from falling and reducing the degree of injury is the 8th item of the fourth Annual Patient Safety Goal of Taiwan. As falls were closely related to an increase in the length of hospital stay and mortality, so fall prevention was essential in clinical practice. There were 10 falls in our ward in 2017, fall rate was 0.08‰ exceed hospital threshold(0.06‰). The cause analysis was inadequate knowledge of caregivers and environmental factors, and we developed countermeasures to improve.
Purpose/Methods
In Feb. 2018, the quality control circle was established for improvement, and the solution was analyzed based on the decision matrix. Reduce the fall rate of this ward by improving <0.06‰.
1. Create new fall prevention images, educate fall prevention skills to the caregiver and re-education if rotated or exchanged the caregiver.
2. Provide user-friendly tools for the educator as the mobile nursing cart computers, mobile phone scan QR code to teach fall-prevention program.
3. Establish accessibility environment.

Results
1. The incidence of falls in patients in wards from June to September 2018, dropped to 0.05‰.
2. The rate of inpatients received fall education reached 90% with using the user-friendly tools by the staffs.
3. The caregivers were requested to report and record the time when they left, and the nurse would more visit the patients and check their safety.
4. Establish Accessibility environment, such as the slope in the entry of lavatory.

Conclusions
Prevent patients from falling is very difficult, but preventable if continuously implement improvement measures. The use of the action car and QR code allows the patients, families or careers to get timely information, making the information link smoother and more helpful for patient safety maintenance. The accessibility environment can reduce damage related by fall. The caregiver should inform the staff when leaving the unit to effectively prevent falls from occurring.

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Audit and feedback development project for hospital falls prevention in Azienda USL – IRCCS of Reggio Emilia

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Introduction
Falls are the second leading cause of accidental injury deaths worldwide. Patient’s falls is a major topic for Emilia-Romagna hospitals. The regional health authority has developed a guideline for falls prevention (FPG) in hospital, implemented in a few “pilot units” (PU) with the aim of improving quality and safety of care. This project aims to introducing audits and feedback (AF) strategies for improving quality of care, through evaluation of performance and improving PU teams awareness.

Purpose/Methods
PU professionals were trained by traditional and e-learning way. Moreover were made available the following tools: online guide for fall risk assessment and computerized form for a plan of preventive actions, video tutorials, brochures and posters for patients and professionals, computerized form for patient’s fall reporting. A reporting system with some indicators has been defined for a checklist to carry out audits about FPG adherence. Indicators were shared and discussed with professionals to identify areas for improvement.

Results
FPG was applied in 14 PW (6 in 2017, 8 in 2018). A 60 patients “before-after” audit showed + 95% (23/T0 and 45/T1) in multidimensional fall risk assessment; + 55% (13/T0 and 29/T1), + 126% (15/T0 and 34/T1) in patient and caregivers education; + 104% (22/T0 and 45/T1) written in patient chart. The training was attended by 85% (95/112) overall of professionals. Reports about FPG adherence (risk assessment, preventive actions and falls reported data, are available on the organization website.

Conclusions
Globally, falls are a major public health problem. The financial costs from fall-related injuries are substantial. Develop a multifaceted project for falls prevention and monitoring (professional education, computerized tools, standard references and AF strategy) has led to improve the patient assessment and preventive actions, clarity in writing medical records. In the long term we will be able to appreciate a real minimization of the falls’ risk factors, more effective preventive actions, with desirable reduction of adverse events.

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Does the Psychological Education Program improve the quality of life of patients with colorectal cancer?

LIN Chen

Introduction
The colorectal cancer was the most common type of cancer and the third deadliest in 2016. Clinically, taking care of the patients is often focused on improving physiological symptoms, we seldom understand what patients’ needs are or what patients are anxious about. So that the patient’s quality of life cannot be improved. It is the reason why I want to study whether giving psychological education to the patients with colorectal cancer can improve their quality of life or not.

Purpose/Methods
The participants are colorectal surgeon, dietitian, physiotherapist, social worker and anesthesia nurse. They tracked the patients from the first month till the first year after the operation. It contains seven parts: 1. Introduction to the definition of treatment, heredity and prognosis of the colorectal cancer. 2. The psychological issues and responses to the cancer crisis. 3. Nutrition issues. 4. Arrangements of daily physical activity. 5. Music and relaxation. 6. Visit the operating room. 7. Feed back.

Results
The results show that the patients who joined the Psychological Education Program improved the quality of life. Women’s mental health was significantly lower than that of men. The overall physical condition of patients with colon cancer was better than patients with rectal cancer. Comparing the mental health education...
courses, the Psychological Education Program had short term effects on patients with colorectal cancer by becoming more optimistic and alleviate discomfort.

Conclusions
The team members, including physicians, nurses, psychologists and cancer case managers, etc. organize the psychological education courses together. This small patient group meeting is held once a week. We let patients proactively ask questions or vent emotions of anxiety. Psychological education courses and cross-team integral care enable patients to receive physical, mental, spiritual and social care. Therefore, we can enhance the quality of life of patients with colorectal cancer.

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Three-year follow-up of Psychiatric Inpatient Fall Prevention in a Psychiatric Center in Taiwan

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Introduction
The purpose of this study was to explore the risk factor of psychiatric inpatient, and three-years follow-up of improvement process and effectiveness in a psychiatric center southern Tai-wan.

Purpose/Methods
A total of 445 inpatient fall incidence relevant data were collected by purposive sampling method from 2015 to 2017. The secondary data summary of inpatient fall incidence includes the characteristics of the patient, activity state, the cause of the fall, and the severity of the injury. SPSS18.0 was used for quantitative data analysis and processing. According to the data, the tum-blowing construction method was used for fall prevention. Step by step to find the cause and factor of falls, collect information to clarify the situation, develop action strategies, discuss teaching and analysis results in practical cases, re-define the fall prevention strategy, and then continue to implement.

Results
The result showed that the main cause of falls was “physiological factors”, followed by mental symptoms or lack of self-protection. The third was the lack of environmental hardware. Step-by-step improvement intervention included to collect and analyzes 1 year data from each ward, applied quality control tools to find effective improvement strategies, and then is counseled by quality control experts. After three years of implementation, the moderate injury degree of fall decreased to mild injury decreased from 40.4% to 6.9%, and the number of patients without injury increased from 59.6% to 93.1%. After the nursing staff participated in the education, the fall prevention knowledge was 90% or more, accounting for 98%.

Conclusions
In the pragmatic promotion of the fall prevention strategy, in addition to strengthening the assessment of rigor, adopting appropriate response strategies, it is necessary to include case-solving and prevention programs, and to provide different needs for flexibility, the medical team will observe assessment and discussion translate into motivation and concrete action. From this study, it is found that the intervention plan for education and training, regardless of whether it is a professional or a patient, needs to consider individual factors and acceptance status.

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The Effects of the Application of PDCA Cycle to Reduce Falls of Psychiatric Rehabilitative Patients

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Introduction
This study explores the fall cases of inpatients in rehabilitative wards of a teaching hospital in southern Taiwan. The study employs PDCA cycle to reduce incidence rate and injury rate of a fall. Fall prevention programs are drafted to decrease the risk of fall-related injuries.

Purpose/Methods
The PDCA cycle was applied in this retrospective study. In 2016, 13 fall cases were reported, and 6 of them resulted in mild or more serious injuries. The incidence rate of a fall was 0.067% and the injury rate of a fall was 0.46%. The first segment of the cycle is “plan”; that is, fall prevention plans were outlined in accord-ance with patients’ needs, medication, and environmental safety. The second segment of PDCA is “do”. That means patients who staggered and showed general fatigue should be marked as high risk group. Their steps, shoe conditions, and clothes were supposed to be checked as the nurses went the rounds of the wards. Also, daily strength coach and hiking activities were provided. In addition, the patients’ medication was discussed weekly and individual adjustments were made. Furthermore, the envi-ronmental safety of the wards was checked daily. The third seg-ment of the cycle, “check”, refers to the monthly evaluation of high risk fall cases. The last segment of PDCA is “action”, which implies the regular implementation of fall prevention measures.

Results
Nine cases of a fall were reported in 2017, and the incidence rate of a fall was 0.018%. Two cases of injuries resulting from falls were reported, and the injury rate of a fall was 0.3%.

Conclusions
PDCA cycle enables nursing staff to carry out measures of fall prevention. Also, it can improve environmental facilities and reduce incidence rate of a fall. We will keep monitoring and modifying this program. Hopefully, this program can be applied to other psychiatric wards so that the risk of a fall is reduced, the patients’ safety is ensured, and the nursing quality is maintained.

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Improving the satisfaction of environment in psychiatric acute wards

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Introduction
This action plan aims to enhance the satisfaction degree of neatness of bathrooms in psychiatric acute wards.

Purpose/Methods
In this study, there were 41 participants, including the staff and the patients. They took both pretests and posttests with the “neatness awareness and satisfaction questionnaire” from October 15, 2017 to February 28, 2018. A cause-and-effect analysis was employed to present the following findings: 1. The clinical staff failed to supervise and grade the environmental neatness, and their criteria for neatness were not consistent. 2. The patients lacked motivation, and sometimes their cleaning tasks were interrupted by acute onsets of diseases. 3. The facilities were old and lacked instruction signboards. Even worse, there were few janitorial supplies. 4. The cleaning process was not standardized. 5. There was an absence of competition system. Based on the above findings, several measures were taken. First, educational training was provided to reach a consensus. Second, a standardized check-list for bathroom neatness was designed. Third, a signboard for neatness and maintenance was set up. Last but not least, the rules of neatness competition were incorporated in ward norms, staff manuals, and inpatients’ schedule.

Results
After the intervention of the four-month action plan, the results of the study are as follows: 1. The neatness grading rate for the ward staff increased from 63% to 98%. 2. The satisfaction degree of environmental neatness of the ward went up from 54% to 83.3%. The staff and inpatients alike gave positive feedbacks like, “It's great to have a clean bathroom.” “Working together to make the environment clean really makes the difference.” “I look forward to taking part in every cleaning competition.” Via cooperation, the inpatients had more confidence to participate in such competitions. Not only did the bathrooms become cleaner but the nursing quality also improved. All in all, this strategy has made the difference.” “I look forward to taking part in every cleaning competition.” Via cooperation, the inpatients had more confidence to participate in such competitions. Not only did the bathrooms become cleaner but the nursing quality also improved. All in all, this strategy has gained a sense of achievement from it.

Conclusions
Cooperation in psychiatric acute wards, standardized procedures, and tidiness check-list systems put a premium on environmental tidiness and safety for ward staff and inpatients. Additionally, they can raise the satisfaction degree and improve comfort as well as environmental quality of hospitalization.

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The Effectiveness of Applying Data Mining in Improving Patient Safety Reporting Process in a Psychiatric Center in Taiwan

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Introduction
“Patient Safety” is common demand and responsibility of medical caregivers and patients. Up to now, patient-safety reporting system has been operated in our hospital. However, the reporting process of consumes times which caused gap of following up and influenced the timeliness of dealing events. Therefore, we hope to analyze thoroughly by using data mining and then to draft intervention measures to improve the effectiveness of reporting process and to ensure patient safety.

Purpose/Methods
This research applied the database of “Patient Safety Reporting System” in a psychiatric center. Date collecting started from January 2018 to July 2018 and the cases of receipt, the error vents which reported to “Patient Safety Reporting System”, were 724. The research method was using data mining to realize the causes of time-consuming of reporting process of “Patient Safety Reporting System” and then to draft and to intervene in improve-ment measures.

Results
The result showed that 1. Since August 2018, the decision tree of data mining find out the relation in reporting procedure of patient-safety events. 2. Applied reporting system database for analysis to review the current situation and formulate and implement intervention measures, such as: (1) draft and revise the patient-safety reporting system operation specifications, and publicize the notice. (2) Set up an information platform for the follow-up of notified cases, including the addition of information equipment and cross-disciplinary and team care meeting records to each other and upload them to the cloud system. (3) Add a reminder mechanism for the newsletter to enable tracking and monitoring.

Conclusions
The research showed the effects slightly in October 2018. The conclude day of reporting events reduces from about 38.8 days to 26.0 days, the rate of progress is 32.11% and the achieving rate is 50.6%. However, the effects intervention measures only reveals 1 month’s data. Therefore we have to follow up continu-ally.

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Reduce the incidence of facial pressure sores in patients with ward oxygen therapy

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Introduction
In the process of care, face crushing is often neglected, resulting in prolonged compression of the skin causing necrosis. The rea-son for the high incidence of crush injury and correct preventive
Construction of a Safety Mechanism for Medication of Hepatitis C to Improve Cure Rates

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Introduction
According to WHO statistics, 130 million people worldwide approximately are chronically infected with hepatitis C virus (HCV). Direct-acting antivirals which compared to traditional interferon combination therapy had a short course of treatment and a very high cure rate. However, the choice of DAAs requires considering viral genotyping and possible drug-drug interactions. If it is not properly evaluated before treatment, not only will the therapeutic effect not be achieved, but it will cause the patient’s physiological harm.

Purpose/Methods
In order to avoid unnecessary adverse reactions during treatment, the medical team must construct a mechanism to improve drug safety: Firstly, confirm the hepatitis C genotype to choose the appropriate drug. Secondly, set the test set related to the treatment to confirm medication compliance. Thirdly, confirm the medication record within three months to avoid drug interaction. Fourthly, the discharge planners need to strengthen their medication administration by health education to enhance medication safety.

Results
There were 82 patients who were treated from 2017 to 2018. Before treatment, 35 patients had to adjust or suspend long-term use of medicine (42.68%). One patient had not completed treatment due to other diseases. The completion rate of medication was 98.78%, and the success rate of treatment was 98.76% (HCV RNA was Normal).

Conclusions
There is more than 90 percent of the opportunity to cure Hepatitis C while taking Direct-acting antivirals. It needs to be carefully evaluated before treatment to prevent the risk in patients during treatment.

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A Study on the Effectiveness of Pharmacist Intervention in Psychiatric Day Care Wards

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Introduction
For patients in psychiatric day care wards, in addition to the long-term intake of psychiatric drugs, patients may have hypertension, diabetes, or other chronic diseases requiring related drugs. Pharmacists therefore need to take part in evaluating patients’ clinical drug administration and provide integrative pharmacy care to enhance the medication safety of patients.

Purpose/Methods
From February 2018 to October 2018 pharmacists carried out assessments on patient medication provided by psychiatric day care wards. The drug administration for the same patient was carried out every three months, and the assessment result feedback was provided to the doctors for reference.

Results
157 patients were evaluated, of which 89 were males (56.7%) and 68 were females (43.3%), with the average age of 49.7±27.3.
The average number of drugs taken by each patient was 11.8 types (4.4 psychiatric drugs, 1.7 cardiovascular drugs, 2.1 blood pressure lowering drugs, 1.2 hypolipidemic drugs, and 2.4 other drugs). The pharmacists’ drug recommendations comprised 231, including 96 drug interactions (41.6%), 62 recommended monitoring testing values (26.8%), 48 diet precautions (20.8%), 21 drug side effect reminders and monitoring (9.1%), 2 recommended additional use of hypoglycemic drugs (0.9%), and two polypharmacy cases (0.9%); there were 172 cases (74.5%) of drug recommendations accepted by doctors. The reasons for not accepting drug recommendations include: the patients’ symptoms are serious and require special medication (11 cases), the patient’s alternative drug is ineffective (1 case), and the patient shows no apparent side effects and continues to be under observation (47 cases).

Conclusions
During the process of drug treatment, to avoid potential risks of adverse drug reactions, medical teams must work together to comprehensively medication assessment and conduct related monitoring after medication in order to maintain patients’ medication safety.

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Neiguan (P-6 acupressure effectiveness in outpatients with Chemotherapy-Induced Nausea and Vomiting.

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Introduction
Chemotherapy-induced nausea and vomiting (CINV) is common side effect of chemotherapy, but also is potentially the most severe and most distressing. Reduce the level of CINV will effectively promote the qualities of life for chemotherapy patients.

Purpose/Methods
The purpose of this study was to determine the effect of applied to the neiguan acupuncture point on outpatients with CINV. 19 outpatients in outpatient chemotherapy unit and presenting vomiting were included in the study. There were 9 outpatients in the experimental group and 10 outpatients in the control group. Using Duke’s descriptive scale (DDS) assess grade of CINV. Education outpatients find the point of neiguan. The outpatients of experimental group apply neiguan acupuncture for 6 mins before and eat after chemotherapy. Nausea and vomiting were evaluated at immediately after chemotherapy and 24 hours after chemotherapy.

Results
The presence of nausea or vomiting throughout the observational period was significantly reduce in experimental group (88%), no change in control group (0%). The efficacy of applying neiguan acupressure was demonstrated for outpatients with CINV.

Conclusions
We determined that applying acupressure at the neiguan point is effective in decreasing chemotherapy-induced nausea, vomiting in outpatient chemotherapy unit patients.

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Discussion on indoor air quality test results in public space - Take a hospital as an example

HUNG-AN Hsieh

Introduction
The issue of indoor air quality has been valued by everyone in recent years. Each person is in an indoor environment for a long time. If the amount of indoor ventilation is insufficient, the pollutants will accumulate easily and the indoor air quality will deteriorate, causing symptoms such as eyes, nose, throat irritation and asthma attacks, etc. The changes in concentrations of formaldehyde, PM10 and carbon dioxide were explored, and the number of people in the waiting area and the amount of ventilation in the process were understood.

Purpose/Methods
The detection point is the waiting to see the doctor zone. The carbon dioxide (CO2) test method is NIEA A448.11C, the detection range is 0~4000ppm, the time is 8 hours, the standard value is 1000ppm, and the carbon monoxide (CO) test method is NIEA A421.13C, the time is 8 Hour, standard value is 9ppm, formaldehyde (HCHO) test method is NIEA A705.12C, time is 1 hour, standard value is 0.08ppm, PM10 test method is NIEA A206.10C, time is 24 hours, standard value is 75 μg/m3, the bacteria test method is NIEA E301.15C, the time is 3 minutes, and the standard value is 1500 CFU/m3.

Results
Test results are CO2 was 822 ppm, CO was 0.8 ppm, HCHO was <0.06 ppm, bacteria was 776 CFU/m3, and PM10 was 33 μg/m3. The monitoring results were within the legal allowable concentration, but the CO2 value was slightly higher, possibly with detection. The number of patients on the day is high, and on the day is natural ventilation, and the ventilation rate will be slower. Therefore this area needs continuous observation.

Conclusions
The test items did not exceed the standard value, indicating that the indoor air quality is not bad, but if there is pollution, first understand the cause, find the main source, and then make improvements based on the cause. such as: When the ventilation ventilation capacity is not enough, evaluate the ventilation rate of the facility’s air volume, provide sufficient fresh air volume and implement cleaning and maintenance of ventilation equipment, keep the air intake opening free of obstacles, and confirm that the exhaust air return and the external air intake damper are correctly opened. For the review of the bad event, it is necessary to present the incident in the meeting. All units are requested to improve and tracking cases and continuous control to prevent similar incidents from happening.
Reduce the incidence of falls in hospitalized patients

LIN Wei-yu

Introduction
As falls were closely related to an increase in the length of hospital stay and mortality, fall prevention was essential in clinical practice. This study aimed to assess the effects of educational interventions on the reduction of fall accidents.

Purpose/Methods
Rotating caregivers were required to view a video on fall prevention the first time they provided help to the patient after June 2018. The outcomes were the number of fall accidents and fall-related injuries. Use the mobile nursing cart computers and mobile phone to scan the QR code to enable patients, guardian achievement rate is 90%.

Results
In 11,185 patient-days during 2016, ten fall accidents happened. Nine fall patients were under the care of internists, and one of family physicians; eight fall patients were above; five patients had a previous fall history. The fall incident was 0.08 per 1000 patient-days. In 4,100 patient-days between June 2018 and September 2018, two patients had fall accidents. Fall prevention education was achieved in 90 % of rotating caregivers. One fall patient was under the care of family physicians, and one of internists; one fall patient was above and one below 65 years old; both patients had a previous fall history. The fall incident dropped to 0.05 per 1000 patient-days.

Conclusions
Knowledge related to fall prevention was important, and viewing video on fall education could be used as a method for preventing falling, and in turn resulted in lesser related injuries.

Discussion on the quality of acute post-care for patients with fragility fractures

LI Ling-May, LIU Jui-Man, LIN Yu-wen, YANG Nan-ping, LIN Ching-feng

Introduction
The aging population in Taiwan has been increasing year by year, and more and more patients have become disabled after acute medical treatment. The NHI has implemented a post-acute care(PAC) through the payment system reform to construct patients with vulnerable fractures. During the golden age of treatment, positive integrated care is provided to reduce the rate of rehospitalization and emergency re-diagnosis, improve medical quality, and reduce medical expenses.

Purpose/Methods
The number of patients who didn’t undergo PAC in patients with fragility fractures from Jan. to Sep. in 2017 was compared with the number of patients with PAC in patients with vulnerable fractures from Jan. to Sep. 2018. The hospital was re-hospitalized and discharged 14 days after discharge. The number and rate of emergency patients will be updated within the next 3 days to understand the progress of medical quality.

Results
From Jan. to Sep. 2017, there were 130 people who did not receive PAC for patients with vulnerable fractures. The number of patients who were hospitalized 14 days after discharge from hospital was 11 and the rate of rehospitalization was 8.46%. The number of emergency patients within 3 days after discharge from hospital for 10 people, the emergency rate was 7.69%. From Jan. to Sep. 2018, the number of patients with PAC patients who were eligible for vulnerable fractures was 122. The number of patients who were hospitalized 14 days after discharge from hospital was 3, and the rate of rehospitalization was 2.46%. The number of emergency patients within 3 days after discharge from hospital for 3 people, the emergency rate was 2.46%. From Jan. to Sep. 2018, PAC patients were reduced by 6% from 14 days after discharge from Jan. to 3 days after discharge.

Conclusions
Patients with fragility fractures receive PAC. During the post-gold treatment period, they are actively treated with rehabilitation therapy to reduce the degree of disability of patients, reduce the rate of hospitalization after hospital discharge, the rate of emergency rate, and the cost of rehospitalization.

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Use cloud information system to reduce the re-execution rate within 30 days of outpatient computerized tomography

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Introduction
In order to improve the convenience and continuity of follow-up treatment of the people, avoid repeated inspections, the NHI previously implemented medical image resource sharing. In January 2018, it encouraged medical institutions to upload inspection images and standardized medical treatment in July 2018. The images from the examination of the institution must be automatically uploaded to the NHI within 24 hours. The medical institution must first go to the NHI PharmCloud to check the image to avoid repeated inspections to improve medical quality and health care for the purpose of rational use of resources.

Purpose/Methods
When the doctor visits a OPD, he/she needs to insert the hospital institution chip card, the physician medical staff card and the patient health insurance card, and go to the NHI PharmCloud Enquiry System to check whether the inspection has been carried out in other hospitals, and analyze the outpatient computer tomography through the information sharing mechanism. The
number of inspections and the rate will be executed again within 30 days.

Results
The number of outpatient computerized tomography tests from July to September 2018 was 771 in July; the number of re-executions was 33 in 30 days; the re-execution rate was 4.28% on the 30th. The number of inspections in August was 813; the number of re-executions was 27 in 30 days; the re-execution rate was 3.32% on the 30th. The number of inspections in September was 664; the number of re-executions was 21 in 30 days; the re-execution rate was 3.16% on the 30th. According to the research, the number of re-executions and the rate of re-execution in the outpatient computerized tomography in July and September of 2018 decreased month by month. When the doctor visited the NHI PharmCloud, you can know when the people have checked the computer faults and avoid repeat executions.

Conclusions
According to the research, the number of re-executions and the rate of re-execution in the outpatient computerized tomography was reduced month by month. The number of investigators fell from July to September 2018 was 771 in July; the number of repeat executions was 33 in 30 days; the re-execution rate was 4.28% on the 30th. In 2013, the patient-centered NHI PharmCloud was developed to provide physician’s prescription and pharmacist adjustment to master the patient’s complete medication information and safely control the patient’s medication.

Project to reduce the incidence of falls in a psychiatric acute ward

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Introduction
The fall event not only affects the patient’s health problems, but also affects the quality of care and social costs. This project is to explore the causes and improvement of the psychiatric acute ward fall.

Purpose/Methods
In 2016, the TPR fell notification statistics, 38 cases of inpatients fell, the incidence rate was 0.47%, 22 cases were mildly injured, 1 case was moderately injured, and the injury rate was 60.5%. The correct rate for colleagues to prevent falls is only 80.5%. The current situation analysis found that the high incidence of the lack of individual fall assessment tools, no balance training activities, drug adjustment too fast, personnel awareness of falls prevention, lack of auxiliary equipment to prevent falls, bathroom equipment, old water, toilet handrail equipment, etc. are not provided. According to the following factors need to be developed: toilet, bathroom environment; add a bed to report the device; establish a fall risk assessment tool; establish a balanced walking group and education.

Results
In 2017, the number of patients fell by 21, the incidence rate was 0.33%, 9 cases were mildly injured, and the injury rate was 42%. The number of patients falling from January to June 2018 was 6 pieces, the incidence rate was 0.19%, and 2 cases were mildly injured. The injury rate is 17%. Nursing staff increased the correct rate of prevention of falls to 93%.

Conclusions
Psychiatric patients are prone to fall incidences and have a high rate of injury due to symptoms, medication, and hospitalization. This is especially true for new patients or for those adjusting to the drug process. The success of this project derived from the...
following areas: the cross-team pharmacists to educate the drug and the evidence of the fall, the physician’s principle of using new admissions to the hospital, functional staff and the nurse providing strength and balance assessment skills training and feedback teaching, and improving the nursing staff’s prevention of fall assessment skills.

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Reduce the incidence of psychiatric ward violence through sensory reconciliation and contextual simulation care processes

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Introduction
Violence has been considered an occupational injury and is a global problem, with the most serious cases being found in psychiatric wards in medical institutions. Reduce the incidences of violence through sensory reconciliation and contextual simulation care processes to create a safe medical environment.

Purpose/Methods
According to the TPR event database analysis, the number of inpatients in the psychiatric acute ward was 29 in 2014, with an incidence rate of 0.33%, which was higher than the quality index threshold of 0.3%. The survey respondents only had a cognitive rate of 83.7% for violence assessment and 83.4% for violent disposition. By creating a safe, sensory and harmonious security environment, increasing music appreciation time, formulating patient emotional management and pressure control principles, establishing a drug addiction care process, situational simulation to establish team violence consistency, and improving communication skills.

Results
29 incidents of violence in 2015, the incidence rate was 0.32%. There were 20 violent incidents in 2016 with an incidence of 0.24%. There were 15 violent incidents in 2017, with an incidence of 0.23%. Nursing staff’s awareness of violence increased to 94.9%, and the attitude of violent behavior increased to 92.2%.

Conclusions
The satisfaction of colleagues in the situation simulation was 92%. I feel that the situation simulation can actually improve processing ability. It also lists the situational simulation as an annual assessment. It also studies the situational simulation case and makes a letter and validity study to establish an OSCE teaching plan belonging to the psychiatric department.

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Improving the Quality Control of Blood Products and Samples Transport with Wireless Temperature Sensors in a Regional Teaching Hospital in Northern Taiwan

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Introduction
Blood products from blood bank must be transported to receiving side under appropriate conditions of temperature, security and hygiene. According to AABB Temperature Standards, RBCs and fresh frozen plasma (FFP) products should be transported between 1°-10°C, for platelets products between 20°-24°C and samples transport under 16°C in our laboratory. In this study, we establish a new temperature monitoring system method to record temperature of blood products and samples transport.

Purpose/Methods
Laboratory has setup the temperature monitoring system (Multi-Use temperature data logger with automatic PDF analysis, tempmate® M1, imec company, Germany) continuously records blood products and samples transport from 2017 to 2018.

Results
In this study, the actual temperature shows that temperature monitoring system can improve the flow of blood products and samples transport status. We used the quality control circle to find defects in traditional methods, such as the size of ice packs variations, inconsistent reading of mercury-type high-low thermometer, temperature not being easy to keep in soft delivery bag, staff members forgetting to record manual recordings, and not reporting temperatures that are out of threshold. We also set up a same medical record number HIS system of patient in other hospitals to record and inquire temperature of blood products and samples transport, in order to improve those defects by multi-use temperature data loggers.

Conclusions
Temperature monitoring of multi-use temperature data logger for the transportation of blood products and samples will improve the accuracy of the report and offer new quality control methods for laboratory certification.

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Using Plan-Do-Check-Act Circulation to Improve Ward Sample Rejection Ratios in a Regional Teaching Hospital in Taiwan

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Introduction
Sample rejections will result in prolonged reports and delayed diagnosis. The samples are accepted according to the rejection criteria of the laboratories. Shortening turn-around-time (TAT) is one of the quality indicators in laboratories. Hence, the aim of the study was to use Plan-Do-Check-Act (PDCA) circulation to improve the ward sample rejection ratios (SRRs) at a regional teaching hospital in northern Taiwan, to determine the frequencies of pre-analytical errors and plan improvements in patient outcomes.

Purpose/Methods
The samples sent from wards to the laboratory were recorded from 2012 to 2017, in which 3,838 specimens were rejected. According to Taiwan Accreditation Foundation ISO15189, the sample rejection ratios should be below 0.5%. PDCA circulation improves quality indicators including the appropriateness of test selection, patient/sample identification, samples collected in inappropriate containers or with insufficient volumes, hemolyzed or clotted samples, EDTA contamination, injection contamination, improperly stored samples or samples that are damaged in transport. We established monitoring and documentation of rejected samples and periodic training of healthcare personnel.

Results
The frequent rejection reasons were 30.59% (n=1174) for sample hemolysis, 22.67% (n=870) for clots, 14.77% (n=567) for inadequate volume and 23.22% (n=891) for others. The sample rejection ratios were 1.26%, 1.15%, 0.86%, 0.77%, 0.71%, and 0.60% from 2012 to 2017, respectively. The SRRs was 0.50% in 2012-2017.

Conclusions
Using the PDCA circulation method included documentation of rejected samples and periodic training of healthcare personnel, we expect significant decrease in ward SRRs below 0.5% in 2018, as well as improvement of total quality management of the laboratory and promotion patient safety.

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The affect of monitoring on cancer treatment quality upon survival rate of bladder cancer.

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Introduction
In order to improve the quality of diagnosis and treatment for cancer patients, the government at health authorities actively develop monitoring mechanisms of cancer treatment quality which focus on empirical medicine. Therefore, the in-house version guidelines for bladder cancer diagnosis and treatment, was developed to provide the best mode to clinical team since

WEI Pen-Chun, CHEN Hui-Zhu, WANG Heng-Hua, LI Ling-Yi

Introduction
Since 2003 the Ministry of Health and Welfare has entrusted The Joint Commission of Taiwan to conduct the evaluation and planning of an external national patient-safety reporting system. Taiwan Patient-safety Reporting system (TPR) was launched in 2004 and our hospital has been using the reporting system in 2009. We analyzed the incidents in TPR and through the feedback mechanism and the case-sharing courses, promoting improvement strategies for collective learning to actualize the goal of securing the patients’ safety.

Purpose/Methods
According to the data gathered at a hospital in Southern Taiwan from the 2014-2017 hospital’s patient-safety incident reports.

Results
The injury caused by patients falling down reaches 45.5% of the total occurrence. The drug-related incidents which takes up to 6.9%. Patients suffering from inspection-related injury account for 1.3% of the total occurrence. The affected patients are predominantly aged 19-64 (49.6%), male (51.7%). The patients’ safety incidents that impact the patients’ health are primarily near-miss events (52.4%), no harm event (30.1%), harmed events (17.5%). However, the number of harmed events is decreasing year by year (19.1% to 18.1%); cases that are categorized as level SAC I and II experience year by year decrease as well (2.0% to 1.3%).

Conclusions
Using the idea of collective learning and experience sharing, hold a hospital-wide patient-security case analysis conference and provide for relevant educational training. Through the realization of colleagues attending the course enthusiastically and being able to learn from the past occurrences of patient-security cases, the spirits of promoting the patient-safety idea will result in a decrement in the level of injury caused to victims of a patient-safety incident year by year.

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The affect of monitoring on cancer treatment quality upon survival rate of bladder cancer.
2009. We will conduct a survival analysis from the cancer registration database as one of the indicators for the management of medical quality.

Purpose/Methods
The cancer registry database was used to analyze newly diagnosed bladder cancer patient who are native Taiwanese, 214 patients treated during 2002-2006 and 403 patients treated during 2011-2016 for all case, ICD-O-3 is C67 and tissue type is urothelial carcinoma, cancer stage is Stage 0a, I, II, III and IV. Then compare the 5-year survival rate between 2002-2006 and 2011-2016, which are before and after the implementation of the quality monitoring on cancer treatment quality.

Results
The overall 5-year survival rate in 2011-2016 case, which was higher. The 5-year survival rate for the 2011-2016 Stage0a case, which was higher. The 5-year survival rate for the 2011-2016 Stage I case, which was higher. The 5-year survival rate for the 2011-2016 Stage II case, which was lower. The 5-year survival rate for the 2011-2016 Stage III case, which was higher. The 5-year survival rate for the 2011-2016 Stage IV case, which was lower.

Conclusions
Stage 0a, stage I, stage III and overall 5-year survival rate were effectively improved. The Stage II case was not fully evaluated during the pre-treatment examination, resulting in underestimation of cancer stage, high risk multiple tumors patient refused to accept radical cystectomy. The Stage IV cases are mostly aged and multiple metastasis patients. Have fed back these results to the clinical team and recommended to reinforce the pre-treatment image assessment for cancer staging program and review the medical treatment guidelines.

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The Effect of Lung Rehabilitation Plan on Outpatients with Chronic Obstructive Pulmonary Disease

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Introduction
The WHO data shows that Chronic Obstructive Pulmonary Disease (COPD) will climb to the fourth cause of death in 2030. According to data from Taiwan in 2017, Chronic Lower Respiratory Disease ranked seventh top ten causes of death. COPD has become a common disease prevention and treatment worldwide.

Purpose/Methods
The pulmonary rehabilitation team give individualized lung recovery plans based on the patient’s resilience and symptoms. The plan includes sports training, breathing training, health education and self-management. The treatment location is both hospital and home, which can improve physical and psychological symptoms and enhance the patient’s adherence to their own health.

Results
There were 167 people being followed up in the period from April to December in 2017. In the half year, 139 people (83%) were not hospitalized with acute exacerbations of Chronic Obstructive Pulmonary Disease. A six-month walking test of the before-and-after study, according to the severity of the disease, the walking distance increased in the group A (+4.4m) and the group B (+6.3m), and the walking distance decreased in the C group (-4m). And the D group with the highest severity of disease (-20m).

Conclusions
The plan results reached treatment goals: improving symptoms, delaying progression and increasing daily activities. The lung rehabilitation team was patient-centered to design individualized treatment plans and used a variety of health education, films, sports tools and so on to improve the efficacy of treatment and the quality of life.

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Applying Barcode Information System to improve the check-in efficiency of patients in the operation room

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Introduction
Nursing informatics, to manage healthcare quality and to improve patient safety has become the tendency toward globalization. Barcode identification system utilized in operation room (OR) to establish system safety and provide the updated patient medical records to healthcare providers. It not only ensured the safer healthcare environment and care service quality, but also improved the accuracy of patient identification and efficacy of patient check-in process in OR.

Purpose/Methods
Barcode identification system was established and intervened in the OR to ensure patient identification safety, to simplify patient check-in process and to explore the efficacy of related software implementation in the OR. Operating room nurses put an order to bring the patients to OR as scheduled. Barcode bracelet and identification system identified the location of patients, thereafter, the nursing staffs and the families in waiting rooms could always know the current status of patients.
A Discussion on the Adverse Drug Reaction Types and Various Age Groups in a Regional Teaching Hospital in Northern Taiwan

CHANG-TSAI Ting-Yu, SHIH Po-Jen, LIN Yu-wen, YANG Nan-ping, LIN Ching-feng

Introduction

Adverse Drug Reactions, ADRs are one of the focuses of clinical pharmacy services. By exploring and analyzing the adverse drug reaction, medical staff members can be reminded of medication safety. Data obtained from exploration and analyses make patients’ medication more reasonable, while enabling medical staff to pay attention to medication safety.

Purpose/Methods

This study analyzed and explored the adverse reaction types of ADR events through a descriptive method, targeting reported cases of adverse reactions of drugs in a regional teaching hospital in Northern Taiwan from 2017 to 2018. Based on data obtained from Type A/Type B, whether different age groups produced different values was analyzed to further analyze causes.

Results

Of the 139 ADR cases tallied in this study, minors (under 18 years old) Type A accounted for four cases and Type B accounted for 11 cases. The ratio of Type A and Type B is about 0.36; among adults (18-65 years old) Type A accounted for 21 cases and Type B accounted for 49 cases. The ratio of Type A/Type B is about 0.43; among the elderly (more than 65 years old), Type A accounted for 25 cases and Type B accounted for 29 cases. The ratio of Type A/Type B is about 0.86.

Conclusions

The analysis showed that ratios of Type A/Type B obtained from different age groups varied. The higher the age, the greater the likelihood for ADRs under Type A to occur. That is, ADRs occurred for different reasons for young people and the elderly. The reason ADRs occurred in the elderly is possibly due to excessively potent pharmacological effects or unwanted pharmacological effects. May be related to the elderly’s physical organ functions.

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Analysis of Patients Falls in 2017 - A Case Study of a Teaching Hospital in a North Area

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Introduction

The Taiwan Patient safety Reporting System shows that 17,104 fall cases were reported in the notified cases in 2017, accounting for the second place in the patient safety report. The proportion of fall is the highest of abnormal incidents in patient ward. Falling is not increasing the number of hospital stays and costs, but is more likely to cause disputes. Therefore, it is necessary to pay attention to the prevention of falls and the degree of injury.

Purpose/Methods

This study is aimed at the descriptive statistical analysis of the 2017 fall notification incident, including gender, age, location, possible causes, and the course of activities.

Results

The TPR system shows that total of 106 falls happened in 2017, female has 53 pieces and 19 - 64 years old is 43; the location is most in rehabilitation department 22 pieces. Before the fall, 90 patients were assessed as high risk groups. The degree of impact on patient’s health after the incident, no harm was 59, and the injured part had a maximum of 19 heads. The patients fall with severe severity is 3, the injured part are legs. Analyze what activities are carried out when the fall event occurs; shifting is the most. Among the possible causes of hospital falls, 91 were related to the patient’s physiological and behavioral factors. Further examination revealed that the patient’s factors was the most common with lower limb weakness, and followed by high-risk patients who insisted on getting down bed (36.2%).

Conclusions

Study found the major injured part is head, the severe part of injured part is leg. Suggestions for reducing the degree of injury: possible causes of falls related to patient. It is recommended to cross-team cooperation to teach the lower limb muscle training and increase communication to reduce the risk of patients shifting from bed.

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Improve medical quality, focus on patient safety and reduce unnecessary exposure

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Introduction
When patients come to the hospital to see the doctor, physicians often prescribe X-rays, sometimes because of changes in the disease, the patient was unable to cooperate with the inspection, or because patients see errors when oral examination, causing doctors to make medical patient’s affected area not, that the patient receives redundant medical exposure.

Purpose/Methods
When the patient examined, in addition to checking patient identity outside, then make medical inspection doctor’s advice and content on a single site that opened to check the description of the appearance of the lesion location or Complaint and doctors make compliance with the implementation or whether Check, if not, inform and ask the billing physician to confirm whether to perform the inspection according to the medical order or change inspection method.

Results
Patients because doctors make mistakes or because of the ratio itself can not make a check with the doctors each year down to 0.38% from the 0.48%, while improving the assessment of the condition when doctors write out orders, and to enhance the efficiency of patient examination of Radiology, also reduce the number of unnecessary exposure shot of medical disputes and the possibility of produce, especially in patients unable to cooperate with the inspection part, from an average of twenty times per month, reduced to an average of fifteen times a month.

Conclusions
When the medical radiologist performs the examination, it must confirm whether the medical order is required by the patient. According to the current condition, discuss with the doctor whether to open a medical order that meets the patient’s needs or can be implemented. This will not only reduce the patient’s sexamination. The risk of secondary injury may occur, while non-essential X-ray exposure is also reduced to maintain patient health.

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Discussion on the current situation of treatment plan for breast cancer patients.

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Introduction
Breast cancer is the number one cancer among women in Taiwan, and the peak is about 45-69 years old. In 2018, according to the Ministry of Health and Welfare’s death statistics and the National Health Agency’s cancer registration data, the standard incidence and mortality rate of breast cancer in women are 69.1 and 12.0 (per 100,000 population). More than 10,000 women suffer from breast cancer and more than 2,000 women die from breast cancer every year. In average, about 31 women are diagnosed with breast cancer every day and 6 women lose their valuable lives due to breast cancer. According to the breast cancer treatment guidelines of our hospital, first and second stage breast cancer requires surgery. Radiation therapy depends on the surgical procedure and lymph node metastasis. Adjutant chemotherapy or hormonal therapy depends on the tumor histology. Third and fourth stage breast cancers require systemic treatment such as chemotherapy and hormonal therapy first, in order to reduce the tumor. Then the physicians evaluate the feasibility of surgical tumor resection.

Purpose/Methods
The case manager’s case tracking method includes: querying the hospital integration system, telephone access and on-site visits to confirm that the patient is regularly returning to the hospital to continue discussing the treatment plan with the medical team and completing the treatment. The content includes treatment introductions for diseases, health consultations for diet and nutrition, post-operative care, related resources, tube wound home care, side effects of chemotherapy, side effects and care after radiation and hormone therapy, and psychological support, referrals and tracking services.

Results
From January 2015 to December 2016, we included 736 breast cancer patients diagnosed in our hospital. They were tracked by the case manager for up to two years, with a total of 5888 follow-ups. The division provides occasional visits, with an average of 6,000 tracking times per year. A total of 734 patients completed treatment. To achieve a cure rate of 99.7%

Conclusions
Through the intervention of cancer case manager, we can support the patient and the family by a whole team effort. We can give them the strength to fight cancer.

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Improving Patient Sleep Quality in the Intensive Care Unit

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Introduction
Various environmental features of the hospital intensive-care unit (ICU) can negatively affect patients’ sleep quality. The unit is typically lit 24 hours a day, with the lighting dimmed only during the late-night shift. Moreover, ambient noise, mainly from staff conversation and mechanically regulated alarms, is relatively constant. This study was undertaken to assess the sleep quality of patients in our hospital’s ICU and determine ways to improve it.
Purpose/Methods
The project was conducted from July 15 to July 30 2018, and involved selected patients who were confined to the ICU for more than 48 hours and were conscious and able to communicate with us. In addition to patient questionnaires, the Verran and Snyder-Halpern Sleep Scale was used to measure the patients’ sleep quality. At the beginning of the project, the mean sleep quality score was 48.65. Analysis of the data revealed that sleep was not assigned much importance in the ICU. Patients did not experience the passage of time because of the constant lighting. They felt significant discomfort from the pressure of invasive tubes and other devices, restraint of their extremities, and postoperative wound pain. The nursing staff generated a high volume of noise, and warning bells and alarms were excessively loud and not turned off quickly.

Results
All of these factors disturbed patients’ sleep. After implementation of improvements in the environmental conditions of the ICU, the patients’ sleep quality was reassessed, and the mean score was 78.87. In the ICU unit, where patients are severely ill, staff attention tends to focus on medical treatment and disease status.

Conclusions
This can easily lead to disregard of patient comfort and sleep quality. Significant improvement can be achieved through education of medical personnel and emphasis on the importance of meeting patients’ basic physiological needs. The results may include improved nursing care and faster patient recovery.

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Improving the Integrity of Pain Control in Cancer Patient by Nurses

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Introduction
This unit is a tumor medical ward. Patients often anger because of the lack of timely assessment of their pain status and assistance in the resolution of the patient, extending the tension of the disease. And the nursing staff’s complete rate of pain control is only 60.5%, which is less than 80% of the monitoring threshold.

Purpose/Methods
Conduct pain-related on-the-job education; post pain assessment slogans and reminder cards on the screen of the nursing work car; make painful CPR slogans; discuss case studies on difficult cases at morning meetings.

Results
The nursing staff recognized the pain treatment of cancer patients, and the average score before and after the test was increased from 75.6 points to 89 points. Nursing staff increased the completeness rate of the fifth vital signs pain assessment record from 50% to 100%, and the pain control effectiveness completion rate increased from 60.5% to 100%

Conclusions
The pain assessment slogan is posted in the ward, and the patient will actively ask for pain-related problems and actively inform the nursing staff about the painful situation, so that the nursing relationship is more welcoming. In the September hospital satisfaction survey option, the satisfaction score (five points method) for “medical personnel will be given proper pain relief at the appropriate time” was raised from 4.3 to 4.7.

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Reducing the Prevalence Rate of Bedsores in the Affiliated Nursing Home of a Municipal Hospital

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Introduction
From April to June 2018, 4 patients had bedsores on the day, with the prevalence rate of 3.6%, which was caused outside the hospital and during hospitalization due to illness and long-term confinement to bed. Correct position changes and appropriate pressure-reducing devices were used to reduce the incidence of bedsores, accelerate the healing of wounds and reduce the prevalence rate from 3.6% to 3.0%

Purpose/Methods
1. Correct position changes and appropriate pressure-reducing devices: Turned the body over every 2 hours; used special pillows to suspend the bony prominence; used air beds; kept sheets clean without wrinkles. 2. Wound care: Performed the sterile dressing change twice every day; covered wounds with ointment or Aquacel according to the medical order and kept them dry; evaluated the wound stage every week. 3. Regular checks: Set the alarm clock for turning the patient's position changes every day.

Results
The prevalence rate of bedsores reduced from 3.6% to 3.0%. 2. Case 1: Stage 4 bedsores on the last sacrum turned from (10*14*4 cm) to (8*6*3 cm). Case 2: Stage 3 bedsores on the left hip (10*8 cm) healed. 4. Case 3: Stage 4 bedsores on the last sacrum turned from (12*8*2 cm) to (12*7*2 cm).

Conclusions
After the project intervention, correct position changes and appropriate pressure-reducing devices were used to reduce the incidence of bedsores and accelerate the healing of wounds, which improved the quality of care in the nursing home.

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Using Failure Modes and Effects Analysis to Improve Accuracy in Blood Transfusion Process

TSAI Chia Ying, WEN Tung-Hua, CHEN Yung-Hung

Introduction
Transfusion process is considered a high-risk medical operation. According to the statistics of Joint Commission on Accreditation of Healthcare Organizations (JCAHO) in 1995-2002, adverse events resulting from transfusion process is 2.7%, of which 75% is systematic problem, and 25% is caused by medical professionals. Therefore, JCAHO recognizes blood transfusion errors as sentinel events. A blood transfusion error occurred in a hospital in 2013. In order to prevent the recurrence of errors, this project develops a systematic error prevention method to enhance the safety and accuracy of blood transfusion process.

Purpose/Methods
Failure Modes and Effects Analysis (FMEA) was performed through the following steps: 1. Assemble the project team 2. Define benchmark risk 3. Confirm guidance for specimen collection and transportation 4. Identify potential failure modes in each step 5. Determine severity rating for each failure mode 6. Identify interventions for steps with high risk priority number (RPN) 7. Confirm effectiveness of the interventions

Results
In this project, 65 failure modes were identified. To prioritize failure modes based on risk priority number (RPN), 19 steps were selected and intervention had been employed. 1. Blood product categories box 2. Blood products transport bag 3. Use TRM (Team Resource Management) approach to establish ISBAR shift mechanism 4. Build Barcode information system

Conclusions
Blood transfusion errors have not occurred since December 2013. when interventions had been conducted. Also, transfusion safety indicators have been significantly enhanced. 1. Patient demand for blood products to enhance the correct rate of 82% to 100% 2. Accuracy rate of the blood bank testing operations is 100% 3. Accuracy rate of blood transport by delivery personnel increases from 85% to 100%

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Evaluation of standards on health promoting hospitals related with the accreditation criteria of the Catalan hospitals system.

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Reduce EKG check time in STEMI patients to improve Door to Balloon Time

YANG Yi-Chun, WU Bao-Tzung

Introduction
According to ACCF/AHA Guideline, ST elevation myocardial infarction (STEMI) Door to Balloon Time (D2B) < 90 minutes, which can reduce myocardial damage and reduce mortality. Completing the ECG diagnosis immediately is the key. However, the 2017 EKG < 10 minutes rate is only 79.7% (59/74), and the longest time is 78 minutes. Therefore, the task force is set up, and it is expected to be effective in every second. Precise management of critical care processes at all stages of STEMI patients during prime time.

Purpose/Methods
1. Knowledge Enhancement, Teamwork: Strengthen AMI symptom education training and produce slogans. 2. Control the elevator, the medical team will send the patient together: Revise the safe operation method for the patient transportation, and
make the AMI package. Smart card clock Objective monitoring time: Simplify the manual operation to automatically calculate the time of the information; for the delay phase, the request will be replied to the reason for the reimbursement time.

**Results**

The improvement of quality indicators at each stage is as follows: (Before improvement: January to December 2017; after improvement: January to November 2018)

1. EKG < 10 minutes rate: from 79.7% (59/74) to rise 91.1% (51/56).
2. EKG confirmed that the cardiologist's < 10 minutes rate(excluding out-of-hospital transfer): from 74.5% (41/55) to rise 85.1% (40/47).
3. Door to Balloon Time <90 minutes achievement rate: increased from 83.6% (51/61) to rise 89.4% (42/47).

**Conclusions**

This project relies on teamwork, streamlining processes, revising standard operations and replacing manual work with smart card time clocks. The statistics are more accurate and objective and persuasive, but for more advanced medical care quality, the team still needs continuous supervision and effective cooperation. Communicate and strive for greater benefits for patients.

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**Project of Applications of Care Bundle Mode to the Reduction of Catheter- Associated Urinary Tract Infection Rates in Medical ICU**

**HUANG Pai-Yu, HUANG Hsin-Shu**

**Introduction**

The project hereto aims to mitigate CAUTI rates in Medical ICU.

**Purpose/Methods**

Analysis of the current situation reveals the unit’s problem:
1. Existing “standard operating procedure for urinary catheter placement and medical care” is not applicable.
2. Lack of standards for indications, removal and care for catheter placement.
3. Health care staff lacks CAUTI prevention education and training.
4. Regular inspection deficiency.
5. The equipment for urinary catheter care is incomplete.

After revising the standard operating procedure for urinary catheter placement and medical care, developing the standard operating procedure for CAUTI Care Bundle prevent and checklist, conducting on-the-job education, inspecting regularly, purchasing more and changing urinary catheter equipment and other solutions, the CAUTI rate was thus reduced from 6.67‰ to 4.1‰.

**Conclusions**

By implementing the project, the CAUTI rates could indeed be reduced, thereby further improving the overall care quality.

**Comments**

Urinary tract infection is a site infection commonly seen in nosocomial infections, accounting for 30%-40% of all nosocomial infections, which not only prolongs the length of hospital stays, but also increases the patient mortality rates and therefore triggering the project motivation herein on account of the CAUTI rate at 6.67‰ in this Unit of the Hospital.

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**Improvement of Integrity of Enterostomy Care in Surgical Ward of a Regional Teaching Hospital in Central Taiwan**

**LIU Yafen, HUANG Hsin-Shu**

**Introduction**

Due to the inconsistent treatment process of enterostomy care in the ward, an ad hoc group was set up to help improve the situation thereof.

**Purpose/Methods**

The reason analyzed showed that there was no functional enterostomy physician for enterostomy care performance, no “standard operating procedures for enterostomy care”, and unfamiliar procedures for enterostomy care. By amending the “Standard Operating Procedures for Enterostomy Care”, thus scheduling nursing staff education courses, revising the “Enterostomy Care DOPS Technical Inspection Report Form” and learning passports, adding enterostomy care manual, videotaping enterostomy care, setting up enterostomy medical bags or the like used for clinical care. Through the implementation of such project, thereby improving nursing staff’s enterostomy care capability and the quality of care.

**Results**

The results showed that the accuracy and integrity of enterostomy care was increased from 73.81 points to 94.6 points, and the perception of enterostomy was increased from 71 points to 98 points. The pair t value (p<0.05) presented a significant improvement.

**Conclusions**

It is recommended that care technology evaluation should be performed at regular intervals for maintaining the accuracy and integrity of the caregiver skills.

**Comments**

Enterostomy is used for relieving intra-intestinal pressure and avoiding a threat to life. If nursing staff could provide appropriate and correct care and knowledge, it would help improve the patients’ quality of life.

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Effectiveness of An Institutional Online System for Reporting Medical Device-Related Incidents to Improve Patient Safety

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Introduction
The design, manufacture or use of medical devices must focus on patient safety. Despite less emphasized in the literature and medical practice in the past decades, the reporting of medical device-related incidents has become an important emerging issue regarding patient safety. Previously we did not have an integrated mechanism for this process that information regarding the problems during the use of medical device became difficult for analysis and improvement. We now report the development of this institution-wide reporting system.

Purpose/Methods
An integrated electronic system for reporting medical device-related incidents was developed in May 2017 in a university-affiliated medical center in Taiwan. Processes contributing to the establishment of this system included finding the team member, surveying the reporting process, integrating the reporting mechanism, unifying the criteria for classifying the problem of the medical device, and regular reviewing of device-related incidents. The online reporting system, which was user-friendly and innovative, was implemented hospital-wide, and the incidents were all verified after being reported.

Results
The criteria promoted the standardized classification of the medical device-related problems. The staff members were provided a structured reporting web page that provides a feedback mechanism to the clinical setting. We focused on the injury-free incidents to healthcare workers by defective medical devices or non-standard use. The no-harm event rate increased between from 32% in 2016, 70% in 2017, and then to 86% in 2018. The near miss events are 0% in 2016, 39% in 2017 and 25% in 2018.

Conclusions
Hospitals and healthcare workers need to understand the importance of medical device-related incidents that the opportunity to improve patient safety should be appreciated. Education programs should be provided to enhance the reporting rate. In addition to replacing with new devices, the hospital should regularly review and classify the problems related to the design and use of medical devices. This not only improves patient safety but may also contribute to a more adequate and effective procurement process for the management units.

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Detecting counterfeit or misbranded drugs by handheld near-infrared spectrometry.

CHEN Yushen, CHENG Sue-Fei, HUANG Hui-Ting

Introduction
Counterfeit or misbranded drugs have always threatened the medical industry and are the problem affecting the global level. Counterfeit or misbranded drugs are not easy to distinguish by appearance or packaging. Traditional laboratory testing equipment is expensive and takes much time to wait for results. That is so difficult for personnel to overcome the problem to ensure quality and safety of medicine use. We are looking for a cheap, fast and efficient way to inspection of drug products.

Purpose/Methods
Nowadays, handheld near-infrared (NIR) spectrometry has been developed. The drug tablets and capsules are scanned by infra-red light of different wavelengths to appear different reflection and absorption of characteristics. For newly approved medicines in our hospital, manufacturers are required to provide standard products which are used to establish the spectrum model of the drug. After receiving the product, we will sample and scan each batch of drugs to determine the homogeneity and confirm the authenticity.

Results
A total of 80 drug spectrum modules have been established since June 2017. We also established a standard operating process for examination of drugs with different batch number. If the spectral detection results are abnormal, the supplier is further required to provide the laboratory test report of the same batch number.

Conclusions
Comparing the traditional laboratory testing, the handheld NIR spectrometer can provide the results in seconds. Additionally, it is a more economic benefit: cheaper, smaller size than traditional laboratory equipment, and without destroying drug samples. Although it is not as accurate as the traditional laboratory can accurately determine the sample composition, it is still suitable for the pharmacy staff to confirm the authenticity of the drug initially.

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Higher surgeon volume reduces admission costs and improves surgical outcome among women with breast cancer in Taiwan

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Introduction
Female breast cancer is highly incident and major causes of mortality in world and Taiwan. Understanding the major determining factors of prognosis and medical utilization will provide indeed mortality and relapse. Total mastectomy and higher co-morbidity index, breast cancer surgery type, hospital attributes, and seniority of surgeon. Cost was calculated data as Taiwan BNHI, adjusted by CPI.

Purpose/Methods
All 3453 eligible women diagnosed of breast cancer (ICD-9 CM-174) and received surgical treatment between 1997 and 2013 were enrolled. We analyzed 2393 patients who were followed more than 5 years. Relationships between volumes and costs and outcomes were analyzed by hierarchical linear regression model and propensity score matching age, socioeconomic status, degree of urbanization, Dyeo modified Charlson co-morbidity index, breast cancer surgery type, hospital attributes, and seniority of surgeon. Cost was calculated data as Taiwan BNHI, adjusted by CPI.

Results
High surgical volume of surgeons reduced 5 years mortality rate (OR=0.5, 95%CI=0.39-0.78), but had no effect on relapse rate (OR=0.67, 95%CI=0.40-1.77). Hospital volume had no effects on mortality and relapse. Total mastectomy and higher co-morbidity index had higher admission costs, high surgeon volume and hospital volume had lower costs. Surgeon volume and hospital volume had no effects on long-term total costs.

Conclusions
High surgeon volume had better prognosis and lower admission costs.

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Introduction
Pain occurs in 20% to 50% of patients with cancer. Children suffering from pain due to cancer itself and the treatment for cancer. Pain often has a negative impact on functional status and psychosocial. But pain relief in children has always been neglected due to the fact that children’s pain is often not recognized and it is difficult to assess. The purpose of this study was to develop a program and was to evaluate its effects in the pain control.

Purpose/Methods
The setting was about a 24-bed pediatric oncology ward in northern regional teaching hospital in Taiwan from January to December, 2018. The first applied instruments was based on literature review. Data collection were monitored and recorded in hospitalization. We worked out those methods: 1. To develop multidisciplinary team: A multidimensional evaluation and intervention. 2. To dispel myths about caregivers faced pain medications. 3. To design “Pain, Pain, Fly Away!” program: We implemented child-friendly healthcare and child life service.

Results
Our worked to reduce the moderate to severe pain defect rate and it were from 5% (2018/1/1~2018/03/31) decrease to 2.6% (2018/4/1~2018/12/31) after implementation of the program. These data support the view that the pain control in children with cancer is associated with a better outcome of “pain, pain, fly away!” program.

Conclusions
Poor pain management can lead to adverse consequences including prolonged hospital stays, increasing health care costs, and patient suffering. Based on our study, it is important to pain control management plans in children suffering from cancer pain. We also found that cancer pain was treatable in children but requires a holistic approach.

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Effects of a novel oral antiviral drug teaching kit used in HIV positive patient in a regional teaching hospital in Taiwan.

HSU SUHAN, LAI HsinHao, HO Hsuan

Introduction
To enhance medication correctness, education satisfaction, and medication safety in HIV positive patient by using a newly designed oral antiviral drug teaching kit.

Purpose/Methods
An oral antiviral drug teaching kit was designed by an infectious disease specialty and pharmacists which referenced from the current use of medication teaching tools in HIV positive patients at home and abroad in January 2017. The teaching kit started to use in March 2017. During the period of using, a satisfaction survey was conducted on both the patients. The survey period was March 2017.

Results
30 patients were surveyed. The education level of interviewed patients was 6 in high school, 22 in universities, and 2 in graduate institutes. The average age was 31.3 years old. Among them, 12 were newly diagnosed patients and 18 were not. As the results, 84% patients thought it was helpful to know the appearance of the drug, 74% patients thought that the appearance of the drug could confirm whether to take the wrong medicine, and only 3% found that the word was too small to be clear.

Conclusions
It is very important to continue to use antiviral drugs correctly. It can maintain the effectiveness of antiviral drugs and avoid drug resistance. The oral antiviral drug teaching kit can show drug size, drug appearance, drug information, Chinese and English trade names, pharmacological classification, not only can improve the
Resolve the gap of patient care for Chronic kidney disease stage V

YANG Feng-Jung

Introduction
Patients with CKD have many morbidities. Their family worried about what time to bring them to the hospital, what cause them disability and death. There is no any connection between family and primary physician after visiting.

Purpose/Methods
Social media mobile application (ex: line, facebook) to enhance the connection of all team. LINE is a globally available messaging social network that enables us to share photos, videos, text messages, and even audio messages or files. In addition, it allows us to make voice and video calls at any time of the day. LINE has better, faster, and more fun means of communication on mobile.

Results
1. Avoid ER return 2. Estimate time to event (hyperkalemia, lung edema, uremic symptoms and so on ) 3. Prevent sudden death by Pre-emptive alarm message.

Conclusions
1. No sudden death from the complication of CKD 2. Delay initiation of renal replacement and improved quality of life 3. Increased mutual support, which is an important team competency allows teams to be more effective by supporting one another

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Hospital’s cleaning plays an important role in reducing the multidrug resistant bacteria burden

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Introduction
The emergence of multidrug resistant bacteria leads to the heavy burden in health care, including the increased mortality, morbidity, disability, psychosocial effects on society, and the cost of healthcare. Because lack of availability of effective antibacterial drugs against these multidrug resistant bacteria, to improve and maintain the hospital environmental cleaning properly is an important issue.

Purpose/Methods
This study was a collaboration between the infection control office, general affairs office, nursing department, and the outsourcing cleaning services company, to improve the quality in hospital cleaning from March to August in 2018. Three major strategies were implemented: 1. Re-establish the standard cleaning protocols and procedures with graphics. 2. Establish the rules of cleaning with different color codes. 3. Provide cleaning staff face-to-face training courses. In this study, the multidrug bacterial burden was introduced for measurement the outcome of hospital cleaning. The multidrug bacterial burden is defined as the numbers of multidrug bacterial isolates per patient-days.
Results
After implementation of the re-established cleaning strategies, significant improvement was observed: the hospital-wide multidrug bacterial burden was decreased from 21.4 isolates per 1000 patient-day on March, 15.1 on April, 13.2 on May, 16.0 on June, 9.8 on July, to 8.9 on August.

Conclusions
The proper hospital cleaning can prevent the bacterial infection by reduced multidrug resistant bacterial burden. Using the different strategies can provide the better hospital's housekeeping.

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Effect of medical quality action strategy on the patient safety culture

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Introduction
Patient safety culture is the core and foundation for medical institutions to implement the work of patient safety. The Institute of Medicine (IOM) also recommends improvement of patient safety can be commenced from culture. If a manager of medical institution can improve the patient safety culture through an effective action strategy, it will provide insight into the risks of patient safety and reduce the incidence of medical malpractice, and thereby improve patient safety and medical quality.

Purpose/Methods
The medical quality department proposed six action strategies in 2016. The implementation period was from 2016 to 2017. The Safety Attitude Questionnaire (SAQ) and the Maslach Burnout Inventory (MBI) include eight facets were adopted for the clinical staff in a medical center. The valid questionnaires were 1,189, 1,354 and 1,534 in 2015, 2016 and 2017 respectively. The changes in the patient safety culture before and after the proposed action plan were analyzed and compared between the first and second years.

Results
The patient safety culture was improved significantly after the first year of implementation. Percentages of positive answer in all the eight facets increased. Two years after action plan, patient safety culture was continuously improved. Comparing the difference of patient safety culture survey between 2015 and 2017, all the eight facets increased significantly. Seven facets, including "Teamwork", "Safety climate", "Cognition of Stress", "Feelings about Management", "Working Status", "Resilience", and "Work-Life Balance", demonstrated statistically significant at 95% confidence interval.

Conclusions
Patient safety culture can be effectively extended to all specialties by regular multidisciplinary meeting, case study of abnormal event, resource sharing, audit feedback, education training, coaching tutor, and diverse converging consensus. Moreover, teamwork and safety climate can improve the overall patient safety culture of the hospital.

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Patient Safety Culture Survey and Health Promotion Application

LAI Fang-Tus, CHEN Jesse, CHEN Yi-Ching, CHUNG Kuo-Mou, TSENG Yuan-Tsung

Introduction
This study investigates patient safety culture recognitions in a teaching hospital. With the assistance of patient safety and medical quality related indicators monitoring, the hospital managers can pre-aware the risk, make proper improvement and health promotion objectives.

Purpose/Methods
This study adopts the cross-sectional questionnaire survey which samples the employees of a regional teaching hospital. The measuring tool, A Chinese version of the Patient Safety Attitudes Questionnaire (46 items for a total eight dimensions including SAQ six dimensions and resilience, life balance dimensions) developed by the Taiwan Joint Commission on Hospital Accreditation was conducted to measure the healthcare workers’ attitudes toward patient safety. There were 1033 valid, 94.8% effective, and internal coherence Cronbach’s α value is 0.720 ~ 0.937.

Results
The results showed significant differences (p< 0.05) exist between genders, ages, service departments, positions. The average percent-positive scores (% respondents with mean score > or = 75 on a 0-100 scale) are diminished from teamwork climate 58.3%, life balance 55.3%, safety climate 51.5%, job satisfaction 50.6%, working condition 48.1%, perception of management 44.7%, stress recognition 43.4%, to resilience 10.9%. Compared with other hospitals, topics as below have the lower values: stress recognition 43.4% VS 49.3%, working condition 48.1% VS 49.2%, and life balance 55.3% VS 55.4%.

Conclusions
This study shows that the teamwork climate has the hinges value while resilience has the lowest; it indicates that most staff has job burnout and exhaustion. Improvement in resilience and life balance can help the medical institutions to figure out the departments and employees in need of help, and Build employee health promotion organizations and strategies.

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Using Patient Safety Culture Surveys to Study Preliminary Psychiatric Hospital Unit Safety Ethos

CHANG Yu Ping, LIN Shu Mei, CHIU Yi Chun, CHEN Po Ying

Introduction
Patient safety is the key to improve the quality of medical care. In 2014, the positive attitude towards safety climate in this acute psychiatric hospital was 64.84%. Quality improvement projects and continuous education of patient safety classes have been conducted since 2014.

Purpose/Methods
This was a cross-sectional national-wide survey conducted from December 1 to 31,2016, by the Joint Commission of Taiwan (JCT). University of Texas Safety Attitudes Questionnaire (SAQ) was used to measure 7 domains of cultural safety, including safety climate, teamwork climate, stress recognition, perception...
of management, working condition, job satisfaction, resilience and work-life balance. Using 5-point Likert scale, the score ≥ 75 (4 points and 5points) indicated positive attitudes based on the JCT’s benchmark recommendations.

Results
The system turned out 375 copies of valid samples (return rate=78.6%). Teamwork climate (75.46±21.41) and safety climate (75.31±20.25) were above the score of 75. Work condition (72.01), job satisfaction (72.03), stress recognition (71.45), perception of management (70.06), work-life balance (69.87) resilience (69.87). Except stress recognition, leaders all had statistically significant higher score than non-leaders in all other five domains. Among the domains which didn’t reach the benchmark, nurses had significant fewer positive satisfaction than other job types in the domains of job satisfaction and working conditions. In the comparison of attitudes toward those domains across various work departments, staff in emergency department had lower scores than staff in other work department in teamwork climate, safety climate, perception of management, and working condition.

Conclusions
Quality improvement projects and continuous education of patient safety classes might help increase the safety climate, perception of management, and working conditions. In the comparison of attitudes toward those domains across various work departments, staff in emergency department had lower scores than staff in other work department in teamwork climate, safety climate, perception of management, and working condition.

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Exploring the Attitude of Hospital Staff to Patient Safety Culture: Survey of A Medical Aesthetic Hospital in China.

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Introduction
Patient safety is the critically important issue in recent years. Studies showed 44.1 % of the medical malpractice occurred in China were mostly medical negligence. The Joint Commission Accreditation of Health Care Organizations (JCAHO) listed patient safety culture as one of the evaluation criteria in 2009 cause it is importance of establishing a culture of safety. The aim of this study is to understand hospital staff awareness of patient safety culture.

Purpose/Methods
The Safety Attitude Questionnaire (SAQ) has been applied in this study. The questionnaire consists of 8 domains, which assess teamwork climate, safety climate, job satisfaction, stress perception, perception of management, working conditions, resilience and work-life balance. All staff as the object of study were from medical aesthetic hospital in China. Of 501 questionnaires issued, 163 were returned undelivered and 338 were completed (response rate 67.5%).

Results
The overall safety score of the patient safety culture was 3.76±0.5, using independent sample T-test and ANOVA analysis: (1) Work-Life Balance score for other staff> Physician (2) Work Satisfaction score for 5 years > half year to 2 years, 3-4 years (3) Patient Safety Culture overall score for less than half a year> 3-4 years and 6 months to 2 years (4) The supervisor has a higher overall score in the patient safety culture.

Conclusions
Understanding attitudes of the Chinese hospital staff towards safety culture via SAQ survey. In the future, it enhances the skill of quality management, the education of culture of patient safety and created a standard of JCI International Hospital Evaluation to raise staff awareness about patient safety culture.

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E-Posters: Patient an community empowerment and involvement, self-help friendly hospitals

Effectiveness of Introducing SDM Courses to Communities Using Problem-based Learning Models in a Regional Hospital

CHEN Yi-Ching, LAI Fang-Tus, CHEN Jean-ShiT, SENG Yuan-Tsung

Introduction
Patient-physician shared decision-making (SDM) is a patient-centered process that opens a dialogue between medical personnel and the public to understand the joint decision making after medical diagnosis and treatment. Therefore, this study teamed up with the government in furthering the 2018 health promotion work program and selected four communities to push an action plan.

Purpose/Methods
The action plan includes: (1) organizing a promotion team to meet regularly for discussion; (2) conducting a community needs survey to understand its attributes and characteristics; (3) designing two teaching programs; (4) problem-based learning: 30 minutes of group discussion on real clinical situations to guide thinking and communication and propose solutions; (40 minutes of teaching; and 30-minute round table interactive meeting to review the feasibility of solutions to ensure correct learning; (5) using a Likert five-point scale to design a questionnaire for evaluating the effectiveness of SDM programs with 5 items; and (6) group discussion of results and revising implementation methods.
Electronic Poster Session

Results
Eight courses were conducted, with an attendance rate of 95% and 100% overall satisfaction. Sixty-one questionnaires were sent out, with a recovery rate of 100%. The results before and after the implementation with 5 items: The overall average rose from 2.5 to 4.8, with an improvement rate of 92%.

Conclusions
The significant effect of the action plan lies in the use of problem-based learning models to get hold of the overall learning context of the public, change the behavior of seeking medical treatment, and thus improve the quality of doctor-patient communication.

Comments
We confirm that this abstract has not been submitted elsewhere and all authors have approved the abstract and agree with submission to HPH.

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Effectiveness of integrating nutrition and nursing education strategies for reducing incidence of dialysis hypotension in hemodialysis patients.

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Introduction
Intradialytic hypotension (IDH) is very common, occurring in over 20% of hemodialysis (HD) treatments, and contributes significantly to morbidity and mortality in the end-stage renal disease (ESRD) population. The aim of this project is to explore whether intervention of nutrition and nursing education strategies can effectively reduce the incidence of dialysis hypotension in HD patients.

Purpose/Methods
The subjects were the ESRD patient who receive regular hemodialysis over 6 months in the hospital. The integrated care or education strategies included 1. Implementing a protocol of nursing care on hemodialysis patients; 2. Revising the patient instructions and handout forms (including videos of hemodialysis exercise program and nutrition education posters); 3. Conducting a series of education lectures for patients and care givers; 4. Providing personalized homecare and nutrition education for patients.

Results
After the implantation of multiple strategies, the incidence of intradialytic hypotension decreased from 18% to 7.97%, the uremic toxin clearance increased from 86.5% to 89.8%. The results reveal that the integrated care program have achieved effectively.

Conclusions
The integrated multi-care strategies effectively reduces the incidence of IDH of hemodialysis patients in the hospital. Encouraging patients and their care givers to learn how to do the self-management actively, such as self-water restriction, body weight control, and healthy cooking. All these strategies in this project could reduce the incidence of dialysis hypotension in HD patients, but also improve their quality of life.

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The application of freehand physical therapy in postoperative breast cancer

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Introduction
In recent years, breast cancer has become a major disease that endangers women’s health and life. However, common complications include: frozen shoulder, weakness of upper extremity, ipsilateral arm lymphedema, limited shoulder mobility, etc., affecting the patient’s daily routine. As the medical technology progresses, the survival rate after breast cancer surgery is greatly improved. Life and physical and mental health. Therefore, to improve shoulder activity and muscle strength, is an important part of the treatment of mastectomy patients.

Purpose/Methods
This study explores the impact of freehand physical therapy on postoperative shoulder mobility disorders, postoperative pain, muscle strength and quality of life in patients with breast cancer through clinical cases.

Results
After data analysis, the results of this study are as follows: 1. With lymphedema accounting for 22.2%, having shoulder pain 44.4%, mean age 54 years, median age 52 years, starting treatment from 2 days to 1167 days (mean 193.4 days). 2. Shoulder Flexion, Shoulder Abduction and Shoulder Internal / External Rotation were obviously limited after the operation, and the movement of the joint was obviously improved after the treatment. Shoul-der joint activity before and after treatment point of view and shoulder activity after each treatment point of view, with each successive physical therapy courses have increased and reached a significant difference. 3. The patient’s age does not affect the physical therapy of breast cancer patients after surgery shoulder angle improvement. 4. Joint angle of motion disorder recovery and quality of life after physical intervention in the physical have significantly improved.

Conclusions
Freehand physical therapy in postoperative breast cancer contributes to the improvement of postoperative shoulder mobility disorders in breast cancer patients and improves the quality of daily life.

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Parent-Child Music Group of Self-Image Improvement Plan for Burned Children

LIU Hui-Yueh, PENG Jung-En, CHAN Chik-Yi, YU Chia-Meng

Introduction
The motivation for the establishment of the parent-child music group is to help burned children to recover from their poor self-concept and to effectively improve interpersonal relationship and the health promotion of parent-child relationship, so that the self-confidence of those injured children can be strengthened through the successful experience by the program. Besides, those similar situation parents can get peer support in the group also playing a great role in reshaping the value and meaning of their family life.

Purpose/Methods
The diversity of the medium of the course makes children learn in fun. Group leader uses some puppet props, rhythm cards, or solo to guide children to become little leaders. By encouraging children to sing or perform alone in a short period increases children's self-confidence and enhances the transformation of their self-concept. Besides, guild parents how to give children appropriate not spoiled companionship helping children learn independently in group and also promote healthy parent-child relationships.

Results
100% of parents agree that this music class lets children happier. After the program, children like to cooperate with other injured children to perform music, and they are more able to show self-confidence in the group. Besides, parental participation is high in the process of courses.

Conclusions
The use of musical elements helps these burned children to break the poor self-image after the injury, and to reduce anxiety and fear of interaction with people, so that injured children and parents can re-develop the concept of healthy self-image in a safe and pleasant environment.

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An exploratory research on the roles that expressive arts group is playing in advanced cancer ward

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Introduction
As the disease is getting worse and worse, the advanced cancer patients will often feel fearful, worried, and anxious. As we know, the time spent on chemotherapy and radiation therapy for advanced cancer patients is lengthy and suffering. Therefore, by holding the performance of expressive arts group in advanced cancer ward, this program intends to help the patients and their families reducing the pressure and anxiety caused by the process in hospitalization, and thus helps them improve their self-efficacy.

Purpose/Methods
This program aims at advanced cancer patients and their families. It runs in a one-time unit as a group in the advanced cancer ward of a hospital in Taiwan, which will be held once a month. This program adopts purposive sampling method to conduct the simple questionnaire, which mainly focuses on understanding the participants’ self-awareness of relaxations, supports and self-efficacy. The results are measured by using the Likert five-point scale and the descriptive statistical analysis is carried out.

Results
The program was conducted 6 times in total on 49 participants and the total questionnaire responses are 32. The result shows that of all the participants’ self-awareness in the group, the feeling of relaxation is the highest. For the various identities, there are no significant differences between the patients and their families in the self-awareness of relaxation, support and self-efficacy. For the gender, men are significantly more relaxed than women. The overall satisfaction with this program is 91.4%.

Conclusions
In summary, the expressive arts group helps the advanced cancer patients and their families get a temporary relaxation in the hospital.

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Effectiveness of PDCA-based information Management System on Nursing Instructional Education

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Introduction
Instructing patients to learn how to promote and maintain their own health status is the most important in the nursing process. Past, nursing staff required a lot of effort to organize, document and devote themselves to teaching. Nowadays, due to the advancement of information technology, the establishment of electronic medical databases and the use of a nursing clinical decision support information system can be tailored to individualized nursing instruction. Patient can receive professional care and improve the quality of care.

Purpose/Methods
In this study, the nursing process of all nurses in the emergency medical center, intensive care unit, and general ward of a medical center in the southern Taiwan are investigated and the retrospective review of data is used. In this study, recorded using of total of 11980 data and recorded using 48 months from three groups of auditors is analyzed. The results are obtained with data using descriptive statistics and one-way analysis of variance.
Results
The results show that after establishment of the nursing guidance and teaching system in the year of 2012, the completeness of auditing and nursing documentation in patient records of the three types of units has increased significantly year by year. The scores of guidance records integrity also showed a significant increase year by year, all reaching statistical significance (P <0.05)

Conclusions
It is recommended that the medical centers expand to diversity the development of electronic clinical practice guideline resources, with the combination of medical systems and other resources in the future. For example, the private telecommunication may provide distant health services to safeguard patient health information, so that patients’ services can be seamlessly integrated.

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Trip with talking - Autoimmune disease patient group experience

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Introduction
Five to ten percent of the people are threatened by autoimmune diseases in industrialized countries. When the immune system is out of tune, it will attack host. A group of similar disease patients can bring more positive changes to patients, injecting flexibility and individualized adaptation process for long-term disease. They also care for positive energy in facing of disease and caring for patients.

Purpose/Methods
This paper is a qualitative study. It collects and analyzes the content of the interviews through listening and participating in observations, and discusses and interprets the meanings in conjunction with relevant texts.

Results
1. Self-help: In addition to obtaining warmth from the stratosphere, can more cohesively move and resilience. When sharing your own experience, you can also promote yourself as a public interest group. 2. Social initiative: The voices of the group and the resources it possesses can influence the society’s view of the disease. Advocate for issues such as disease care or policy. 3. Quality improvement: Through the patient group to improve the interpersonal cycle of medical care, nursing, and patient, repair the rigidity of the medical model, and increase the patient’s "normal".

Conclusions
"The heart of joy is a good medicine, the spirit of sorrow makes the bones dry." Happy mood, live a happy life, and the condition will gradually dawn. Through the support of the patient group, I know that I am not alone. A group of people fight together.

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Using the Ottawa Charter Five Action Plan to develop a community-based care service model in dementia

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Introduction
Community refers to people with common culture, living in the same area, thus inducing the influence of interaction. Therefore, taking care of the localized community, leaving the elderly to live in a familiar environment, to prevent the deterioration of long-term care problems, and to play the role of community self-help. The number of dementia patients has increased rapidly, and the number of dementia population in the Chihi District of New Taipei City is 1,210. The hospital combines community partners to jointly establish a demented care service model in the district, providing comprehensive care services for the demented from evaluation, diagnosis, treatment to resource utilization.

Purpose/Methods
In April 2018, the five major action plans for health promotion were used to develop a community-based demented care service model. 1. Healthy public policy: community leaders’ dementia care consensus; 2. Creating a supportive environment: building dementia care centers and services. According to the point; 3. Strengthen the organization of the organization’s action: build a demented and friendly guardian station, find cases and referrals; 4. Develop personal skills: conduct propaganda education, promote public education for dementia; 5. Adjust the direction of service: create a friendly attitude allows demented people to enter the community, increase social participation, and provide care and support for caregivers.

Results
As a result, 1 dementia care center, 6 demented community service bases, 40 demented friendly guard posts, 1000 demented public education participants, and 96% course satisfaction were completed.

Conclusions
The cohesion of community power and the recognition and support of the demented are more necessary. Dementia care is an integrated work. Because of the development of the disease, different service modes must be provided to meet the needs of the case.

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Elderly Volunteering Plan as Empowerment in Healthcare system

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Introduction
The mission of the health care system is to ensure the elderly to have dignity and reasonable comfort in their old age. In 2106, our hospital aims to provide distinctive services to the elderly, i.e. elderly participation and empowerment.
Purpose/Methods
We launch Elderly Volunteering Plan to empower older persons through active participation since 2016. Elderly volunteers were about 37% of total volunteers. We provide qualified education programs and organizations for the dual purpose of engaging persons 65 and older in volunteer service to meet healthcare workplace needs and to provide a high-quality experience that will enrich the lives of volunteers.

Results
Elderly Volunteering Plan approach can be a useful method to change old people from passive clients into active and empowered individuals with a positive self-image. High satisfaction score was noted during the patient satisfaction survey. Elderly Volunteers had a more positive result than younger. It is effective in strengthening elderly people's contact with the community, eliminating elderly people's negative self-image.

Conclusions
We develop volunteer opportunities and empowerment that affect volunteerism, knowledge about the impact of volunteering on older individuals is important. We should shape volunteer roles on the basis of knowledge of what improves the well-being of the older population and what improves society.

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Diabetes support group attendees’ self-care and disease control efficacy before and after health promotion in Taiwan

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Introduction
To evaluate the self-care by patients attending a diabetes support group in terms of disease control efficacy before and after health promotion activities.

Purpose/Methods
In Taiwan health promotion interventions were used by 50 DM support groups (N=432 cases) during 2018. A self-reported evaluation sheet was completed by attendees before and after health promotion activities. The content of questions included self-reported management: Body Mass Index (BMI), waist circumference, compliance with medication, diabetes diet control, blood glucose monitoring; Investigations: (glycosylated hemoglobin (HBA1C)< 7, serum cholesterol, blood pressure, fundal examination, plantar examination, albumin test) and exercise five days a week.

Results
The most commonly used group activity type was Nutrition Education, which accounted for 52.2% of activity, followed by exercise, which accounted for 44.9%. Rather surprisingly, the use of internet teaching was far less common with only 6.4% reporting its usage. There was a statistically significant difference in diabetes disease control before and after the health promotion interventions (P<.05/P<.005). In addition, there was a significant positive correlation between group structure and community relationship with total number of attendants, female patients, age over 65 years old, university education and retirement.

Conclusions
The project implemented health promotion activities in 50 diabetes support groups in Taiwan and confirmed their efficacy in...
terms of improvement in self-care and disease control. In the future, the author suggests that efforts to build a community support network should be continued and linked to resource sharing and shared learning. There should also be encouragement for different models of diabetes support groups according to local needs and resources and the provision of up-to-date information on diabetes care.

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The Development of Nutrition Education Board Game for the Elderly

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Introduction
Traditional teachings yield poor learning results for the elderly. Board games combine the benefits of entertainment and learning for them, as traditional military chess and card games notably hold their interest. Therefore, we developed suitable nutrition education board games, an interactive teaching method to improve learning performance, resulting in better knowledge, attitude and behavior. We also used a variety of activities with teaching aids to increase cognitive and physical activity for elders to better participate in the games.

Purpose/Methods
The applicability of nutrition board games in prevention and delay of debilitation was studied. We evaluated, by questionnaire, participants’ cognitive knowledge and attitude before and after participation. The knowledge questionnaire included the definition of sarcopenia, relationship with disease, related to metabolic syndrome, and nutrition support related to chronic disease. They are in community health education for the elderly and provided the basis for achieving the nutrition status and reducing the risk of disability, debilitation and chronic diseases.

Results
Nutrition education board games were promoted, and holding twenty-seven games in the community. 34 subjects were engaged in nutrition education board games. 79.4% of subjects expressed stronger interest in these games than traditional teachings. The scores of knowledge in pre-test and post-test regarding nutrition approach to prevent weakness were 52.1 ± 12.3 and 75.6 ± 12.6, respectively. Ten attitude indicators of nutrition approach to prevent chronic disease, 88.3% expressed strong overall agreement. Overall satisfaction averaged 92 points.

Conclusions
We found that seniors were very interested and positively challenged by various activities during the games. According to the comprehensive results, using an nutrition education board game was very suitable to community activities. It could improve knowledge of nutrition education, prevention chronic disease and progressive disability for the elderly.

Comments
The preliminary results have shown that the development of nutrition education board game for the elderly may attract their interest, promote knowledge of nutrition and prevent sarcopenia, frailty and disability.

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Risk of Osteoporotic Fracture Following Haemophilia: A Nationwide Population-based Cohort Study

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Introduction
Low bone mineral density occurs more commonly in patients with haemophilia (PWH) than the general population. However, the risk of haemophilia-related osteoporotic fracture has not been well established. We aim to explore the relationship between haemophilia and the subsequent development of osteoporotic fracture.

Purpose/Methods
This was a nationwide population-based cohort study based on the data in the Taiwan National Health Insurance Research Database. Patients who were diagnosed with haemophilia were selected. A comparison cohort was formed of patients without haemophilia who were matched according to age and sex. The incidence rate and the hazard ratios (HRs) of subsequent new-onset osteoporotic fracture were calculated for both cohorts.

Results
The haemophilia cohort consisted of 75 patients, and the comparison cohort comprised 300 matched control patients without haemophilia. The risk of osteoporotic fracture was higher in the haemophilia cohort than in the comparison cohort (HR = 5.41, 95% confidence interval [CI] = 2.42–12.1, P < 0.001). After adjustments for age, sex, comorbidities, urbanizations, and socioeconomic status, PWH were 4.53 times more likely to develop subsequent osteoporotic fractures (95% CI=1.93–10.62, p =0.001) as compared to matched cohort. In addition, the incidence of newly diagnosed osteoporotic fracture was significantly increased after 5 year follow-up durations.

Conclusions
Haemophilia may increase the risk of subsequent osteoporotic fracture and the cumulative incidence was significantly higher for PWH diagnosed more than 5 years. Clinicians should pay particular attention to subsequent osteoporotic fracture in PWH as they age.

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A Nursing Experience of Caring an Intracerebral Hemorrhage Patient with Powerlessness: A Case Report

LIU Ying-Yu

Introduction
This study aimed to describe the nursing experience of treating a 68-year-old male patient who was suffering from weakness in the right limbs due to a sudden intracerebral hemorrhage and consequently, lost his ability to perform daily life functions. Despite undergoing a week-long rehabilitation, the patient failed to attain the rehabilitation effect that he desired, and subsequently experienced negative emotions that caused him to become withdrawn and quiet, emotionally unexpressive and unwilling to cooperate with his rehabilitation therapy.

Purpose/Methods
The team's combined efforts enabled the patient to positively face his disease induced dysfunctions, actively undergo rehabilitation, improve his self-care ability and quality of life, and adapt physically and mentally to his condition.

Results
Data was collected through the application of Miller’s seven sources of power, and the utilization of techniques including physical assessment, observation, and interviews with the patient and his family. It was found that the patient was facing problems such as impaired physical mobility, lack of self-care ability, and feelings of powerlessness. With the help of physiotherapists and occupational therapists, appropriate nursing care measures were implemented to help alleviate the patient’s negative emotions and feelings of powerlessness.

Conclusions
The author’s focus on physical care and lack of experience in the psychological aspects of nursing care prevented the timely implementation of appropriate nursing measures. It’s thus suggested on-the-job education and knowledge sharing sessions could be conducted regularly, so as to enhance the nursing staff's ability to detect a patient’s psychological problems and assist them. It's hoped this case study will serve as a reference in clinical nursing. The sooner we notice the psychological problem of the patient, we can provide better care for them.

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Association between Chronic Disease Status and Grip Strength among Middle-age and Elderly Population in Taiwan – The Chiayi Community-based Elderly Health Survey (CCEHS)

LIN Yu-Chen, LIU Chun-Yin, WU Der-Min, CHU Nain-Feng

Introduction
Chronic disease status is associated with muscle wasting and weakness which may be associated with falling down and disability among middle-age and elderly population. Muscle weakness among elderly population is an important public and clinical issue in the world-wide. This study is to evaluate the association between processing of chronic disease status and grip strength (GS) among middle-age and elderly population in Taiwan.

Purpose/Methods
We conducted the community-based health check-up and survey among middle-age and elderly people in Chiayi County, Taiwan. The people more than 50 years old and lived in Chiayi county will be invited to attend this survey every year. General demographic data and lifestyle patterns were measured using standard questionnaire. Disease status, such as all cancers, hypertension, diabetes and stroke among the population were collected from the medical record. The grip strength was measured using digital dynamometers (TKKS101) method.

Results
Total there are 7,560 middle-age and elderly subjects were recruited in this survey. Among these subjects, there are 3,090 males and 4,470 females with the mean age of 70.2 (from 50 to 85 year old). For male, the mean GS was 41.4 +/- 7.4 kg and 32.8 +/- 7.1 kg for 50-65 and greater than 65 YO. For female, the mean GS was 25.6 +/- 4.8 kg and 21.6 +/- 4.8 kg, respectively. In multiple regression, the subjects with stroke and diabetes had lower GS than those subjects without these diseases. For example, the male stroke subjects had 3.28 kg lower GS than those without stroke. For diabetes, it was 1.96 and 0.96 kg lower GS than non-diabetes in male and female respectively. In logistic regression, the subjects with stroke and diabetes had lower GS than those subjects without these disease. For example, the male stroke subjects had 3.28 kg lower GS than those without stroke. For diabetes, it was 1.96 and 0.96 kg lower GS than non-diabetes in male and female respectively. In logistic regression, the odds ratio for lower GS was 1.45 (95% CI 1.24-1.70) for stroke and 1.25 (95% CI 1.16-1.34) for diabetes among male subjects.

Conclusions
From this survey, we found that the people with more chronic disease status had lower GS than the healthy subjects. Stroke and diabetes are two important chronic diseases that associated with significantly decreasing of GS. For these diseases subjects, early prevention of muscle weakness and increasing physical activity training should be considered to prevent sacropnea or muscle weakness in later life.

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An Empowering Approach to Promote Self-Efficacy of Patients With Type 2 Diabetes in A Southern Teaching Hospital in Taiwan

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Introduction
Evidence shows a significant increase in advanced glycation end products after postprandial hyperglycemia, which might play an important role in the development of endothelial dysfunction, leading to atherosclerosis. Monitoring the carbohydrate intake is
key to glycemic control. Self-efficacy is not only one of the most important factors in behavior change, but also for long-term control of chronic disease. The study investigates the effect of carbohydrate counting on self-efficacy in patients with type 2 diabetic.

**Purpose/Methods**

The study was approved by the Research Ethics Committee at Saint Martin De Porres Hospital. 35 patients were enrolled in this program. We emphasized the importance of blood glucose self-monitoring, medication compliance, diet and exercise. Data were collected through HbA1c, anthropometric measurements and the knowledge, attitude and behavior toward self-efficacy questionnaire. Statistical analysis was conducted using SPSS 24, Pearson correlation coefficient and paired t-test.

**Results**

Patients utilizing the carbohydrate counting tool improved HbA1c by as much as 0.73% (p<0.001). Changes in HbA1c were independent of age and diabetes duration. A direct positive correlation existed between HbA1c improvement and adherence to carbohydrate counting in participating subjects. Regarding muscle strength measurements, no significant changes were noted in handgrip strength. Skeletal muscle mass was positively correlated with BMI. Knowledge retention was better for younger patients or shorter diabetes duration.

**Conclusions**

Recent research has demonstrated the effect of monotherapy for glucose-lowering with a drop in HbA1c from 0.5% to 2%. Our study indicates that the carbohydrate counting used in this empowerment program had positive effects on self-efficacy in patients with type 2 diabetes. A long-term follow-up study is necessary to support a sustained effect and evaluate quality of life in these patients.

**References**


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**Analysis of medical effect and medical resource consumption of knee arthroplasty in diabetic patients with knee degenerative arthritis**

**PEI-LING Tsai**

**Introduction**

With ageing and life expectancy, the population with diabetes and degenerative joint disease grow larger in future and expect patients require total knee replacement (TKR) to be increasing. The study aims to investigate the differences of mid-term and long-term efficacy and the utilization of medical resources between patients undergoing TKR with or without diabetes.

**Purpose/Methods**

This was a retrospective study utilizing the systemic sampling data subsets of longitudinal health insurance database 2005 (LHID2005) from the National Health Insurance Research Database (NHIRD). Excluding subjects aged below 20 years or with missing data such as hospital stays or gender, patients undergone primary TKR with or without diabetes were included in the study.

**Results**

The prevalence of primary TKR was increased from 0.03% in 2000 to 0.06% in 2010. However, the average annual medical expenses (from NTD144,511 to NTD127,037) and the admission fees (from 10.04 days to 7.14 days) were decreased year by year. In subgroup analysis patients undergone primary TKR with comorbidity of knee osteoarthritis whose length of stays in DM...
group was more than non-DM female in metropolitan hospitals, cardiovascular diseases without CKD and COPD. Besides Medical cost in DM group was more than non-DM group in female, aged more than 65 years, without comorbidity of COPD CCI=0 moderate hospital service volume population. Among patients undergone primary TKR, the re-admission rate within 30 days after previous discharge, diabetes was 3.46 times higher than non-diabetic group in CKD population.

Conclusions
It found the rate of TKR is increasing year by year, it suppose be a significant difference in length of stays, expenses, and recent admissions in the diabetic group, but due to pairing was performed at 1:3 which result no significant difference. Although NHI has adopted the pre-auditing system, the medical costs of TKR have accounted for a significant increasing in part of overall NHI. However, to choose proper medical devices is the main concerned issue due to that we couldn’t get information about self-funded materials in NHI, it’s required to help patients choose in order to protect the patients’ rights and interests. How to let patients and their families learning on the self-care in hospitalization, in order to better quality of life.

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Using Infection Control Measures to Reduce the Incident Rate of Upper Respiratory Infection—A Case Study in Rehabilitation Wards of a Psychiatric Center

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Introduction
This study explores the reduction of incident rate of upper respiratory infection (URI) by using infection control measures in rehabilitation wards of a psychiatric center.

Purpose/Methods
From January 2017 to October 2018, the inpatients in the rehabilitation wards of a psychiatric center were encouraged to get vaccinated annually against flu in accordance with the infection control manual for psychiatric medical institutes as well as the ward infection control checklist. Health education was provided monthly to raise their awareness of infection control. Daily infection control measures were taken, such as taking temperatures in the morning, cleaning the environment, wearing masks during treatment and activity, washing hands, and so on. Moreover, personal hygiene and visitor management were implemented. All of the above were written down as data. Any abnormality was immediately reported so that infection control could be intervened. Based on the data, the reported number of URI served as an effect index for infection control measures.

Results
The analyses of the data indicate that the vaccination rate rises from 79.6% of last year to 92.8%, infection control awareness of patients rises from 64% to 89%, environmental disinfection implementation rises from 83% to 98%, cooperation rate of infection control rises from 73% to 93%. On the other hand, the number of reported URI drops from 54 to 15.

Conclusions
The intervention of infection control measures can indeed reduce the occurrences of URI for inpatients. Individual or mass URI cases are detected early by intervention, monitoring, adjustment, and improvement of infection control measures. Once necessary infection control measures are taken, ward infection will decrease and nursing quality will improve. Also, clinical nurses will be relieved of workload which is related to infection.

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Introduction
At present, about one-third of patients with end-stage renal disease in Taiwan are caused by long-term diabetes, which not only causes high incidence and prevalence of end-stage kidney disease in Taiwan, but has caused public health problems, and cost more than 20 billion per year. The medical expenses are also the financial burden of health insurance, and also affect the quality of life of patients, which shows the seriousness of the problem of diabetic nephropathy.

Purpose/Methods
The purpose of this predecessor study was to investigate the feasibility of self-management programs for HbA1C and proteinuria in patients with diabetic nephropathy. The patient was sampled at the Department of Metabolism, a regional hospital in the Southern District of Taiwan. Four patients with diabetic nephropathy were admitted. The self-management program is a self-administration course of approximately 90 minutes per week for the subject. The results of the study include self-monitoring records, HbA1C and proteinuria changes.

Results
The total number of participants in this pre-test was four, with an average age of 62 (SD=17.56), the average time of illness was 11.25 years (SD=6.85), the highest education level was college, and the junior high school is the lowest; the HbA1C averages 7.65 (SD=0.98); AC sugar averaged 143.5 (SD = 36.20); Creatinine averaged 0.52 (SD = 0.17); total cholesterol averaged 162.25 (SD = 20.69); Triglycerides averaged 99.0 (SD=45.27); microalbuminuria averaged 63.5 (SD=120.28); four participants’ Urine protein/creatinine ratio were greater than 0.2.

Conclusions
Since this is a small sample of pre-tests and post-test in a single group, after one month of self-administration, the four participants had a decrease in the values of glycated hemoglobin and microalbuminuria, but because of the small number of samples.
The evaluation of HbA1C and proteinuria needs to be tracked for a long time, which may be the reason why there is no statistical significance. But the feasibility of the research design and process can be confirmed through the precursor test process. These four participants can also serve as seed teachers and model roles for future formal research.

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Teamwork to build a dementia case management model

YI-LIN Su

Introduction
It is known that older people are admitted to hospital more often than other age groups and occupy two-thirds of acute hospital beds. Admission to hospital is demanding for the person with dementia, physically and emotionally. Poor detection and diagnosis, negative outcomes, longer hospital stays, higher mortality rates, increased likelihood of falls, functional decline, spatial disorientation, possible malnutrition and dehydration, increased reliance on care givers, depression and superimposed delirium are some of the reported consequences of being in hospital. We use quality improvement techniques to promote case management in dementia cases, so that more dementia cases can receive complete care services.

Purpose/Methods
In June 2018, the project was used to solve the problem, to set up a cross-team demented care team, to implement well-known in-hospital activities, to use the capital system to know the target group and the care team to communicate, to build a mentally handicapped person to seek medical treatment. Through the system, formulate referral procedures for outpatient dementia cases, and formulate management practices for dementia cases.

Results
The results are 207 of dementia cases, which were extremely mild 57, mild 50, moderate 56, and severe 44; follow-up resource referral rate was 100%.

Conclusions
Acute care hospital environments are generally unsuitable for people with dementia. Recent reports suggest a culture that devalues people with dementia. Ward cultures are mainly task-focused and person-centred care may go at the expense of meeting targets such as shortening lengths of stay and risk management. Some individuals do provide care that is in part person-centred but this is not a widespread or consistent practice of caring for people with dementia in hospital, despite evidence of its benefits in other care settings. Interventions that have been suggested to be useful include the use of volunteers, mental health liaison services, shared care models and education.

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Assessment of sofosbuvir use in a regional hospital in Yunlin, Taiwan

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Introduction
Hepatitis C is a common liver disease in Taiwan. The recommended dose of Sofosbuvir (Sovaldi®), a full oral drug for hepatitis C treatment is 400mg QD. It was included in health insurance payment in January 2018. It was approved to treat hepatitis C with other drugs, such as Ribavirin (Robatrol®) and Daclatasvir (Daklinza®). This study aimed to assess sofosbuvir use in a regional hospital in Taiwan.

Purpose/Methods
Information on outpatients at the Yunlin Regional Hospital (August 2017 to August 2018) who used sofosbuvir+ribavirin or sofosbuvir+daclatasvir was obtained from the hospital’s electronic medical records. Basic patient data, viral load, AST and ALT values, and adverse drug reactions were determined.

Results
Twenty people were included in the study. One patient used the drug for 16 weeks (5%) and 19 patients used it for 12 weeks (95%). After treatment, AST and ALT decreased by 62% and 70%, respectively. Nineteen patients demonstrated sustained vi-ral response, while 1 patient relapsed (cure rate: 95%). Four patients had lethargy and fatigue, 3 had gastrointestinal discomforts, and one had insomnia; however none of these side effects affected the treatment.

Conclusions
From these data, it can be suggested that sofosbuvir is beneficial for hepatitis C treatment. If ribavirin is used, monitoring of haemoglobin every 2 weeks is recommended. After completion of treat-ment, abdominal ultrasound and blood tests are recommended every 6 months.

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Fecal Calprotectin for detection of small bowel Crohn's disease patients: a systematic review and meta-analysis of observational studies

MEI-WEN Chen, SHU-HUA Huang

Introduction
Conventional ileocolonoscopy is unable to assess the mid small intestine. However, fecal calprotectin has been a useful technique for distinguishing small bowel Crohn’s disease. The objective was to evaluate the diagnostic accuracy of fecal calprotectin in patients with symptoms consistent with small bowel Crohn’s disease.
The Effect of Controlling Serum Phosphorus Levels of Dialysis Patients at a Local Hospital In Taiwan

TSAI Wan-Yi, CHANG Pei-chen, HSIEH Chiu-Ping, YANG Chien-wei, KAO Li-chueh

Introduction
According to an assessment conducted during July ~ December 2016, 35.8% of dialysis patients treated at the hospital were found to have blood phosphorus level higher than 6mg/dl. Among them, 16.53% exceeded 8mg/dl with a risk rate of 5.2%. Problems identified: Patients are not clear about a low phosphate diet. Patients are not clear about the use of calcium pill. The content of patient education sheet does not meet the needs. Objectives Decrease the percentage of dialysis patients with serum phosphorus level higher than 8mg/dl to less than 20%. Raise the score of awareness to high blood phosphorus diets from 73.8 to 85.

Purpose/Methods
Holding group education on low phosphorus diets and phosphorus-lowering medications. Producing posters for hyperphosphatemia complication. Adding use instruction on medicine bag. Producing movable low phosphorus health education kit. Producing posters for hyperphosphatemia complication. Producing interactive health education kits to motivate patients to learn and instill in them the images of foods that are high in phosphorus.

Results
1. The number of patients with serum phosphorus level higher than 6mg/dl drops from 27 to 13. By percentage, it is improved from 35.8% to 17.8%, representing 50.3% quality improvement rate and 113.9% target attainment rate. 2. The average score rose from 73.8 to 98, representing an improvement rate of 32.9%. 3. The overall satisfaction rate is 98% and the education kit won third place in creative nursing works contest organized by the hospital.

Conclusions
We found that factors leading to hyperphosphatemia are complex. We also found that dialysis patients at the hospital, in general, are older, have memory and vision loss and are less educated with inadequate health literacy. All those situations have made health education more challenging. Therefore our team brainstormed creative ideas and decided to use colorful boards and interactive health education kits to motivate patients to learn and instill in them the images of foods that are high in phosphorus.

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Cases study on latent tuberculosis infection from nursing home in Taiwan

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Introduction
Research shows that 5-10% of latent tuberculosis infection (LTBI) cases will develop active tuberculosis in the future, and the incidence rate will increase with age. People lived in nursing homes are mostly elderly people, which is one of the reasons for the high incidence rate of tuberculosis among nursing homes. Workers who close contact with residents have a higher risk of being infected. Early treatment of LTBI cases will reduce the risk of acute illness.

Purpose/Methods
This research started from April 2018 to October 2018. 184 cases(116 residents, 68 workers) were willing to take the IFN-γ release assays (IGRAs) examination (participation rate 67.90%). The examination showed 37 cases are IGRA positive, and 33 cases received treatment (89.19%). To explore the distribution of these IGRA positive cases (LTBI) and their background in nursing home, we analyzed the LTBI residents data, including age, the length of stay, mobility, reliability, and the age of the LTBI workers data, including age and the length of service.

Results
Among the 116 residents of all age groups, the highest IGRA positive rate of all age group was 61-70 years (positive rate 25%). Analyzed the statics data that residents stayed less then 1 year, 1-2 years, 3-4 years and 5 years above, the result shows that the highest IGRA positive rate is 25% at less then 1 year group. The data which less then 1 year group in workers shows 33% IGRA positive rate.

Conclusions
We can interpret the results of IGRA positive group in the following section. There is no significant correlation between length in nursing home and the risk of being infected with tuberculosis. Staff members who have been working for less than 1 year are tested IGRA positive, residents’ data showed the same outcome. Many cases may be infected with tuberculosis in the community. In conclusion, the control and prevention of Tuberculosis is equally important at community and nursing homes.
Electronic Poster Session

The lifestyle behaviors and the risk of hypertension according to the age and sex in Korea

KIM Suyoung, NAH Eun-Hee, CHAI Jong-Yil

Introduction
As the prevalence of hypertension (HTN) has increased over almost two decades, it is important to identify modifiable lifestyle behaviors for disease prevention. Although the risk of HTN is associated with aging, the range of programme for preventable chronic disease has been extending to include young adult. This study aimed to determine a risk of HTN according to the pattern of lifestyle factors by age groups in men and women.

Purpose/Methods
This study included 942,637 adults that underwent health check-ups at 16 KAHP centers in Korea, between January to December 2015. HTN was defined as SBP ≥140mmHg or DBP ≥90mmHg or on medication for HTN. Lifestyle behaviors were dichotomized as low and high risk for HTN. We considering high risk defined by obesity with BMI, smoking, alcohol drinking, insufficient physical activity. Participants were divided by age (19-39, 40-49, 50-59, ≥60 years). The association between lifestyle behaviors and risk of hypertension was examined using the Mantel-Haenszel method stratified by age groups and logistic regression models.

Results
The overall prevalence of HTN was 28% (male 29.9%, female 26.3%). When participants were stratified according to age, the risk of HTN was significantly high in the men with obesity or alcohol drinking factors or in the female with obesity, alcohol drinking or insufficient physical activity factors (each P-value < 0.001). Compared to no risk factor in lifestyle, the number of lifestyle risk factors was positively associated with a higher risk of HTN in adults aged >40 years (all P-value for odds-ratios (OR) < 0.05). And obesity among individual lifestyle factors was associated with decreasing OR of developing HTN in sequential order from young to old age groups in male and female.

Conclusions
In the young adult group, obesity is associated with a higher risk of HTN. And in middle or old age groups, the number of lifestyle risk factors were positively associated the risk of HTN as well as individual lifestyle factor. Results of this study highlight the im-portance of segregated strategy by age to manage disease related to HTN. Particularly, young adults need routine screening to maintain healthy body weight, and the using digital device could be effective to prevent disease.

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The Effect of Controlling Serum Phosphorus Levels of Dialysis Patients at a Local Hospital ~Taiwan experience

TSAI Wan-Yi, CHANG Pei-chen, HSIEH Chiu-Ping, YANG Chien-wei, KAO Li-chueh

Introduction
Assessment of hyperphosphatemia: According to an assessment conducted during July ~ December 2016, 35.8% of dialysis patients treated at the hospital were found to have blood phosphorus level higher than 6mg/dl. Problems identified: Patients are not clear about low phosphate diet. Patients are not clear about the use of calcium pill. The content of patient education sheet does not meet the needs. Objectives: Decrease the percentage of dialysis patients with serum phosphorus level higher than 6mg/dl to less than 20%. Raise the score of awareness to high blood phosphorus diets from 73.8 to 85.

Purpose/Methods

Results
1. Percentage of dialysis patients with hyperphosphatemia: By, it is improved from 35.8% to 17.8%. 2. Awareness of hemodialysis patients to hyperphosphatemia: The average score rose from 73.8 to 98.

Conclusions
Through “Hyperphosphatemia Awareness Questionnaire for Hemodialysis Patients”, we found that factors leading to hyperphosphatemia are complex. We also found that dialysis patients at the hospital, in general, are older, have memory and vision loss and are less educated with inadequate health literacy. In addition, their primary caretakers are mostly foreign workers and they tend to eat out a lot. To achieve effective health education, it is best to develop fun game-based educational kits to help patients improve their health literacy through enjoyable activities.

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A Preliminary Study on Long-term Treatment of Proton Pump Inhibitors and Risk of Gastric Cancer in a Regional Teaching Hospital in Northern Taiwan

LI Yi-Ching, SHIH Po-Jen, LIN Yu-wen, YANG Nan-ping, LIN Ching-feng
Introduction
Proton Pump Inhibitors (PPIs) are widely used to alleviate hyperacidity or are used as a therapy for helicobacter pylori infection with antibiotics. In October 2017, a scholar from The University of Hong Kong published an article on the long-term use of PPIs, which led to an increased risk of gastric cancer. The purpose of this study is to explore the PPI use situation in the hospital as a treatment consideration for physicians, thereby improving medication safety.

Purpose/Methods
Targeting the list of patients in a regional teaching hospital in Northern Taiwan, this study adopted the descriptive statistics of patients who had used PPIs over the past year.

Results
There were 4465 people tallied in this study, of whom 109 used it for up to a year, accounting for 2.44%; 224 used it for more than half a year, accounting for 5.02%. It was observed that for many patients, after continuous use for 4-6 months, the doctor would terminate medication for 1-2 months before resuming use, which was similar to intermittent therapy. It was also observed that after several months of continuous use, the prescription quantity gradually decreased, which was similar to the progressive reduction method.

Conclusions
The risk of contracting gastric cancer shows significant elevation after routine use for more than a year. Long-term use also comes with side effects to be noted. Therefore, it is not recommended. An observation shows only 2.44% used PPI continuously for more than a year, while the remaining majority fell under the reasonable range according to the medical association. There were also cases similar to intermittent treatment and progressive reduction. For long-term users, in addition to reminding physicians of relevant drug information, patients should be reminded of occurrences of side effects.

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The effect of Mindfulness-Based intervention on reduction of chronic pain for patients
WANG Chiiao-Chu, CHEN Mei-Wen, HUANG Shu-Hua

Introduction
The prevalence of chronic pain in adults was obvious, yet little was known of its predictable factors. Thus, this review investigated the effect of Mindfulness Based Stress Reduction (MBSR) of self-management on chronic pain by paper reviews.

Purpose/Methods
We searched the literature electronic databases Cochrane Li-brary and Ovid, the PubMed from inception to 27 November 2018 for relevance of systematic review and meta-analysis studies. We used Keywords with Mindfulness Based Stress Reduction (MBSR) and chronic pain.

Results
The Meta-analysis suggested that MBSR interventions may be associated with pain intensity (standardized mean difference=-0.89; 95%CI=1.63 to -0.15; P = 0.02) and headache frequency (standardized mean difference=-0.67; 95%CI=1.24 to -0.10; P = 0.02)(Gu, Hou et al. 2018). Besides, Anheyer, Haller et al. (2017) showed that no significant differences on low back pain of MBSR. Furthermore, Bawa, Mercer et al. (2015) suggested that no significant evidence of MBSR was found for chronic pain.

Conclusions
The inconsistent results indicated that the effect of mindfulness may rely on duration of the intervention meaning no favorable long-term effect were found with short-term training. Further study can investigate weather the effect of medicine with MBSR on reduction of chronic pain in patients work best in RCTs. The article concluded by discussing the implications of the study for MBSR may reduce pain headache and maybe an option of treatment for patients in the future.

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E-Posters: Tobacco prevention and coping
Increase smoking cessation in stroke patients by integrated system
LU Yen-Wen, LIEN Chi-Hsun, CHOU Yi-Jiun

Introduction
Smoking has been proven to cause diseases such as lung cancer and cardiovascular disease, it the significant risk factor for causing stroke, Smoking people get 2 to 4 times more cardiovascular disease than the average person, but the brain stroke is more than 10 times that of the average person. According to the National Health Service’s statistics 2014 statistics, among men with stroke in Taiwan, the male smoking rate is as high as 64.9%. Although female smokers are lower than men but suffered from secondhand smoking effect as 24%. Nicotine and other harmful substances can accelerate the deterioration of arteriosclerosis, in this article, we used an information system to increase smoking cessation for stroke patients.

Purpose/Methods
After review reference, peer hospital data comparison, benchmarking and clinical workflow observation and through the use of interdisciplinary team meetings. Make patients and their families aware of the importance of quitting smoking in medical care and The nursing system is supplemented with a warning slogan, with a quit smoking health education leaflet and a manual, which can be mentioned by the team in all categories of health education. After the discharge, the system refers to the smoking cessation clinic and regularly tracks the patient’s teaching methods to overcome the craving.

Results
Between January and June 2017, the rate of quit smoking and the success rate of smoking cessation among stroke patients were 73% and 38.4%. After the improvement of the countermeasures
and the implementation of the system, statistics from January 2018 to October 2018, referral of smoking cessation for stroke patients. The rate increased to 93.1% and the success rate of smoking cessation increased to 56%. Both indicators had improved.

Conclusions
Smoking is one of the risk factors for many chronic diseases, and patients after stroke are especially more concerned with the disease. After the initial evaluation and encouragement of the medical team, not only stimulated their motivation to quit, but also improved their self-confidence. The relative acceptance of patients and their families will also increase, and it is expected that advances in smoking cessation treatment will reduce the risk of recurrence of the disease.

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Improve the quality of service in smoke-free hospitals

HUANG HUI CHUAN

Introduction
Health improve and disease prevention are regard as important for our medical system. We not only take laws of tobacco control seriously but reduce the amount of tobacco and damage as a non-smoking hospital. To improve, we are taking action to be a completely non-smoking, and make our environmentally smoking free. Our hospital started non-smoking plan, and cooperate with patients, community and employees to execute since 105.

Purpose/Methods
We set up non-smoking crew to execute policy and figure out the solutions. In hospital, we have employee training, consultation, inpatient intervention, and reward. To create cut out tobacco and non-smoking environment, we post slogan and title to catch attention. For patients, offer cut out tobacco consultation, health education and medicine in use to assist patients. We educate people and school to become non-smoking community by releasing promote stuffs and let people understand how important non-smoking is.

Results
After our non-smoking crew promotion, there are three employee training, lesson videos are viewed by 506 people, up to 84.89% NT10000 bonuses would be issued by first three patient transferred. In 106, the quantity of people who get health education is up to 401 from 165. The percentage of success cut out smoking is from 21% to 24.24%. There are over 16 tobacco control promotion, relative meds and consultation from psychologists lessons and one cut out smoking lesson in workplace.

Conclusions
In line with government policies, the hospital promotes smoke-free hospital programs, create multipurpose and integration of non-smoking hospital plan, we strengthen community, good environment and adjust the direction of consultation to show the spirit of health promotion and care. Furthermore, try to make health environment and promote the non-smoking ideas over people, and make everybody healthy as a target.

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Used 5A’s quit smoking counseling guidelines to improve the success rate of outpatients’ smoking cessation

YIN-LIN Su

Introduction
Tobacco dependence treatment efforts have focused on primary care physicians (PCPs), but evidence suggests that they are insufficient to help most smokers quit. The cessation counseling guidelines can enhance the willingness of medical staffs to perform counseling and improve the motivation and success rate of smokers.

Purpose/Methods
From April 2017 to March 2018, the 5A’s smoking cessation counseling guidelines were used in outpatient cessation to set guidelines for persuasion, referral rules for smoking cessation services, persuasion incentives, production of computerized health education leaflets, admonition instructions, and advice. Guarding education and training, standardizing disease management to implement smoking cessation services.

Results
The results of the implementation of smoking behavior query rate of 90.3%, recommended smoking cessation rate of 92.7%, evaluation of smoking cessation rate of 81.8%, referral rate of 62.7%, scheduling follow-up rate of 23.6%, six months quit smoking success rate of 30%.

Conclusions
As more health professionals realize the significance and feasibility of addressing tobacco use, it is hoped that cessation rates and interventions will increase and more smoker lives will be saved. No other intervention has such a high health potential benefit.

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Evaluation of Smoking Cessation Services in Hospitals with Pay-for-Performance Subsidy in Taiwan

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Introduction
Reducing the tobacco use is one of the most effective and efficient approach to enhance citizens’ health and welfare and the economic development. Health Promotion Administration (HPA) in Taiwan launched a pay-for-performance project to subsidize
tobacco-free hospitals and monitors their quality and quantity of smoking cessation services.

**Purpose/Methods**
The subject number, the cost and the 7-day point prevalence abstinence rate (PPAR) at 6 month of smoking cessation services of 354 hospitals in 2017 were evaluated. Of them, 142 hospitals received a pay-for-performance subsidy offered by HPA and the other 212 hospitals did not.

**Results**
The 142 hospitals receiving subsidy provided cessation services to 52,296 subjects (including 16,521 inpatients), indicating that each hospital served 368 subjects (including 116 inpatients) on average. The 7-day PPAR at 6 month was 31.6% (95%CI: 31.0%-32.3%). The cost for helping each subject quit smoking was 248 US dollars. The 212 hospitals without subsidy provided cessation services to 10,348 subjects (including 1,081 inpatients), revealing that each hospital served 49 subjects (including 8 inpatients) on average. The 7-day PPAR at 6 month was 31.0% (95%CI: 29.5%-32.5%). The cost for helping each subject quit smoking was 370 US dollars.

**Conclusions**
The 142 hospitals involved in the pay-for-performance project exhibited greater quantity and quality of smoking cessation services when compared with the performance of the other 212 hospitals. Moreover, the project lowered hospitals’ costs for cessation services by 33%. It was revealed that the pay-for-performance project launched by HPA in Taiwan is valuable for improving hospitals’ smoking cessation services.

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**Design Thinking in tobacco control**

**CHANG Fang-I, CHIN Yi-Hua, CHANG Chih-Sung, LO Shu-Ying, YU Li-Hui, WANG Ying-Wei**

**Introduction**
Design Thinking is a human-based problem-solving methodology that seeks innovative solutions and creates more possibilities based on human needs. The tobacco control policy has been promoted for many years, however it was seldom driven based on the Design Thinking process. In the present study, we want to evaluate how Design Thinking being applied in tobacco control.

**Purpose/Methods**
Design Thinking process includes Discover (insight into the problem), Define (the area to focus upon), Develop (potential solutions) and Deliver (solutions that work). Design Thinking process be applied in local government’s tobacco control policies (youth tobacco control, smoking cessation services, smoke-free environment etc.).

**Results**
The Health Promotion Administration (HPA) in Taiwan held “County and City Tobacco Control E xchange Workshop” to improve the effectiveness of tobacco control program by functioning as a platform for learning and exchanging experiences, which strengthened the consensus between the central and local governments in driving the program. The workshop taught Discover and Define of the Design Thinking process, and be applied in local government’s tobacco control policies in 2019.

**Conclusions**
It is expected that local governments’ tobacco control policies based on Design Thinking will be more satisfactory to citizens.

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**Effectiveness of Financial Incentives to Healthcare Professionals for Smoking Cessation**

**WANG Yi-Wen , LU Hsin, HSU Ron-Yuan, CHEN Cheng-Yu**

**Introduction**
Quitting smoking affords significant health benefits for current smokers. Studies showed referral to counseling for smoking cessation can increase quit rates. This study is to evaluate the impact on smoking cessation of financial incentives to healthcare providers for referral.

**Purpose/Methods**
Smokers (N=1405) received cessation advice and counseling during January 2015 to December 2018 were documented in our hospital. Every June to November, we provided 100 NTD (US$3.25) voucher to healthcare professionals for referring smokers to counselors for quitting. Budget subsidy was from a program of Improving quality of tobacco-free hospitals by government. The program was conducted in June to November for six months in every year.

**Results**
The mean number per month for smoking cessation which had financial incentives to healthcare providers was 34.2± 11.5. The other months without financial rewards was 24.3 ± 16.4. The participation number of smoking cessation was significantly higher in financial incentives intervention months compared with the other months ( p =0.02).

**Conclusions**
In this study, financial incentives to healthcare professionals appear to increase smoking cessation services significantly.

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Educational training changes the perception of social work team's smoking cessation

WU Shih-Hsiung, CHOU Ling-Ling, TSENC Yao-Yi, HUNG Ming-Bin, HSING Chou Mei-hua, XUE Guangjie, CHENG Jin-Shiung

Introduction
Since the launch of "Tobacco Hazard Prevention Act" is implemented in January 2009 in Taiwan, the VGHKS devotes to the second-hand smoke prevention activities. The dean takes the lead to promote smoke-free hospital by posters, slog and education. To enhance the smoking cessation knowledge of social worker's team, we keep training the social workers so that they can introduce the knowledge in a smooth way when facing the patients and their families.

Purpose/Methods
The sample of this thesis was from social worker team. The survey used pretest and posttest, and statistical analysis: 1. 16 social workers and 75 volunteers 2. Professional doctor for made a speech to the social workers for the topic of tobacco cessation, and conducted pretest and posttest. 3. Same as the second step, but the speech was made to the Volunteers, And to make the Q&A discussion.

Results
1. Sixteen social workers were tested and found that their pretest average score was 57.5 and the posttest average score was 94.4. It shows smoking cessation knowledge has grown substantially. 2. 75 volunteers were tested and found that their pretest average score was 68.7 and the posttest average score was 96.4. In the after-satisfaction entity course, Q&A discussions have achieved remarkable results. 3. after education satisfaction: Very satisfied with 60%, satisfaction 40%, and total satisfaction is 100%.

Conclusions
1. Diversified education is very helpful to social workers and volunteers, because it has a significant effect on the promotion of smoke-free environment. 2. Social workers changed their cognitive of smoking cessation by enhancing their knowledge base, which is beneficial to the practice of smoking cessation. 3. The after education satisfaction survey showed that understanding the two-way communication (Q&A) through the site is very helpful for the future.

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Exploring the Effectiveness of Applying Shared Decision Making to Assist Psychiatric Patients for Quitting Smoking

TSAI Yu-Chun, CHANG Shu-Min, LU Huei-lan, CHENG Ching-Ming

Introduction
The purpose of this study was to explore the effectiveness of applied shared decisions making to assist psychiatric patients quitting smoking successfully at 6 months.

Purpose/Methods
The smoking cessation case management record which established by the National Health Administration’s Smoking Cessation Treatment Subsidy Form was used to understand the motivation of smoking cessation, applied the shared decisions making, patient-centered communication skills and evidence-based medicine, then traced quit rates at six months after participated the smoking cessation since Jan. to Dec. 2018.

Results
Total 349 subjects received the smoking cessation program. Through three steps of patient decision aids tool and video operation intervention to enhance motivation for quitting smoking, the step one, compare the advantages, disadvantages, risks, side effects, possible costs of each option, step two, explained what are the items that will be concerned about the choice of medical methods? And what is extent of care? Step 3. Understand patients’ perception of medical options? Step 4: Is the medical treatment now confirmed? According to the individuality of the case of smoking cessation, it helps to strengthen the effectiveness of smoking cessation treatment. The success rate of smoking cessation treatment increased from 44% to 49%, and the satisfaction rate of smoking cessation service increased from 80% to 95%.

Conclusions
Different from previous advice or induced disciplinary treatment, the SDM implementation model can guide patients to express their most important preferences and values, and then make the best decision-making process for patients, which can help the success rate and service of smoking cessation more effectively and quality, the ultimate goal of achieving the best patient care model, hope to have more specific application data to provide reference applications for future practitioners.

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You Can Decide by Yourself — A Smoking Cessation Service with Implementing Shared Decision Making

YEH Shin-Yu, CHEN Guan-Ju, TSAI Min-Ching, WU Mei-Yu, YOU Bih-Jeng

Introduction
National Taiwan University Hospital Yunlin Branch has been providing high-quality smoking cessation service for many years, and we just got the honor of becoming a Global Gold Forum Member in GNTY in 2018. However, we still keep trying our best to make our service better. From August 2018, we started to implement the method of shared decision making in our service which was expected to help smokers to find a best way to quit smoking for themselves.
Purpose/Methods
The patient decision aid (PDA) was created by our smoking cessation team. The PDA contains four accessory tables including comparison of smoking cessation effect between only counseling and counseling with drug therapy, comparison of NRT and non-NRT, comparison of characters between people who need drugs and people who don't, and contra-indication of NRT and non-NRT. Smokers will choose their favorable way to quit smoking with the PDA, and satisfaction questionnaire was used to evaluate the effect of shared decision making.

Results
15 smokers and 9 smoking cessation team members completed the satisfaction questionnaire. The top three satisfying items by smokers were "Helping me to understand the therapy option I can choose", "Increasing my participation through the course of therapy", and "Improving communication between me and medical staff". And the top two satisfying items by medical staff were "Helping me to offer medical information more clearly" and "Helping to promote medical relationship".

Conclusions
The smoking cessation service with implementing shared decision making help smokers to find their favorable way to quit smoking. The PDA we used could let smokers participate more and know more about their smoking cessation therapy, and the most important, improve medical relationship, which may be the key of promoting smoking cessation success rate.

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Efficiency of Smoke Cessation Advocacy by Smoke-free Hospitals using Information Assistance Systems

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Introduction
Tobacco hazard is an important global health issue today. This hospital has adopted the information assistance systems to help the staff to obtain and assess tobacco hazard information, provide more motivation for smokers to quit, and reduce the damages caused by smoking.

Purpose/Methods
At present, the hospital has adopted a comprehensive informationalized health assessment measure for its patients. The information assistance system can immediately collect the smoking status of the patients, record the data, allow the medical team to provide timely advices on smoke cessation, and perform the relevant intervention measures. In addition, the hospital's information assistance system can display visual and audio information, static posters, and dynamic videos in the public areas of the hall and outside the clinic to deepen the viewer impressions and facilitate the tobacco damage prevention avocation.

Results
With the help of the information assistance system, the smoke cessation referral rate has grown to 35%. Among them, the number of people who have successfully accepted the smoke cessation services has grown by 13.3% from 2017 to 2018 of the same period. In addition, the people are switched from passively to actively asking the smoke cessation teacher about the smoke cessation and smoke-free related information. From scratch, these people account for approximately 23.3% of those who have successfully received the smoke cessation services.

Conclusions
The hospital's Information Assistance System can actively, timely, and effectively provide static and dynamic tobacco hazards related information to the people. The system can also help the medical colleagues to actively provide immediate smoke cessation counseling to patients who are smokers or passive smokers according to their medical history when their cases are reviewed for the first time. As a result, the hospital's smoke cessation referral rate has increased. The hospital has once again passed the smoke-free hospital certification, and the smoke-free policy continued to operate well in the hospital.

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New approaches of smoking cessation for military personnel in Korea: focus on the balance between digitalization and face-to-face communication

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Introduction
The adoption of IT in healthcare systems has emerging issue in worldwide. Many institutions in the public and private sector have already moved the wave of IT adoption, such as digitalization of entire enterprise, including digital products, channels, and processes, advanced analytics. Because digitalization in healthcare is included complex and sensitive issues, in-person intervention is also emphasized recently. Thus, it is necessary to share our practices of smoking cessation for military personnel, balancing between digitalization and face-to-face communication.

Purpose/Methods
The purpose of this study is to describe the experience of smoking cessation approaches focused on balancing digitalization and face-to-face intervention for Korean military personnel, performed by Korea Association of Health Promotion (KAHP) as Health promoting Hospitals (HPHs) in 2018.

Results
Digitalization of smoking cessation support was included the followings: 1) establishing computerized system for effective management of smoking soldiers 2) building a big data infrastructure of intervention processes for evaluating the intervention 3) developing and releasing of supportive smoking cessation videos for soldier using media boards. Smoking cessation clinic in milli-
Intervention of smoking cessation for military personnel needs to consider the balance between digitalization and face-to-face communication. Also, digitalization of intervention methods is more effective approaches for smoking cessation in military camps. Smoking cessation strategies applied to personalized mobile devices should be developed for military personnel in accordance with the Korean military situation, in the future. KAHP will make a great effort to support smoking cessation based on the balance between digitalization and in-person intervention for military personnel consistently.

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To Explore the Associated Factors of Smoking Behavior and Cessation Behavior in Hardcore Smokers

YANG Ya-Hui, HUANG Chih-Ling, LU Huei-Lan, CHENG Ching-Ming

Introduction
Tobacco control policies of governments have succeeded in decreasing smoking prevalence. However, the rate of decrease has attenuated in recent years. Researchers proposed the "hardcore smoker hypothesis" that is used to generally refer to the proportion of smokers who are unwilling to quit and are likely to remain so. It is lack of literature focused of hardcore smokers. The objective of the study was to explore the associated factors of smoking behavior and cessation behavior in hardcore smokers.

Purpose/Methods
The correlational study design was adopted to investigate smokers in the community since December 2016 and May 2017. Inclusive criterion included: age 20; living in the community; 1 years smoking history, no quit attempts. Total of 177 subjects completed the questionnaires. The questionnaires composed of smoking history, cigarette dependence scale, a self-efficacy scale for cigarette quitting, and a scale of attitudes towards tobacco control policies. The descriptive statistics and logistic regression model were used to analyze data.

Results
Cigarette dependence is an important factor that explains smoking behaviors of hardcore smokers (AOR=1.06, p < .01). Motivation to quit smoking is an important factor for quitting behaviors of hardcore smokers (AOR=3.89, p < .05).

Conclusions
When tobacco control policies for hardcore smokers are enacted, their smoking dependence and motivation to quit should be improved first for better effectiveness of smoking cessation.

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Effects of Shared Decision Making on Smoking Cessation among Patients

HSIAO-LING Chang

Introduction
Shared Decision Making (SDM) is a patient-centered medical procedure, which is aimed to help patients and doctors share current evidence-based medical results before making the final decisions for treatment. KMCH has provided consolatory service and medication-assisted treatment for tobacco cessation since it was founded in 2014. The relatively lower rate of quitting smoking found in the implementation process has led to the introduction of SDM approach. It is hoped to help more patients quit smoking and increase their satisfaction in their smoking quitting experience.

Purpose/Methods
1. To add the Task Force for Physician-Patient SDM Clinical Practice into the organizational structure of Medical Quality and Patent Safety Committee and formulate clear directions for the task. 2. To conduct SDM educational training sessions in the hopes of increasing the medical staff's professional competencies. 3. To establish an intervention SOP for dealing with smoking patients. 4. To develop a set of health education materials for SDM in accordance with the checklist titled as I want to quit Smoking. What choice do I have? by the Joint Commission of Taiwan.

Results
Since the execution of this plan in August 2018, a total of 173 patients have received health education materials (165 in the outpatient clinic, and 8 hospitalized patients). Twenty-two of them had already completed SDM process and opted for medication-assisted treatment. These patients also filled out the survey for SDM satisfaction among patients; 19 people (86.4%) clicked "very satisfactory." Those who did not complete the SDM process ended up having 7.55% success rate, whereas those who completed the SDM process were achieving a success rate of 16.67% in tobacco cessation. This indicates a positive effect of SDM in helping patients quit smoking cigarettes.

Conclusions
Since SDM has been proved to have remarkable effect in helping patients quit smoking, it is planned as an SOP for smoking cessation. It is hoped that the efficacy of this plan may contribute to the prevalence of SDM across KMCH in the future.

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The Effectiveness of Outpatient Smoking Cessation Therapy and Related Factors on Health Promotion in a District Teaching Hospital in Southern Taiwan

LIAO Lin Yu, LIN Ya Hui, CHEN Li Yang, HUANG Shao Tsung

Introduction
Smoking is a major cause of cardiovascular disease, COPD, and cancer. Smoking also increases disease severity and treatment failure. Despite our government's promotion of the smoking-free hospital health promotion policy in Taiwan, Taiwan's smoking rate is still high. However, there are no reports regarding hospitals promoting success rate and impact factors of smoking cessation. We believe that as Health Promotion Hospital Network, should become a model and make a suggestion for the public.

Purpose/Methods
Objectives: To investigate the smoking-cessation clinic and related factors analysis on health promotion in a District Teaching Hospital. Methods: This study is a retrospective study. The participants were enrolled by smokers and outpatient smoking-cessation therapy, on health promotion hospital from January to October 2018. Intervention: Nicotine patch and chewing ingot, tobacco cessation education, smoking cessation medication counseling for a total of 8 weeks, and telephone consultation. The demography, the smoking cessation treatment phase and nicotine addiction score were collected.

Results
Overall, 146 subjects were enrolled, with age distribution of 52.05% (n=76) for middle-aged (41-64 years), 28.08% (n=76) for the elderly over 65 years, and 18.40% (n=29) for young adults aged (18-40 years). The continuous abstinence rates of 3 month was 23.97% (n=35), and the continuous abstinence rates of 6 months was 14.38% (n=21). The main affects related risk factors includes number of visits clinic 45.89% (n = 67), health factors 28.09% (n = 41), and nicotine addiction scores 26.03% (n=38).

Conclusions
In our study, we find that frequency of clinic visits, health factors, nicotine addiction and smoking cessation medication side effect influence the success of outpatients in smoking cessation. We recommend those should be encouraged to return to visit our clinic, to enhance the impact of smoking on the disease, and to improve the body's discomfort after nicotine patch and chewing ingot treatment.

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E-Posts: Workplace health promotion in health care organizations
Employee Care Notification Network Promotion in Taiwan

YI-HSUAN LIN, FENG-CHING SUN, BO-SYUN LIN

Introduction
The work style of the medical clinics is a group of people under high pressure. Under conditions of high pressure for a long time, it can easily cause physical and mental fatigue. Therefore, it is an important goal that the hospital continues to actively promote to...
build a supportive environment for employees' health and to allow them feel at ease in the workplace.

Purpose/Methods
We build employee care online systems, encourage employees to report on their own initiative, and give bonuses for notifications. When employees of department are affected by work, life, or health incidents, they may affect work efficiency. The system will inform and the staff care team will support the care according to the severity of the incident.

Results
Staff care and assistance report in this year, 76% of nursing staff, 9% were medical staff, and 15% were administrative staff. The types of assistance mainly included work, health and life. Through instant notification assistance, employee satisfaction grew by 5.8% over last year.

Conclusions
Employees are the most valuable assets in an organization. In order to relieve employees' pressure on work, develop friendly and healthy workplaces, protect the physical and mental health of employees, and create an all-encompassing working environment, so that the organization culture is in good interaction, and strengthen the staff's determination. Improve work efficiency and enhance the overall competitiveness of the organization.

Comments
The employee care system notification can instantly discover and assist employees in solving related problems that may affect work efficiency. The system will inform and the staff care team will support the care according to the severity of the incident.

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Elevation of the job satisfaction of the nursing staff

WU Mei-Chuan, HSIEH Fu-Hsiang, CHANG Hsin-chin, SHER SU-Jung, LI Mei-Fang, LIN Ching-Ju, LIN Tzu-ting, LIN Li-Chun

Introduction
Nurses are the largest part of medical personnel in hospital. In order to understand the job satisfaction of the nurses, the Department of Nursing periodically carried out a yearly survey in our hospital. The satisfaction was found to be 55.93% in October 2017, lower than the preset threshold 65%. A working group, composed of medical departments, nursing staff, human resources, and management department, was organized to fix the problem.

Purpose/Methods
Quality Control Circle (QCC) was applied from March 23 to October 30, 2018. Possible reasons for low satisfaction were: (1) heavy workload and shortage of nursing manpower; (2) late maintenance and update of the computer system; (3) variations of doctors’ treatments and different cognitive between nurses and doctors. Three strategies to improve satisfaction were proposed by QCC members: (1) elevation the sense of accomplishment; (2) improvement on work environment and welfare; (3) increase proper interactions between medical and nursing members.

Results
The satisfaction by the nursing staff was surveyed again from October 2 to 9, 2018. A total of 214 nurses completed the survey, and the work satisfaction increased from 55.93% to 56.10% with an accomplishment rate of 1.87% and an improvement rate of 0.30%. Number of adverse events was reduced by 64 from 2017 to 2018. Number of complaints was dropped by 7 in 2018.

Conclusions
This improvement activity implemented some strategies, including aggressive manpower recruitment, periodically update of computer software and hardware, often communication meetings between doctors and nurses, and periodically review of welfare rules for nurses. The job satisfaction of the nursing staff increased from 55.93% to 56.10% after the improvement. The satisfaction was higher but not reached the threshold.

Comments
There are some more to improve after this movement. For example, the survey questionnaire is anonymous. It is recommended that the name and email of the responder should be incorporated into the questionnaire. Not only to prevent the responder filling the questionnaire ignorantly, but also to provide feedbacks to the responder.

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Improve the Implementing Competencies of Violence Management in the Emergency Department-Violence Management

CHEN Shu-Lin, CHEN Chieh-Fan, LAI Jun-Huang, CHANG Hong-Tai

Introduction
Workplace violence in the emergency department may result in physical and psychological or emotional harm for the employees, including reducing quality of care, causing an unsafe work environment, and leading to high worker turnover. Based on a survey by nurses, the implementation rate of violence management was merely 63.3%. The specific causes were identified as follows: no standards operating procedures for workplace violence management, lack of violence education programs and prevention training materials, and no standards for monitoring violence management.

Purpose/Methods
Aimed to improve the implementing competencies of workplace violence management in the emergency department by means of developing violence management standard operating procedures, establishing violence management checklists, holding in-service training, developing teaching materials for violence prevention and management, providing bonuses to motivate employees, and practicing effective communication skills.
Results
As a result, the implementation rate of violence management has improved from 63.3% to 93.3%.

Conclusions
Our project was demonstrated to enhance effectively nurses’ competencies in violence management. In the future, we also expect to reduce the incidence of violence and ensure a safe healthcare environment for patients and health personnel in the emergency department.

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Impact of health promotion programs on activity participation rates

LEE YI-LIEN

Introduction
Nearly one-third or more of your career is in the workplace, so the workplace is an important place to promote health promotion. Providing a comprehensive health promotion program can not only establish a positive image of the company, improve employee morale, increase productivity, and reduce health care costs. Therefore, we hope to promote a healthy workplace environment and promote employee health through workplace health promotion activities. And analyze what activities can increase employee participation rates.

Purpose/Methods
The design and incentives for health promotion activities in 2017 and 2018 are different. I want to compare whether the number of participants, the completion rate of the activities, the satisfaction of the courses are different, and what activities are most effective for waist circumference and weight loss.

Results
Number of participants in 2017 and 2018: taijiquan 57 vs 62; Boxing aerobic 78 vs 89; Walking Exercise 138 vs 209; Activity completion rate: taijiquan 70% vs 45%; Boxing aerobic 62.5% vs 51.6%; Walking Exercise 71.7% vs 20%; course satisfaction is best with boxing aerobic 98.5%, followed by 90% Walking Exercise and 70% taijiquan; the difference in waist circumference and weight loss between the three groups reached a significant level (p<.05). The Scheffe method has the best boxing aerobic effect; and the reward is of a significant level (p < .05).

Conclusions
In addition to demonstrating the actual behavior of caring for employees (health), workplace health promotion, systematic promotion, creative approach, support from senior executives, reward system helps to promote motivation, and the use of collective activities to enhance personnel in different departments. The interaction allows employees to achieve mutual self-health management goals through mutual encouragement and active participation.

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Reduction in the Turnover of Nurses through the Electronic Information System
A Plan to Reduce the Turnover Rate of Nursing Staff in a Municipal Hospital in the Southern Taiwan

KUO Mei-hsueh, HUNG Jui-lien, LEE Hsien Ju, YEN Chia-chi

Introduction
The turnover of nurses in Q1 of 2018 was 3.96%. Although it is lower than that investigated by Taiwan Union of Nurses Association (9.88%), the Hospital emphasizes care for the nurses by providing a possible working environment and maintaining safe and quality nursing service. After the analysis, the reasons for the turnover covered four aspects, namely personal factors, hospital, environment and involuntary separation. In particular, highly repeated and non-electronic nursing forms accounted for 50.2%, followed by work overload (25.3%).

Purpose/Methods
1. The Hospital spent NT$1 million purchasing mobile e-nursing carts to facilitate movements between nursing stations and wards. 2. The Hospital held 10 cross-team meetings and 6 in-service training courses to help nurses quickly grasp the use of e-nursing carts. 3. The Hospital established an instant feedback platform to handle problems immediately online.

Results
Since April 2018, the Hospital started improving workflows based on the scheduled deadline. After the nursing information system went live, nurses cut the use of nursing forms and searched for medical information at any time, which improved the productivity and satisfaction. The turnover of nurses decreased from 3.96% in Q1 to 2.04% in Q3.

Conclusions
Workers must first sharpen their tools, and e-nursing carts allow nurses to keep up-to-date information on patients. To reduce paperwork for nursing staff, avoid walks between wards and nursing stations, improve work efficiency and save a lot of time to care for patients, improve the quality of care, improve job satisfaction of nursing staff, reduce the turnover rate.

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Baseline Survey for Making Health Promoting Hospital at one University Hospital in G Region, Republic of Korea

MOON Jiyoung, JO Heuisug

Introduction
K National University Hospital joined HPH network in 2018. Based on Korean Government policy that is to strengthen public
health, introducing HPH program to Kangwon National University Hospital is an opportunity to step public health up at G region. It is important to have information about recognition and needs of HPH and basic information of personnel. Kangwon National University Hospital was launched HPH project to start with gathering the information. This survey was planned with the object of develop evidence based HPH program.

**Purpose/Methods**
Survey was conducted from 8th August, 2018 for one month via email. 198 persons, 14.8% of the total personnel answered the survey. We used fully answered 158 persons data for analysis. Items of the survey were consisted of health behaviors, mental health, disease, subject health and health concern, opinions and needs to make HPH for Kangwon National University Hospital, gender, age, occupational group. We got research approval from IRB and took action for protecting vulnerable subjects, employee.

**Results**
49.1% respondents have no idea what is HPH. The respondents prioritized subject of HPH program; first patients and their carers, second, staffs; third, hospital culture. The staff most wanted their health promotion program were exercise, mental health, and disease management program. 84.9% of respondents agreed to promote HPH program and 52.5% were going to take part in HPH program. Only 39.4% of respondents knew what HPH is.

**Conclusions**
Base on the current results, we need to educate staffs on HPH concept and project. To make better workplace for K University Hospital, in-depth analysis is required with survey data. We only get 14.8% answers from 1,400 staffs therefore, we need to get more interest and opinion to develop detailed program.

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Promoting a healthy workplace by using social networking services improves body weight management and lipid profile.

**WANG Yun-Ting, YANG Yun-Chin, LI Shin-Rung, CHENG Hsiang-Ling, CHAN LinChien**

**Introduction**
WHO Healthy Workplace Framework and Model was published in 2010. A healthy workplace provides all members of the workforce with physical, psychological, social and organizational conditions that enable staff to increase their ability to control over and to improve their health. The objective of our study is to im-prove body weight management and lipid profile by an innovative and appealing project design.

**Purpose/Methods**
We pasted the playbill of the project in all ward and apartment and then gave participants the brochure including hand-draw exercise map, physical activity recommendation, and exercise related nutrition knowledge. Encouraged and followed their activity by using “LINE@” and “Facebook fan page”. At the end of time, we hold a lucky draw. We followed up participants’ plasma levels and body weight in regular yearly labors’ physical check-up.

**Results**
All participants significantly lost weight (P < 0.05) and they totally reduced 251.6 kg. HDL-C level is increase in all participants (P < 0.05). Weights loss is significantly associated with higher HDL-C levels (P < 0.05), and the similar result is also found in participants with abnormal BMI (P < 0.05). 58% of participants whose LDL-C level was higher than 100 mg/dl in the baseline decreased LDL-C level. 91% of participants were satisfied with our project.

**Conclusions**
We found promoting the healthy workplace by using social networking services. From the results, participants successful in lose weight, increasing plasma HDL-C level the decreasing the LDL-C level through our program. Besides, we also founded the positive relation between increasing plasma HDL-C level and lose weight. This concept of healthy workplace promoting could serve as an innovative and appealing framework for body weight management and lipid profile improvement in health care organizations.

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Maternal protection strategies and effectiveness of hospital workers

**WEN Chien-Ru, HSU Yung-Nien, SHEN Yu-Ting**

**Introduction**
In the past 20 years, women’s participation rate has increased from 45.64% in 1997 to 50.92% in 2017 at Taiwan, with the improvement of education, employment opportunities in the service industry and government maternal protection policy. In the past 20 years, the rate of labor participation in age groups from 25 to 54 years old increased about 20 percentage points and the health of these women is especially important in the workplace.

**Purpose/Methods**
We started to interview pregnant woman since 2015 and comprehensively identified the environmental hazards and carried out in many ways, including questionnaires, on-site observations, individual interviews, shift schedules, and related documentation, such as the Safety Data Sheet since 2016. Our hospital had physical hazards such as free radiation. Chemical hazards that have adverse effects with reproductive systems and on breast-feeding function. Biological hazards such as the environment is infected with some microorganisms. We also evaluated work type and work stress.

**Results**
Our hospital has more female employees, about 80%. We started to interview pregnant woman since 2015 and gave personalized health education according to her worksite. We promote the healthcare for women of childbearing age since 2017. The coverage rate of workplace hazards care was 100% since 2017 and the number of women receiving care ranges from 41 to 231. However, the total hazard ratio is form 58.5% in 2014, 40.7% in 2015, 22.2% in 2016, and to 15.8% in 2017.
Conclusions
Continue to promote the work of maternal health protection in the workplace, if the workers cannot improve, the Occupational doctors will conduct interviews and on-site confirmation of the environmental hazards and adjust their work appropriately. For work environments that are not able to improve, we will again provide suggestions to employer. This type of intervention may be helpful in the health perception of the employees and the employer of hospital. Further make hospital managers willing to improve the health of hospital staff.

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Effective Strategy for increasing Hospital Staff’s Pap Smear Screening Rate.

TSAI Chin-Hung, KUO Hsiu Feng, CHAO Pei-Ju, LUO Yun-Ru

Introduction
Pap smear is a highly effective national policy for cervical cancer prevention and control since 1995 in Taiwan. However, the willingness of receiving Pap smear is low among hospital staff, resulting in a 6.41% decrease in screening rate from 2016 to 2017 in our hospital. The study aim is to explore the more effective way to improve staff’s Pap smear rate.

Purpose/Methods
We established a quality control circle, applying few essential steps (situation and cause analysis, target setting, strategy implementation, and result confirmation) to this issue. Main reasons of refusing Pap smear disclosed from “Fishbone Diagram” and 180 questionnaires (58% response rate) by staff were “lack of time” and “the concern of privacy”. We changed the sequence of employee health exam and performed Pap smear in special bus with female doctor, to increase willingness for Pap smear. The target of screening rate was set at 15.01% according to other hospitals’ average (13-18%).

Results
After implementation of strategies, the staff’s Pap smear rate increased from 8.34% to 16.34% and had maintained above 15.01% for next six months. The improvement rate was 94.7%. The satisfaction survey (on a scale 1 to 5) regarding “time” issue were 4.52 of combined Pap smear and employee health exam, 4.37 of waiting time, and 4.29 of flow arrangement; Regarding “privacy” issue were: 4.33 of screening bus (vs. in clinics), 4.38 of female doctor service.

Conclusions
Early detection of cervical cancer is crucial. With problem identification, information gathering and analysis, we generated effective solutions to improve staff’s Pap smear rate. Satisfaction survey can be the reference to adjust strategy in the future and used in other issues for effective health promotion.

Comments
Pap smear is a highly effective national policy for cervical cancer prevention and control in the world. However, the willingness of receiving Pap smear is low in community and hospital in Taiwan. This experience contributes to raise people’s awareness of cervical cancer and provide more convenient, private, and satisfactory Pap smear environment.

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The Occupational Risk after work experience 10 years plus of Nurses at Local Community Hospital in Taiwan.

LIN Chiao-Chuan, HSU Hua-Yin, TSENG Yuan-Tsung

Introduction
This paper is a report of a study investigating nurse of Local Community Hospital and its association with occupational stressors in Taiwan. Occupational stress is described as feelings of emotional exhaustion and reduced personal accomplishment. Evaluation the situation among nurses and its association with occupational stressors are important in providing appropriate intervention to reduce stress.

Purpose/Methods
In total, 1264 nurses of work experience 10 years plus from National Health Insurance Research Database in Taiwan. A cohort of 1264 nurses and 4108 matched controls were included. All the study subjects were followed up until the onset of any of the aforementioned outcomes, death, or the end of 2013.

Results
Most Local Community Hospital nurses had higher disease risk than a nun-nurse cohort. The nurses showed a high level of comorbidity of living function. The analyses showed higher risks of stress among nurses at the older age, or on shift duty or from Local Community hospitals. Intervertebral disc displacement (1.79[95% CI]:1.47-2.18), Lumbago ([RR]: 0.99[CI]:0.84-1.17), Back pain ([RR]: 1.12[CI]:0.91-1.38). Menstrual abnormalities ([RR]: 1.37[CI]:1.2-1.57), Migraine ([RR]: 1.65[CI]:1.29-2.1), Tuberculosis ([RR]: 2.63[CI]:1.45-4.74), Sleep Disorder ([RR]: 1.41[CI]:1.23-1.61).

Conclusions
Nurses of Local Community were suffering from higher levels of stress among nurses at the older age, or on shift duty or from Local Community hospitals. The analyses showed higher risks of stress among nurses at the older age, or on shift duty or from Local Community hospitals. Intervertebral disc displacement (1.79[95% CI]:1.47-2.18), Lumbago ([RR]: 0.99[CI]:0.84-1.17), Back pain ([RR]: 1.12[CI]:0.91-1.38). Menstrual abnormalities ([RR]: 1.37[CI]:1.2-1.57), Migraine ([RR]: 1.65[CI]:1.29-2.1), Tuberculosis ([RR]: 2.63[CI]:1.45-4.74), Sleep Disorder ([RR]: 1.41[CI]:1.23-1.61).

Comments
We confirm that this abstract has not been submitted elsewhere and all authors have approved the abstract and agree with submission to HPH.
Occupational burnout in operating room nurses: A cross-sectional questionnaire survey

CHANG man-na

Introduction
Occupational burnout has been resulting from prolonged emotional or psychological stress, nurses has found to be impair of ability to regulate negative emotions at work. Conflicts of responsibility are the most potential predictors as a role of adverse influence on satisfaction and turnover intention among operating room staff nurses and impact on the quality of healthcare. Study aims to evaluate the predictors to occupational stress, burnout, turnover intention in operating room staff nurses of the private facilities of the district health system of Taiwan.

Purpose/Methods
This study conducted a hospital-based cross-sectional survey; data were collected using an anonymous, self-administered and structured questionnaire. Study adopted Copenhagen Burnout Inventory (CBI) tool and clinical assessments for the measurement degree of burnout. CBI consists of four scales measuring personal burnout, work-related burnout, client-related burnout, work engagement related burnout, to investigate on the basis of occupational burnout in operating room staff nurses.

Results
176 questionnaires were completed (83.3% response rate). Analysis of variance indicated significant associations between age of nurses and emotional exhaustion (F=2.84, p<0.05). Relationship between working experience in work-related burnout and client-related burnout were found statistically significant (p<0.05). Comparison of religious affiliation and personal burnout (t=3.40, p<0.05), client-related burnout and overall workplace exhaustion (t=2.78, p<0.05). Study found significantly higher personal accomplishment in married nurse and higher emotional exhaustion regarding to personal burnout (t=2.31, p<0.05) found significant. Parental nurses found higher emotional exhaustion regarding to personal burnout (t=3.40, p<0.05), client-related burnout and overall workplace exhaustion (t=2.78, p<0.05). Study found significantly higher personal accomplishment in married nurse and higher emotional exhaustion regarding to client-related burnout and work engagement related burnout (p<0.05).

Conclusions
Study recommended hospital administrator to monitor operating room nurses’ job fatigue and stress regularly, in order to perceived job control, enhance support at workplace, reduce the turnover tendency of nurses and increase personal accomplished, which could reduce safety concerns of patients, improve healthcare quality and ensure patient safety in operating room.

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To Establish the Supply Room as a Friendly Workplace

CHUNG Shu-Chuan, TSAI Ching-Mei

Introduction
The operation of the supply room mainly consists of equipment cleaning, disinfection, sterilization and distribution. Due to the need for moving heavy objects, bending and cleaning packaging, and pushing and pulling equipment and trolleys, many colleagues company about fatigue, pain and aches in back, neck and shoulder areas. Improvements have been conducted to prevent occupational injuries and to create a friendly workplace.

Purpose/Methods
Based on work specifications, feasible schemes were planned based on advice from rehabilitation therapist and references to relevant literatures. The scheme includes on-the-job education by rehabilitation therapists, signage and slogan design to display accurate physical activities, and referencing to basic warm-up stretching exercises promoted by the Health Promotion Administration.

Results
After the above measures were implemented, occupational fatigue was effectively alleviated and occupational injuries were effectively prevented. Improvements have stimulated team spirit among all colleagues. Job satisfaction increased from 76% to 96%, which indicated that the goal of creating a friendly workplace has been achieved.

Conclusions
Creating a healthy workplace has become a global trend. Promoting such activity can protect workers from occupational injuries and enhance personal health. It can also stimulate harmonious working atmosphere, worker vitality, work efficiency, and, ultimately, achieve the goal of creating a healthy workplace and improve worker health.

Comments
Workplace health promotion in health care organizations

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Employees to Participate in Team Sports Competitions - Dragon Boat Race

LIN Ching-Cheng, LI Wan-Chen, TSAI Chun-Chi

Introduction
To enhance health promote for employee, the served directors of hospital encourage staffs to participate different sports including dragon boat, jogging, walking, cycling and ball games. Especially Dragon Boat Race could foster and show teamwork power. Hope to encourage to join the dragon boat race each year which would both promotion of employee health and group sportsmanship.

Purpose/Methods
A total of 30 team members included medical staff and administrators employees recruited to form the Dragon Boat Team. The hospital hires professional coach planed training courses include-ing physical training, core muscle training and rowing training at...
Practical Experience in the Application of Shared Decision Making on Locally Advanced Breast Cancer

BIAO Yun-Ling, LEE Wen-Hsin, WANG Heng-Hua, CHEN Hui-Zhu

Introduction
In the face of the impact of cancer, breast cancer patients have difficulties choosing the treatment option at the first moment. If physicians use one-way communications when describing medical conditions, it is often that a more subjective treatment method will be provided due to medical subsidies and policies. It is not necessarily in the best interests and considerations of the patients. If patients and family members can have a better understanding and discussions about the treatment options of the disease through the process of SDM for medical treatments, it will increase the reliability towards the medical treatment, reduce decision-making conflicts, and improve the quality of medical care.

Purpose/Methods
The medical team jointly developed a “SDM for medical treatment of locally advanced breast cancer patient” as the supplementary tool for decision-making to explain the course of disease and treatment methods relevant to breast cancer. In addition, questionnaire investigation was used to understand the patient’s thoughts, treatment expectations, and factors for considerations.

Results
With the medical team jointly invited the patients and their family members to participate in the treatment planning options and the SDM procedure was applied to assist the individual case, adjuvant targeted chemotherapy was selected as the most appropriate treatment method. After using a supplementary tool to assist in making the most appropriate medical choices, patients’ degree of anxiety has significantly reduced.

Conclusions
At present, the introduction of the SDM concept to cancer treatment in our country is still in its infancy. This study has applied the SDM procedure to assist the patients in selecting the most appropriate treatment method. Hopefully, this will be helpful in the introduction of SDM for medical treatment model in the future, as well as cumulating localization experience for future reference, it’s hoped that clinical education can further promote this concept so as to implement the idea of patient-centered care.

Effectiveness of In-house Stress Relief Program: Pre-post Comparison of Hospital Employee’s Psychological State

PARK Myung Sun, KIM Doyen, PARK Hee Dong

Introduction
Based on the 2016 in-house survey on emotional labor, authors found hospital employees in direct line of contact with clients of Seoul Medical Center scoring at a “high risk” category in sections such as “overload and conflict during customer service,” and “lack of institutional safety-net.” This alerted the hospital to establish a day-long stress-reduction program for employees. This study attempts to gauge the effectiveness of the in-house stress management program.

Purpose/Methods
The program was held from April to June of 2018 over eight rounds. Participants were enrolled in the program once, on a sign-up basis. Prospective participants were given an online survey consisted of three questionnaires before the program: PHQ-9 to measure participants’ level of depressive symptoms, GAD-7 for anxiety symptoms, and ISS for signs of insomnia. The survey was given anonymously, making it impossible to measure each individual’s pre-post differences and therefore made it necessary to compare group means.

Results
Participants were grouped according to occupation types for post-analysis, by nursing (n=131), medical (n=13), managerial (n=24), technical (n=32). As a whole, comparison of questionnaire scores before and after program participation was significant in PHQ-9 (t(396)=2.510, p=.013), while non-significant in both GAD-7 (t(396)=.617, p=.537) and ISS (t(396)=1.517, p=.130). Within occupational groups, nursing participants showed a significant decrease in PHQ-9 (t(259)=2.110, p=.036) only. Differences were non-significant in all other groups and all other questionnaire score comparisons.

Conclusions
As a one-time intervention, by the end of the eight-hour program, overall participants saw a statistically significant decrease in depressive symptom scores (PHQ-9), in addition to the vast majority (97.5%) rating the experience satisfactory. The non-significant score differences shown in occupational groups save nursing could possibly be due to small samples. Further analysis of program participants and hospital employees who were not enrolled in the program could be beneficial.
Using On-line Real Time Symposium to Improve the Ability of Personnel to Cope with Violent Events in Medical Places

CHEN YAN-FEN, CHEN PEI-JYUN

Introduction
The number of violent event is increasing day by day, which not only endangers personnel physically but also mentally, in medical place. For example, there are 12 violent events in CHANGHUA CHRISTIAN HOSPITAL (CCH), my working place, from 2015 to 2018. To enhance the ability of employees to deal with violence becomes an important issue. Therefore, we use national on-line real time symposium to increase the ability of employees to deal with violent events and do the research.

Purpose/Methods
We invite employees in CCH to participate in the conference, The Method of coping with violence, in CCH. The organizer of the symposium is Taiwan Medical Association and the conference was held in National Taiwan University. Speakers are Fuh-Yuan Hsih, MD, and Shih-Cheng Liao, MD. In the conference, employees can learn new knowledge about topics: violent events, the art of communication between patients and medical personnel, medical disputes, constructing the trust between patients and medical personnel, decreasing the threatening of violence and resolving violent events. After the conference, we designed a questionnaire for the participates to inquire for the efficacy of the on-line real time conference.

Results
There are some major results including: contents of the conference with 35% agree and 65% absolutely agree, 60% agree with the arrangement of the time of the on-line real time conference and 40% absolutely agree, the setting and location of the on-line real time conference with 55% agree and 45% absolutely agree. After the conference, we designed a questionnaire for the participants to inquire for the efficacy of the on-line real time conference.

Conclusions
After holding an on-line real time conferences of violent events, we find some points. Not only the texts but also the arrangement of time and the choice of location is significant for the on-line real time conference. Besides, for analyses, we get positive response from frontline personnel who participates in the on-line real time symposium. That manifests that the influence of technology about the issue of violent event is positive to personnel in medical place.

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The Effects of Walking Program on the Exhaustion Levels and Fitness Performance of Healthcare Professionals- An Example of a Health Promoting Hospital in Taiwan.

SHEN Chun-Wei

Introduction
As it is challenging for healthcare professionals to completely involve in a health promotion program and keep a regular and sustainable health promotion behavior due to their specific job requirements, this study aims to investigate the impacts of walking exercise with pedometer on the exhaustion levels and fitness performance of healthcare professionals.

Purpose/Methods
This study investigated staffs from a specific hospital in Taiwan. This is a pre-experimental study design involving a 3-month walking program; i.e. a 12-week daily outdoor walking activities (wearing a pedometer) with incentive measures and personal as well as group competitions. The values of body mass index (BMI), percentage of body fat, blood pressure (BP), flexibility, grip strength and cardiopulmonary endurance are collected as study endpoints at Week 1 (as pre-training data) and 12 (post-training data), respectively.

Results
1. Our findings showed that after joining the health promotion program, the average score of healthcare professionals on the burnout scale reduced from 54.6 to 27.2 (P<0.001), and the percentage of employees with moderate-to-severe exhaustion level changed from 51.92% to 1.11% (reduced by 50.81%, P<0.001). 2. 70.1% of the subjects significantly improved their overall fitness in terms of body weight, BMI, BP, flexibility and cardiopulmonary endurance (the fitness score increased by 20.52%, P<0.05).

Conclusions
Frequent but short-term walking exercise is considered as a simple, accessible, safe and economic exercise model, which is very suitable for healthcare professionals who only have fragmented free time between their busy working schedules. Our study results prove that walking exercise not only reduces the exhaustion levels, but also enhances the fitness performance of the hospital staffs, which can be the reference exercise program for healthcare industry in the future while promoting workplace health promotion models.

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Creating A Health Promotion Culture in the Workplace- An Example of a Health Promoting Hospital in Taiwan.

SHEN Chun-Wei

Introduction
As it is challenging for healthcare professionals to completely involve in a health promotion program and keep a regular and sustainable health promotion behavior due to their specific job requirements, this study aims to investigate the feasibility and associated outcomes of conducting health promotion programs in medical institutes.

Purpose/Methods
By following WHO’s comprehensive workplace health promotion model, the initiation, integration, demand evaluation, priority, planning, implementation, appraisal as well as improvement procedures along with proper leaderships and risk assessments were executed in the study step-by-step. The improvement of work overload risks and the participation rate of healthcare professionals in health promotion programs are set as the study endpoints.

Results
The accumulated rate was 1,746 person-times with 98.12% of satisfaction. Our findings showed that after joining the health promotion program, the average score of healthcare professionals on the burnout scale reduced from 54.6 to 27.2 (P<0.001), and the percentage of employees with moderate-to-severe exhaustion level changed from 51.92% to 1.11% (reduced by 50.81%, P<0.001). In addition, 70.1% of the participants significantly improved their overall fitness (the fitness score increased by 20.52%, P<0.05).

Conclusions
The application of a comprehensive health promotion model into workplace may effectively reduce the exhaustion level of healthcare professionals, increase the diversity as well as creativity of workplace health promotion activities, facilitate the motivation and willingness of employee’s involvement, and thereby achieve the goal of work overload prevention. To motivate healthcare professionals’ involvement and create a “well-being at work” environment, it is recommended to adopt attractive marketing as well as promotion strategies to design and implement health promotion activities.

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A Study of the User Satisfaction on the Service Quality of the Teaching and Research Center

SHIH Yi-Chun, CHAO I-Ting, LIN Hui-Tzu,HUANG Pin-Jia

Introduction
The Institute of the Teaching and Research Center promotes various educational activities to train more outstanding physicians and medical staff. In order to improve the six capabilities of patient rights, patient safety, medical ethics, holistic health care, infection control, management of crisis, and thus improve the quality of personnel and service quality. Explore the situation of teaching materials, teaching aids and classroom used and quality by the Teaching and Research Center as a basis for improvement, enhancing the satisfaction of overall service.

Counting the numbers of current flexible and rigid cystoscopes and to determine the amount of newly purchasing cystoscopes. 3. Moving OPA high-level disinfection process from the cystoscope operating room to the central supply unit. 4. The cystoscope schedule will be halted for 30 minutes to wait for the scope disinfection. 5. Evaluating the revised cystoscope disinfection process.

Results
Since March 15, 2018, every cystoscope examination schedule separated into 2 parts with 5 patients in the each session. After 5 cystoscope examinations, the cystoscopies will be transferred to central supply unit for high-level disinfection and the schedule will be halted for 30 minutes. According this process, we terminate the risk of inhaled and contact OPA stimulating vapor in the small, closed operating room for our healthcare personnel. And the cystoscope examination schedule was smoothly operating now.

Conclusions
High-level disinfection processes might be conducted in different places with inadequate and unsafe protection in the hospital. This may have risk for operating personnel to inhale or contact the biohazard chemicals and influence the health of our healthcare workers. All disinfection processes should be centralized in the central supply unit to provide our healthcare personnel a safer working environment.

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The strategy to improve stimulating vapor from high-level disinfective process of cystoscope

LIU Tzu Yin , WU Fang Lan, SHIH HsiaoPing, CHEN Tun Chieh

Introduction
Cystoscope is an endoscopic procedure for diagnosis and management urethral and bladder disorders which need high-level disinfection to provide rapid and safer quality for patients. We use 0.55% Ortho-phthalaldehyde (OPA) for cystoscope disinfection. The operative personnel complained of stimulating smell while cystoscope procedure due to OPA in October 2017. Through field inspection, we found the lack of air-exhausting ventilation in the small, closed operating room is the main cause. We established an action team to resolve this problem.

Purpose/Methods
1. To establish an action team by recruiting the experts from occupational safety office and central supply unit. 2. Counting the numbers of current flexible and rigid cystoscopes. 3. Moving OPA high-level disinfection process from the cystoscope operating room to the central supply unit. 4. The cystoscope schedule will be halted for 30 minutes to wait for the scope disinfection. 5. Evaluating the revised cystoscope disinfection process.

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The strategy to improve stimulating vapor from high-level disinfective process of cystoscope

LIU Tzu Yin , WU Fang Lan, SHIH HsiaoPing, CHEN Tun Chieh
Purpose/Methods
1. Divide the colleagues into three categories: "Physician", "Medical staff" and "Administrator". 2. The questionnaire survey focused on "Classroom", "Teaching materials", "Teaching aids" to conduct satisfaction surveys. The items of survey include "process", "environmental equipment", "efficiency", and "services", which affect the satisfaction of the Teaching and Research Center. 3. The questionnaires were based on the Likert Scale. 4. The survey period was 972 questionnaires issued from 2017.08-2018.07, and 669 valid questionnaires were obtained. The effective questionnaire recovery rate was 68.83%.

Results
The survey result show that the most satisfied the average of the project is "Service" (4.06). Satisfaction of other projects "Classroom" (4.02), "Teaching materials" (3.86), "Teaching aid" (3.72), "Process of Borrowing" (4.00). The average degree of satisfaction of all projects is more than 4. The users of the survey were generally satisfied with the overall service quality and the environment of the Teaching and Research Center.

Conclusions
Through the inside peer feedback assessment of service satisfaction with the Teaching and Research Center, as a basis for internal improvement standards, and thus improve overall service satisfaction.

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To establish environmental safety of devices processing for ENT clinic personnel in a regional hospital

CHOU Min Huei, LIU Tzu Yin, SHIH Hsiao Ping, CHEN Tun Chieh

Project for hospital staff to increase physical activity frequency and minutes: A novel framework for promoting the physical activity motivation in Taiwan

YANG Yun-Chin, WANG Yun-Ting, LI Hsin-Rung, CHENG Hsiang-Ling, CHAN Lin-Chien

Introduction
The World Health Organization recommends that physical activity has the benefit for health and reduces the risk of chronic diseases, depression. However, according to the data from our hospital staff, the frequency of physical activity less than 3 times per week was reaching to 70%. Therefore, the purpose of our project was to promote the physical activity motivation by providing "various environment resources", "flexible exercise time" and "reward program."

Purpose/Methods
We publicized the project by giving them brochure related nutrition knowledge. We used "LINE@" to give them one point after they doing 60mins physical activity anytime and take- ing picture to upload to our "Facebook fan page" (up to one point a day). At the end, all points could redeem to raffle tickets for drawing including wireless MP3 player. We followed up the changes of high-density cholesterol (HDL) after a year project ended.

Results
The frequency of using exercise equipment in our hospital is increasing by 91% of participant (P<0.05). The frequency of physical activity is increasing by 91% of participant and less than 3 times per week is reducing to 47% (P<0.05). The average minutes of physical activity was 138minutes, 35% of...
participants were reaching to total of 150 minutes per week, and average 304 minutes. HDL was significant higher when minutes of physical activity increasing (P < 0.05).

Conclusions
We successful promoted the workplace health by providing “various environment resources”, “flexible exercise time” and “reward program.” Hospital staff significant increased physical activity frequency and minutes related to HDL. This concept of physical activity motivation promoting could serve as a novel framework for the development of more effective workplace health promotion in health care organizations.

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A Preliminary Study of the Status Quo of Burnout of Staff in a Medical Center
LIN I-Ting, CHANG Yu-Chu, MA Hsien-Jy

Introduction
One person died of burnout every 11 days in Taiwan. And evidence have shown that overtime working, extreme stress, or heavy workload may trigger or worsen cardiovascular disease, which is defined as “burnout.” Since medical personnel often work shifts, at night, or for a long time, they are exposed to high risk of burnout. The objective of this study is to make a census of the entire staff in a medical center to screen out the high-risk group of burnout.

Purpose/Methods
Through holding several lectures of occupational safety and health for staff in certain medical center during January 1 to March 31, 2018, data were collected afterwards via the filling of after-class questionnaires. The questionnaire was constructed after consulting experts in occupational medicine, psychiatry, and psychology, consisted of three parts—demography, burnout and health-related behaviors. The second part was revised from Copenhagen Burnout Inventory, which had good reliability and validity in previous studies.

Results
3,592 questionnaires were collected, with the average age of 36.97, weekly working hour 45.14, and risk of cardiovascular disease categorized as low 97.02%. Burnout was divided into 3 degrees—slight 55.60%, medium 29.96%, severe 14.45%, and was significantly related to participants’ unit, discipline, gender, weekly working hour, age, suicidal thoughts, and doing exercise for 30 minutes every day (p <.05). Both weekly working hour and degrees of burnout were significantly different between disciplines, with doctors and nurses to be the highest respectively.

Conclusions
The weekly working hour was longer comparing with both national analytic data and criterion of Labor Standards Act, which aroused the attention that medical personnel’s working condition should be valued. It was suggested that supervisor used hierarchical management to prevent staffs’ diseases and improve their health at the same time. Hence, for those who felt severe burnout, consultation and administrative adjustment should be arranged immediately, even those who felt a slight burnout, manager should encourage them to exercise more often.

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The Preliminary Analysis of Effectiveness of Workplace Health Promotion Program at - An Example of a Hospital in Southern Area
SU Ya-Hui, CHOU Chien-Chi, TSENG Yuan-Tsung, WU Kun-Ling

Introduction
Chronic illness such as cerebrovascular disease, heart disease, diabetes mellitus and hypertension derived from metabolic syndrome are in the ten leading causes of death. According to health checkup results in 2017, the incidence rate of Serum total cholesterol (≥200) was 42.34%, hypertension (≥ 140/90 mmHg) was 15.72% and fasting blood glucose (≥100mg/dl) was 15.12%, which is higher than the prevalence rate. Our aim is to improve health of the employees through workplace health promotion program.

Purpose/Methods
This study enrolled from October, 2017 to October, 2018, and those who faced “three high” (hypertension, hyperglycemia and hyperlipidemia) issue in 2017 were our main objects. We provided individual health education and follow-up regularly via call. Moreover, behavioral change strategies are implemented to increase their motivation, including exercise and diet program, self-management, creating a health-supportive environment and incentive. Serum total cholesterol (TC), blood pressure (BP) and fasting blood glucose (GLU-AC) will be evaluated for the effectiveness.

Results
After intervention, the effectiveness was shown by significant improvements in the objects’ hyperglycemia, hyperlipidemia and hypertension (p <.00). Hyperglycemia had a cut from 174 to 97(55.74%), 44.25% improvement rate; hyperlipidemia decreased from 111 to 83(74.8%), 25.22 improvement rate; hypertension dropped from 115 to 71(61.7%), 38.26% improvement rate.

Conclusions
In this workplace health promotion program, the key factors to success include exercise and diet program, self-management skills development and health-supportive environment. Individual health education, regular follow-up via call and incentive are the pushes for progress. We can see obviously positive outcome of TC, BP and GLU-AC in this study and hope to keep operating this model to patients and community residents.

Comments
We confirm that this abstract has not been published elsewhere and is not under consideration by another workshop or symposium. All authors have approved the abstract and agree with submission to HPH. The authors have no conflicts of interest to declare.
Prevalence of overweight and obesity among security guards in Southern Taiwan

YEH JIH-KUEI, CHEN CHIA-HUI

Introduction

Many security guards were the shift workers been disturbed by the changes in their lifestyles causing the body’s circadian rhythm which has affected the secretion and regulation of hormones in the body. In addition, it affects normal social activities and interpersonal relationships, causing unable to exercise regularly and abnormal diets. Many studies show that long-term shift workers are more likely to have diabetes, hypertension and heart disease. These long-term shift workers also have obesity or overweight situations.

Purpose/Methods

The retrospective analysis was included individuals attending annual health examinations on security guards in 2017. Ministry of Health and Welfare of Taiwan suggested that classification of overweight and obesity by body mass index (BMI), waist circumference. Central obesity was considered at a waist circumference of \( \geq 90 \) cm in Men and \( \geq 80 \) cm in Women. The predictive value of BMI for overweight, obesity at adult, defined as \( 24 (kg/m^2) \leq BMI < 27 (kg/m^2) \) and BMI \( \geq 27 \). Weight, height, and waist were measured.

Results

We investigated 630 security guards aged from 20-74 years old including 545 men (87%) and 85 women (13%) after annual health examination. There were 16% (86/545) men and 5% (4/85) women within central obesity. There were 28% (175/630) for overweight within \( 24 (kg/m^2) \leq BMI < 27 (kg/m^2) \), including 93.1% (163/175) in men and 6.9% (12/175) in women. There were 39% (244/630) obesity within BMI \( \geq 27 \) (kg/m^2). Prevalence of obesity were 96.3% (235/244) in men, 3.7% (9/244) in women.

Conclusions

For shift workers, they should assess their personal health risks, such as metabolic syndrome, cardiovascular disease, to adjust their working hours and protect the physical and mental health.

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Apply health promotion to reduce the overall weight of the staff

JHENG CIAN-HE, HONG LI-MEI, SHIH AI-WEI, LIU YA-MIN

Introduction

Medical personnel are the major part of the hospital colleagues. They are composed of care givers and providers who are equipped with more medical knowledge than general population. However, the elevated body mass index (BMI) of the medical personnel may not only threaten the health of themselves, but also it is not a good model for the people. This is the incentive to conduct this project aimed at improving the BMI of the staff.

Purpose/Methods

The health promotion program was composed of the light food cooking course twice a month, aerobic and core sports training twice a week, and the “fighting BMI” campaign taking 6000 steps a day, 15 days a month. A total of 102 people with a BMI greater than 24 participated in the 9-month program. A questionnaire on “Healthy Diet, Activity and Behavior Survey” was administered and body weight was measured before and after the program. Data were analyzed by descriptive statistics.

Results

Before the activity, the total weight of the 102 participants was 7063.7 kg. After the activity, the total weight was 6676.1 kg. The average weight loss was about 3.8 kg and the overall weight dropped by 5.48%. Those without regular exercise habits decreased from 99.1% to 7.84%; cooking avoiding steaming and blanch was reduced from 97.5% to 24.5%; habit of sugary beverage drinking decreased from 92.5% to 11.7%.

Conclusions

Applying light food cooking, sports training courses and “fighting BMI” campaign enables the hospital employees to establish healthy eating and exercise habits. It can effectively improve the employees’ living habits, and thus maintain a healthy posture. Other in-hospital activities were also encouraged to participate in (such as yoga, jogging clubs, etc.). It is vital to find ways to continue to lose weight and partnership is also the key to increase their motivation.

Comments

It is recommended that the activity club in workplace can incorporate a parent-child style to integrate the family with a healthy concept before they can implement a healthy lifestyle.

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Effectiveness of Nutrition Education and Aerobic Exercise on Weight Management

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Introduction

Obesity is usual in modern life, resulting from diet change and stress. In order to achieve the maximal profit for a company, it is vital to keep the health of the staff. The competitiveness of a company can be reinforced once the health of the staff is being cared a lot.
Purpose/Methods
This program was designed by the Department of Management of our hospital, composing of nutrition education, aerobic exercise and personalized diet planning. We also created a social media group to answer diet related questions in real time. We collected a guarantee deposit from the participants and it was return when the participants completed the program. A bonus will be paid to those achieved the goal of weight loss.

Results
A total of 15 employees participated in the program. Data on body weight and blood testing were collected. After six weeks of nutrition education and aerobic exercise, the body weight reduced about 0.5-5 kilograms. Blood chemistry showed that total cholesterol, triglyceride, and low-density lipoprotein (LDL) reduced around 3.5-11%. It implies that it was effective for weight loss and blood lipids lowering even in a short period. This also enhances the incentives of the staff to continuous weight management.

Conclusions
The staff participating in the weight management program not only learned the healthy diets and exercised regularly, but also induced the willingness to weight management of other colleagues. At the same time, an environment of healthy workplace was established.

Comments
It is suggested that the management division of the hospital should design and support the weight management program. The program is able to elevate the awareness of the staff on weight management. It will also create a healthy workplace, and this is a win-win situation for everyone who is involved.

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Chinese Culture as Measure of Health Promotion in Workplace

CHEN MEI-LING, HUNG KO-YUN, LIAO HSIU-MEI, LEE MING-TSUNG, LIN CHANG-SHENG, LIU YA-MIN

Introduction
There is a long-established custom in Chinese culture, which is to eat a bowl of vermicelli on birthday. This custom originated from the Chinese Emperor Wu of Han in 156 BC: he pursued his longevity. People borrow long lines of vermicelli to represent the meaning of longevity. When eating longevity noodles, no matter how long the noodles are you cannot cut, in order to live longer. It means the meaning of good health and longevity.

Purpose/Methods
The subjects are the staff of the hospital, and the personnel department will make the birthday list and the number of the month. The dietitian prepares longevity noodles made of about 160 grams of fresh wheat flour, puts boiling water for about 2 to 3 minutes, and then adds Chinese herbal medicines such as Chinese angelica, huang qi, and Chinese Wolfberry to the medicated diet. Dedicated to the birthday star by the hospital.

Results
The hospital is a teaching hospital in central Taiwan. The hospital staff are divided into: administrative department, doctor department, medical technology department, and nursing department. The number of birthdays per month is counted back in the retrospective manner from September 2017 to December 2018. There were 223, 92, 375, and 478 counts in administrative, physician, medical technology, and nursing departments, accordingly.

Conclusions
The longevity noodle plays a very important role in Chinese culture and is a must-have for birthdays and celebrations. Everyone hopes that he/she can get the blessings from the loved ones and friends on birthday. It represents the Chinese people’s aspirations, values and beliefs about the future. Our hospital’s attitude towards patient care is also implemented in our employees. On the employee’s birthday, we will contribute to the health promotion of our employees and create a healthy workplace environment.

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The Effect of Interval Training on Body Fat Percentage and Skeletal Muscle among Obese Staff in Hospital

CHEN Shu-Yen, WANG Chen-Wei

Introduction
The hospital is a patient-centric medical service provider, however, most staff often focus on clinical care services and ignore their own health issues. According to the physical examination analysis of the staff of Tungs’ Taichung MetroHarbor Hospital in 2017, it was found that there was 24.9% of the staff had a body mass index (BMI) value higher than 27. Therefore, the hospital employs professional fitness instructor to conduct interval training classes to help staff to reduce body fat and build muscle.

Purpose/Methods
The obese staff (BMI≧27) are the training targets. An interval training course for 10 persons per class was held from July to August 2018. An alternate aerobic training is performed through short periods of high intensity exercise with less intense recovery periods. The training frequency is 2 times a week, and each training session is 60 minutes. Paired sample t test was used as the data analysis method to understand the intervention effect of the interval training.

Results
(1)The “post-test” for the weight, whole body fat percentage, trunk fat percentage, fat percentage of two wrists, fat percentage of two feet, and BMI were all lower than the “pre-test”. In addition, the “whole body fat percentage”, “trunk fat percentage” and “body fat percentage of two feet” were statistically significant (p<0.05); (2)The “post-test” for the whole body skeletal muscle, trunk skeletal muscle, skeletal muscle of two feet, and skeletal muscle of two wrists were all higher than the “pre-test”.

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Conclusions
It is confirmed that the interval training of this class was able to attain the effect of exercise in a short time. The obese staff in the hospital also can reduce fat percentage and increase skeletal muscle, thereby control obesity. Therefore, it is recommended that the hospital continues to conduct interval training classes in order to improve physical abnormalities and create a healthy working environment.

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Application of Transtheoretical Model toward the Staff with Metabolic Syndrome of A Hospital in Southern Area

CHOU Chien-Chi, WU Kun-Ling

Introduction
It showed technical personnel without regular exercise behavior are around 75%. The change of work style increases time of being sedentary, decreases physical activity levels and furthermore raises the risks of suffering from chronic diseases. WHO suggest adults aged 18 to 64 should at least do moderate exercise for 150 minutes weekly. This study applies transtheoretical model on weight loss program to see the work effectiveness by changing exercise behavior and boosting physical activity levels.

Purpose/Methods
Purposive sampling was adopted from March to May, 2018, and those who have been defined overweight, waist circumference ≥90 for men and ≥80 for women and with metabolic syndrome were our main objects with 42 in total. We investigated the objects’ exercise behavior and divided into stages based on transtheoretical model, then give them relative strategies to evaluate the effectiveness of weight, waist circumference and exercise time improvement by providing exercise program and creating a health-supportive environment.

Results
The effectiveness of the weight reduction program was shown by significant improvements in the objects’ weight, waist circumference(p < .001) and their weekly exercise time(p < .000). All the participants reduced 2.49 kg with total 104.9 kg of weight reduction(75.71 kg SD±15.51 to 73.22kg SD±15.34), cut 2.67 cm with total 112.1 cm of waist circumference decrease(89.68cm SD±11.75 to 87.01cm SD±10.66) and the weekly exercise time of all the participants grew from 68.33 minutes ± 70.01 to 140.48 minutes SD± 95.78. Those who exercise over 150 minutes weekly went from only 7(16.7%) to 22(52.4%) after intervention.

Conclusions
The results of the study showed that providing 12-week relative intervention based on the transtheoretical model can significantly increase the objects’ exercise time and physical activity levels, and we can also see obvious improvement on weight and waist circumference reduction.

Employees health-Workplace’s commitment: A campaign strategy for weight loss

LI An -Ze, OU Hui-Chun, DU Chung-Li, HUANG Su-Hua

Introduction
Obesity is one of the most important public health issues worldwide. In Taiwan, half of all adults in 2013 are obese, quickly catching up to the US. Modern workplaces have become increasingly obesogenic due to the changing nature of work, as well as working conditions, such as long working hours. The consequences of workplace obesogenic factors extend beyond the individual level. Workplaces represent a logical and natural setting to implement health promotion and prevention initiatives targeting overweight and obesity.

Purpose/Methods
We designed multiple dimensions of integrate programs, services, and policies to promote employee health. Body weight control is our final goal in our health policy. Implementation and cost-effectiveness of a weight loss awareness campaign conducted at worksites. ‘Lighten Up with diet and exercise’ was a 54-week, worksite-help weight loss campaign offered free assisted. Worksite volunteer coordinators, with the assistance of the staffs, were responsible for implementing the campaign in our worksites.

Results
218 employees from all departments lost a total of 628.9 kilograms; an average weight loss of 2.88 kilograms per person. A promising finding is that people who wanted to receive more incentives for weight loss shed more pounds without additional assistance, such as personalized fitness training and nutrition counseling. Incentive recipients report that they achieved weight loss by modifying their diet and getting more exercise.

Conclusions
Program costs amounted to USD $15 spent per kilogram lost. Our data suggest that ‘Lighten Up with diet and exercise’ campaign is an effective worksite weight loss strategy for health workplace. With creative design, targeted use and evaluation, financial incentives campaign for weight loss and healthy behavior may be a useful addition to the health policy toolkit.

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Comments
We confirm that this abstract has not been published elsewhere and is not under consideration by another workshop or symposium. All authors have approved the abstract and agree with submission to HPH.

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The Effects of vocational rehabilitation for occupational accidents labor

CHU Chan-Man, RUAN Yi-Shiou, YANG Chia-Lin, LIOU I-Hsiu, TUAN Sheng-Hui, HUANG Wan-Yun, SUN Shu-Fen, LI Min-Hui, CHENG Jin-Shiung

Introduction
According to the Ministry of Labor statistics in 2016, there were 52198 cases with work-related injuries and illness in Taiwan. We established a vocational rehabilitation center in our hospital to help occupational accidents labor. The purpose was to provide individuals with occupational injuries or illness instant information and to assist workers to return to their workplace.

Purpose/Methods
The center mainly recruited patients suspected with workplace-related injury via other medical departments referral. After referral, we ensured the diagnosis and established personal archives. For those whose recovery time was over one month, we provided health education, information of social services and referral to the Kaohsiung City Government Labor Affairs Bureau. When workers’ condition improved, we provided interventions included evaluation and facilitation of ability to work, social adjustment counselling, and occupational accommodation. This study summarized the characteristics of labor we provided interventions as aforementioned from September 2016 to August 2017.

Results
Sixty workers completed screening from September 2016 to August 2017 and was introduced to our services. During our follow up at one, three and six months after intervention, 33 returned to their job. Seven cases remained unemployed for reasons as listed in table 1. The ten cases who underwent counselling were satisfied with the service (table 2). During our interview, six cases said they had more ideas in coping problems. All ten cases were satisfied with the counselling services. Five cases had the need for occupational accommodation in our study. Through the service program, we helped the workers adjust to their work via ways of the use of orthosis or accessory devices. Furthermore, in corporation with the government, we made suggestions to promote equipment, safety at work.

Conclusions
With the support of Occupational safety and health administration, ministry of labor, Taiwan, we established a more integrated and more comprehensive service delivery system for patients with occupational injury.

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Experience Sharing of Establishing a Workplace with Happiness in Hospital

CHEN Guan-Ju, HUNG Sheue-Chen, WU Shu-Yu

Introduction
National Taiwan University Hospital Yunlin Branch has been always attaching importance to helping employees to create self-affirmation. We promote health including body, mind and spiritual care, and build both software and hardware to create a health care organizations.

Purpose/Methods
Our hospital encourage all employees to have a healthy life style. For our employees, we established 28 recreational clubs, provided free yearly health examination, and held employee sports meeting every year. We also provided a comfortable space
Electronic Poster Session

Medical workplace improves physical fitness and softness improves lower back pain correlation

HUI-YING Lin, CHIN LIEN Lai

Introduction
The results of the study showed that the abdominal muscle endurance of hospital staff was related to lower back pain, while the upper body pain of women was related to long-term sitting posture. However, the physical fitness of nursing staff was significantly correlating with the quality of life. All Physical Fitness contained body mass. Index, body fat, balance, softness, low extremity muscle strength, muscular endurance, and cardio endurance are significantly related to the quality of life of caregivers. Appropriate health promotion programs in the workplace can provide employees with health and safety. Environment, for employees, can reduce stress, improve morale, increase job satisfaction, improve health protection skills, and improve personal life quality, thus improving the lower back pain of employees by improving physical fitness and softness.

Purpose/Methods
In 2018/3, 110 employees participated in the physical fitness test of the sit and reach, and the poor softness accounted for 60.71%. The quality management method finds out the reasons for the poor softness of the employees’ physical fitness. There are five reasons: They do not know what kind of sports to do, do not have time to exercise, do not have the same sports, they do not have a self-training checklist, and we planned for these five reasons to improve. 1. For employees who don’t know what kind of sports to do: Shoot sports video and upload it to the cloud to provide for download. Provide incentives to encourage to a sport. 2. In order to solve the problem of lack of exercise with peers: a sports group therapy course is organized to help employees develop exercise habits. The unit is designed to improve physical fitness and use a step-by-step approach to increase participants’ confidence and safety. Group classes are held on Thursday, the third week of each month. 3. Do not know how to get equipment: Create a piece of a poster to introduce equipment cushion (yoga mat), towel, chair and stair (step) that can be obtained in life, reminding employees to use equipment that can be obtained in life, and to fit in physical fitness. 4. Design a sports passport to record the frequency of home sports. Encourage employees to develop the habit of doing sports at home. The sports passport includes five steps of the static lunge, upward stretching, forward flexion, lateral pressing and sitting forward bending. Each movement is pulled for 10 seconds and repeated five times. Do it once a day. Use a sports passport to perform self-monitoring and Tick to indicate the completion of the day’s action.

Results
Our employee participating rate of recreational clubs was 24%. The comprehensive rate of yearly employee health examination was 98.5%. There were 806 employees joining out sports meeting. The person-time using Medici Center was 2305 persons monthly. Between public and non-public employees, whether there is a significant difference in the satisfaction levels conducted. Subsequently, One-way ANOVA was used to analyze the results of this implementation, the softness of employees’ physical fitness increased by 22.14%. In the future, we will continue to apply physical fitness testing videos, exercise group therapy courses, and sports passports to health promotion programs, to influence more employees to improve their fitness.

Conclusions
Use quality management methods, collect objective data, identify problems, improve countermeasures, and improve employee physical fitness. In the results of this implementation, the softness of employees’ physical fitness increased by 22.14%. In the future, we will continue to apply physical fitness testing videos, exercise group therapy courses, and sports passports to health promotion programs, to influence more employees to improve their fitness.

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Employee Attributes and Job Satisfaction Research - A Study of Certain Public Hospital in Southern Taiwan

CHANG Chih-Ming, YEN Chia-Chi

Introduction
Public hospitals in Taiwan have both public and non-public employees. They hold the same job positions such as doctors, nurses, medical affairs, and administrators but had different salary. The goal of this study is to conduct a hospital-wide job satisfaction survey to understand whether these two types of employees have different job satisfaction levels regarding “work and environment,” “organizational atmosphere,” “management control,” and “assessment and reward”.

Purpose/Methods
The well reliability and validity questionnaire was distributed to the doctors, nurses, medical affairs, and administrators of the hospital. A total of 572 anonymous questionnaires were conducted. Subsequently, One-way ANOVA was used to analyze whether there is a significant difference in the satisfaction levels regarding “work and environment,” “organizational atmosphere,” “management control,” and “assessment and reward” between public and non-public employees.
Chin Lien Lai, Hui-Ying Lin

Introduction

"Employees" are the most important assets in the workplace. Only happy and happy employees can create a high-quality, sustainable business. The purpose of creating a healthy medical workplace is to create a supportive environment, develop personal skills, and adjust health services in accordance with the five major action plans of Ottawa. Arrange the employees' body and heart to support the health promotion activities. Through the major action plans of Ottawa, we provide employees with interpersonal relationships and family emotional support. In December 2018, did post-test the assessment of the mental health life events and stress levels of 450 people in the hospital was conducted using questionnaires.

Conclusions

The study indicated the satisfaction levels from non-public administrative employees in terms of "organizational atmosphere" and "assessment and reward" are significantly lower than those from public administrative employees. The satisfaction level from non-public medical employees in terms of "assessment and reward" (p=0.003) is significantly lower than that from public medical employees.

Purpose/Methods

In December 2017, did pre-test of the assessment of the mental health life events and stress levels of 450 people in the hospital was conducted using questionnaires. Eight months period from April 2018 to November 2018, to create a health promotion program for the physical and mental health care workplace, and to provide employees with interpersonal relationships and family relationships by the Ottawa Five Action Plan to create a supportive environment setting. Love relationship, career development, emotional distress adjustment, etc. Through the information system, take the initiative to make appointments with psychologists and psychologists, and accept 20 counselors. In the developing period of the employee, take the initiative to make appointments with psychologists and psychological adjustment, participated in the employee 350 people. For employees are diversified and practiced, employee to study four practical courses, cooking, aromatherapy, and travel photography courses to help employees reduce their work pressure by learning interesting courses and participated in 266 employees. Adjusting the direction of health services, the employee's mental health promotion section sets out the "Staff Support and Counseling Standards book" to provide working procedures, measures, and pipelines for employee psychological and emotional support. In December 2018, did post-test the assessment of the mental health life events and stress levels of 450 people in the hospital was conducted using questionnaires.

Results

In December 2017, the mental health life events and stress level assessment information questionnaire the number of employees was 394, the statistical results of the stress event scale risk high risk (300 points or more) 5.8% medium risk (150~299 points) 20.1% general risk level (less than 149 points) 74.1%. In December 2018, mental health life events and stress level assessment information questionnaire surveyed the number of employees 358, the statistical results pressure event scale risk level, high risk (300 points or more) 5.5%, medium risk (150~299 points) 18.1% General risk level (less than 149 points) 76.2% Pre- and post-test results are reduced by 0.3% for high risk (300 points or more) and 2.0% for medium risk (150~299 points).

Conclusions

Mental Health Life Events and Stress Rating Scale used in this survey is a measure of life events and stress levels. It contains 43 events that occur frequently in life. Different events have different stress levels, such as: spouse death. The stress degree score is 100; the divorce, the stress degree score is 73, and the total score is the sum of the stress degree scores of the events occurring. According to Holmes and Rahe (1967), a total score of 300 or more is a high-risk group, about 80% of the chances of suffering from physical and mental illness; 150 to 299 points are moderate risk, about 50% of the opportunity to suffer from physical and psychological illness Disease; below 149, the risk is average, only about 30% chance of suffering from physical and mental illness. Use information-based anonymous method to do pre- and post-question surveys, and create a healthy workplace for psychological adjustment, pressure, and exercise behavior in eight months. High risk in employees' mental health life events and stress (300 points or more) a 0.3% reduction, a medium risk (150 to 299 points) reduction of 2.0%, a reduction in the risk of physical and mental illness, and a correlation between the physical and mental health care workplace and the improvement of employee life stress.

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Establishment of an Information System to reduce the Number of Inventory Omission Cases involving Consigned Medical Equipment for Operating Rooms
LIN Yu Chun

Introduction
The operating room contains the densest concentration of medical equipment, and with the development of various advanced surgical methods (e.g., the da Vinci system, minimally invasive endoscopic surgery), the medical equipment requirements for surgeries are becoming increasingly lengthy and complex. Given this trend, cost control is paramount to the quality and cost of medical care.

Purpose/Methods
There were 206 cases of inventory omissions involving medical equipment in 2015, and 392 cases in 2016. An analysis of the situation revealed that there were a high number of inventory omission cases that involved the consigned medical equipment for operating rooms. The following were the causes that contributed to this issue. 1. Personnel: Unfamiliarity with the consignment of medical equipment and batch codes, overly high number of medical equipment items and complex pricing methods that made it difficult to perform pricing, and neglect of pricing tasks due to heavy workload. 2. Management: Lack of specialized personnel to handle such duties, manual operations, and lack of timely audits and a regular stocktaking mechanism. 3. Environment: Lack of properly allocated storage space.

Results
Improvement plan: 1. Implementation of medical equipment consignment and UDI code links to facilitate the pricing tasks performed by the nursing staff. 2. Implementation of a UDI barcode-based consigned medical equipment storage management system. 3. Establishment of a storage management center that is handled by specialized personnel. 4. Implementation of informatized consigned medical equipment management, timely audits, and a regular stocktaking mechanism. 5. Education, training, and propagation with respect to the improvement project.

Conclusions
After the project was implemented, the number of inventory omission cases involving consigned medical equipment dropped from 392 cases to 121 cases. The implementation of a UDI barcode-based information management system and establishment of a storage management center (handled by specialized personnel) effectively reduced the number of inventory omission cases.

Application of data exploration and decision tree to the allocation of nursing staff

CHEN JU Chen, PENG SHENG You

Introduction
The caregiver's willingness to work and the stability of clinical work, the quality of medical services and the labor costs of medical institutions, according to the willingness and personnel characteristics of the current nursing staff, construct the criteria for the care of the nursing staff, as judging the subordinates of the new recruits.

Purpose/Methods
In addition to demographic variables, the questionnaire is based on the Memetic learning styles inventory learning structure, investigating the willingness and learning characteristics of nursing staff, and using C5.0 decision tree to establish model stream, using seven types of learning patterns as input variables, the construction of nursing staff members of the subordinates guidelines.

Results
Through the C5.0 decision tree algorithm for data exploration and classification, the result of this tree analysis is transformed into a decision tree rule, and the overall overall correct rate is 83.02%. This result can provide a reference for the nursing staff to adjust the nursing manpower when the nursing department is assigned to the new nursing staff.

Conclusions
The job satisfaction of nursing staff has a significant relationship with the retention of any wish. Based on the learning style of the nursing staff in the hospital, the criteria for the appropriate department are summarized, and the recognition and adaptation process of the nursing profession is further enhanced. Stay in office.

Comments
Follow the decision tree classification, assign the appropriate nursing staff to the ideal unit, take care of the specialist disease to enable the patient to obtain the full range of body and mind care quality, and use their unique trait areas to create a good working environment and atmosphere, and increase their work. Satisfaction and improvement.

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On Promoting Regular Exercise and Physical and Metabolic Performance in Medical Workplace

HSU Shu-Ling, LEE Min-Chen, LU Yuh-Pin, HSIAO Hsu-Feng, HONG Rong-Bin, HUANG Sheng-Te

Introduction
In 2017, the abnormal rates for overweight, high total cholesterol, high low-density lipoprotein (LDL) and low high-density lipoprotein (HDL) for hospital staffs in a regional hospital were 37%, 34%, 23% and 20%, respectively, of which metabolic syndrome and hyperlipidemia are the highest. For this reason, a program of 6 months of regular exercise was actively engaged, and the involvement of regular exercise, physical condition, physical and metabolic performance was further explored.

Purpose/Methods
The subjects in a regional hospital volunteered to participate in health promotion comprises of 105 medical personnel (35 in the control group and 70 in the experimental group). This study was conducted with the experimental method. In March 2018, a pre-intervention test of physical fitness and metabolic examination were all measured. From April 1 to October 31, 2018 regulation
Raising influenza vaccination coverage at the University Medical Centre Ljubljana

DERNOVŠČEK HAFNER Nataša, URDIH LAZAR Tanja

Introduction
The seasonal flu vaccination against influenza is one of the keys for preventing the spread of this disease. The seasonal flu vaccination rate is very low for the general Slovenian population (3.2%) and also for healthcare employees (9.1%), and it does not ensure sufficient protection against the spread of this disease.

Purpose/Methods
At the end of 2016 and 2017, the University Medical Centre Ljubljana (UMCL) launched an intensive in-house social marketing campaign promoting flu vaccination with the slogan “I don’t pass on the flu! So I get vaccinated to protect myself and others.” The goal of the campaign was to reach as many employees as possible by using different communication tools, because those working in healthcare have a significantly greater risk of catching the flu than the rest of the working population.

Results
The campaign encouraged all employees to receive the free vaccination, especially those groups that had lower vaccination rates over the past years. The support of the institution’s executive staff and the heads of individual divisions/organizational units was key to securing the required funds and suitable conditions for carrying out the campaign. The promotion strategy significantly increased vaccination coverage at the UMCL from 10.4% to 13.9% in 2016, and to 20.1% in 2017.

Conclusions
The social marketing campaign which was the result of cooperation between the Institute of Occupational, Traffic, and Sports Medicine and the Service for the Prevention of Hospital Infections, promoting flu vaccination did make a positive difference. The main message spread by a special logo, visual reminders, badges, and symbolic gifts for vaccinated employees, was that by being vaccinated, the employees protect not only themselves and their families against the disease, but also their patients.

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Experience Report on Promoting Smoke-free Workplace in a Regional Hospital in Northern Taiwan

HSING Yi-Tien, LIN Yu-Wen, LIN Ching-Feng

Introduction
In Taiwan, Tobacco Hazards Prevention Act began in Sep. 1997. Up to now, the smoking rate of adults, adolescents and the elderly has been significantly reduced. Our hospital is a public hospital, committed to promoting the national policy mission, implementing the protection of the health of the people, and setting an example to promote a smoke-free workplace.

Purpose/Methods
Promote the programs to implement a healthy workplace to protect and enhance the health of all staff in the hospital: 1. When recruiting, will be a smoke-free workplace, and the policy of a smoke-free hospital will be included in the “Employee Registration Notice”. 2. In employment contract, explain our hospital fully implements the smoking ban and promotes a smoke-free work-place, and employees are required to comply with the smoke-free environment and culture. 3. New employees fill in the “Employee Health Care questionnaire to identify and re-ord the employee’s smoking status and assist in referral to the smoking cessation clinic. 4. In the employee training, our hospital’s smoke-free policy will be included in the course project to remind employees to follow. 5. There is an employee health pro-motion plan that includes employee mental health, physical fit-ness, healthy eating and smoking cessation services.

Results
According to the employee smoking survey in 2017, 9 employees had smoking habits, using various channels to promote the im-portance of smoking cessation, and establishing a health belief model. 9 employees were willing to use smoking cessation services (usage rate 100%). The smoking cessation guards took the initiative to visit, care and provide smoking cessation education or referral to smoking cessation treatment services, and continued to follow up and care. Three of them quit smoking success-fully, with a success rate of 33.3%, which was higher than the hospital’s treatment for 6 months (29.1%).
Conclusions
In the future, through the implementation of the smoking cessation case tracking management mechanism, counseling employees to establish and improve the motivation to quit smoking, continue to encourage and invite those who have not quit smoking to continue to participate in the full course of treatment, in order to improve the success rate of smoking cessation.

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Applying the behavioral theory of planning to Exploring the behavioral intentions of participating in health promotion activities

YI-HSUAN LIN, CHIAN-HUEI GAU, SHIH-YU YEH

Introduction
This study on the behavioral intentions of employees' Motivation, Emotions, Subjective norms, Attitudes, and Perceived behavioral control in participating health promotion activities. Through analysis of information, we can understand the relevant factors that affect the intentions of employees to participate in the promotion of health promotion activities.

Purpose/Methods
Subjects of this study were hospital staffs. 500 questionnaires were distributed and 409 were valid responses corresponding with a 81.8% return rate. Applying the descriptive statistics, independent t-test, variance analysis, Pearson Product-moment Correlation, confirmatory factor analysis, and structural equation modeling were analysis. Thus to understand the intention of hospital staffs participating in health promotion activity.

Results
There is significant difference among demographic variables upon emotion. Emotion has positive impact on attitude. Participation motivation has positive impact on attitude and perceived behavioral control. We found that there were significant differences in attitudes. Attitude and perceived behavioral control has positive impact on behavioral intention.

Conclusions
Attitude is the most influential among the variables affecting the intentions of health promotion activities. The factors affecting include Emotion and Participation motivation, among which the degree of influence on participation motivation is higher. Therefore, in order to increase the intentions of employees to participate, it is necessary to first trigger the motivation of employee participation.

Comments
We can find that if we want to increase the intentions of employees to participate in health promotion activities, they need to be motivated to participate. Therefore, we can promote the benefits of employees' participation in health promotion activities for physical and mental health, so as to enhance the behavioral intentions of employees participating in health promotion activities.

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Effect of Hospital Employee's Rehabilitation Exercise Program on Chronic Neck Pain related Musculoskeletal Disease.

KIM Ji Hyun, KIM Byeong Gwan, SON Hwan Cheoul

Introduction
Hospital staff are susceptible to chronic neck pain related musculoskeletal diseases because they sit for long periods or perform repetitive tasks during work. Patients with chronic neck pain are often accompanied by a decrease in strength, flexibility and endurance of cervical muscles. These chronic pain not only reduce work satisfaction but also result in lower quality of life. The goal was to reduce pain by increase muscle strength and flexibility through cervical exercise program containing stretching and strengthening exercise.

Purpose/Methods
A total of 32 employees were recruited by intranet mail for those who had chronic neck pain for at least 3 months. As pre-test, Visual Analogue Scale and Neck Disability Index questionnaires were conducted and the goal was set to VAS 3points or less and NDI 4 points or less. They accomplished a rehabilitation exercise program including 5 sessions education - postural education, stretching with theraband, muscle fascia relaxation, neck stabilization exercise and low frequency therapy.

Results
After 5 sessions training, the questionnaire was conducted for post-test in the same way as pre-test. As a result of post-test questionnaire, the mean VAS decreased from 4.9(moderate) to 3.5(mild) and the NDI decreased from 9.6(mild disability) to 6(mild disability). And also after 3 weeks guided follow-up self-exercise, the result of final test was performed. VAS was decreased by 2.5(mild) points and NDI was decreased by 4.0(no disability) points compared to the pre-test.

Conclusions
Through this therapeutic rehabilitation exercise program, degree of neck pain and job satisfaction of the hospital staffs were improved. After 5 sessions of exercise education program, the instructor served as a guide to enable self-exercise with positive feedback to the participants. The reduction of neck pain and improvement of functional ability through such a program is considered to be clinical significance as an intervention method for patients with chronic neck pain.

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Promotion of seasonal influenza vaccination rate among hospital staff

LI PO-YI, CHEN Chieh-Yu, PAN Hsiang-Ju, CHENG Jin-Shiung

Introduction
Seasonal influenza can lead to severe complications with higher mortality rate and longer hospitalization which imposes a heavy burden on society. For reducing influenza complications, seasonal influenza vaccination is the most effective way, in particular to the persons with elderly age, chronic disease, pregnancy, and hospital staff. Therefore, policy to promote vaccination rate among hospital staff to reduce cross infection in hospital is an important issue.

Purpose/Methods
As encouragement policy, lottery system was designed for rewarding the vaccinated person in the first 3 weeks after starting seasonal influenza vaccination. Participants were drawn every day since the first day of vaccination; and the odds of winning were set as 10 percent of daily vaccinated persons in the first two weeks, and 5 percent in the last week. Prize is unknown to the participants. Propaganda of posters and e-mails to healthcare workers was done one month before vaccination.

Results
In the first two weeks, higher vaccination rate was found in the lottery group, compared with the same period in the past year. The last week, higher vaccination rate was also found in the lottery group, compared with the same period in the past year. The overall vaccination rate of first 3 weeks was also higher than the same period in the past year.

Conclusions
In this study, in the first 3 weeks after starting seasonal influenza vaccination, the vaccination rate of hospital staff can be increased by encouragement policy as lottery system.

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Investigation of the current situation of Human Factors Engineering health plan for people in the Maintenance Department

HUNG-AN Hsieh

Introduction
The people in the Maintenance Department due to the working environment, in poor posture during maintenance or improper management of working hours, causing work-related musculoskeletal injuries and Human Factors Engineering caused by hazards, so in order to prevent Human Factors Engineering harm and avoid repetitive muscles Skeletal injuries require the application of Human Factors Engineering knowledge to prevent people in the Maintenance Department from repeating work due to prolonged exposure to not ideal maintenance work environments.

Purpose/Methods
The people in the Maintenance Department uses the "Musculoskeletal Symptoms Questionnaire" conduct a survey of symptoms After that, These data compilation to the "Musculoskeletal Symptom Survey and Control Track List" and organized by BI (Business Intelligence) tools collation and statistical research, convenience subsequent improvement and control track, and to
identify hazardous and non-hazardous cases, conduct hazard assessment and improvement, and implement health guidance and health protection measures.

Results
There are 7 employees in the repeated handling, 1 the typing staff, the habitual hand has 8 people in the right hand. In the past 1 year, the body has more than 2 weeks of fatigue, soreness, tension, etc. A total of 5 people, 1 person has a soreness for 1 month, 1 person has a soreness for 3 months, 2 person has a soreness for 6 months, 1 person has a soreness for 3 years, 3 people without soreness, 2 person with slight pain in the neck, 1 person with slight pain in the upper back, 1 person with medium pain, 2 person with low back pain, 1 person with severe pain, 2 person with pain in the left shoulder, 3 people with slight pain in the right shoulder, 1 person with moderate pain in the right elbow, 1 person with slight pain in the right wrist, 1 person with left thigh pain, 1 person with moderate pain in the right foot. Most of the 8 people's neck and upper back soreness is painless, accounting for 75%, the slightly painful right foot is 35%, some soreness has a medical history, not caused by work. Therefore, there is no need to implement engineering improvement at the workplace.

Conclusions
Due to the maintenance site space diversity in the people in the Maintenance Department, Therefore the posture on the maintenance needs to be squat or kneel, and it is easy to cause repetitive musculoskeletal injuries due to improper management of working hours. Therefore, it is necessary to conduct a questionnaire survey to find out whether the personnel are in a bad environment. Work, to avoid affecting the injury of personnel on the repaired items, resulting in the occurrence of occupational diseases, after the implementation of the improvement plan, management and control should be implemented, and records should be kept.

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Exploring on the hospital employees with disabilities for attending experiences of health promotion activities

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Introduction
Due to the small proportion of people with disabilities, hospitals are less concerned with their special needs when promoting health promotion activities. In addition, research on the experience of people with disabilities participating in health promotion activities is also lacking. This study explores the experience of employees with disabilities in hospitals participating in health promotion activities. The hospital has a total of more than 3,000 employees, including 30 employees with a disability.

Purpose/Methods
This study uses qualitative research to explore the experience of employees with disabilities participating in health promotion tourism tailored to them. We collected information through in-depth interviews and interviewed three participants, including two males and one female. Their disability levels are 2 severe and 1 moderate. Each interview lasted about 45 minutes, and the interview process was recorded after the interviewer agreed. After the interview, the recording was converted into a verbatim script for further analysis.

Results
1.In-depth communication: Attending this event can meet colleagues in other departments and know more about their interests and personality. 2. No more loneliness and regret: In the past travel experience, they are often left in one place. This activity is mainly based on the participants, and they are no longer feeling lonely and regret. 3. Expanding the horizon of life: People with disabilities are not convenient to travel, this trip helps to expand the horizon of their lives.

Conclusions
Due to the lack of understanding of the needs of people with disabilities, employees in the workplace have been less likely to participate in physical health promotion activities. This study suggests that health promotion activities for the employees with disability need to carefully assess their needs, design their activities, and take into account the needs of employees with different physical functions to achieve the goal of building a healthy and friendly workplace.

Discussion on the effect of using horticultural therapy on stress reduction- Take a regional teaching hospital as an example

HUANG Wen-yin, YAO Wen-chen, CHIANG Hsiao-yuan, LIN Yu-wen, YANG Nan-ping, LIN Ching-feng

Introduction
The hospital has a life-critical and year-round nature. In an emergency medical situation, any scornful and irresponsible behavior may endanger the patient's life. The employee is in a highly stressful environment for a long time. Study shows that horticultural therapy can exert plants healing power and release pressure, rebuild mind, restore attention, bring benefits to body and mind. We hope using horticultural therapy can reduce stress to relax our mind, increase happiness.

Purpose/Methods
On April 2017, using Chinese 14-item PSS and the Chinese happiness scale to investigate and analyse employees sleep condition. It shows that stress perception score is on an average of 58.5 points, the happiness score is on an average of 61 points. During May to November, we have held several lecture about plant healing, plant growing activities, establishing line group to share experience with each other, plant back home activities, success travel exhibition and discussing the experience of plant care.
**Results**

Stress perception score decreased from an average of 58.5 points to 55 points, the happiness scale scores increased from an average of 61 points to 66.75 points. The employees say that in the plant caring process can calm down their head, by observing the yellow leaves falling, as if the loss of vitality, but as time changes, it is surprising to discover that sprouts sprout. Feel the change of life, and experience the power of nature healing.

**Conclusions**

Through planting, focus on caring, and ornamental plants, so that colleagues can perceive in the external environment, emerge health awareness and happiness naturally, to relieve the pressure.

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**Nutrition-Supportive Environment Creation to Improve Iron Deficiency Among Premenopausal Staff in Healthcare Workplace**

**HSU Chiu-Ping, CHANG Huang-Yu, LIN Yu-wen, YANG Nan-ping, LIN Ching-feng**

**Introduction**

Preventing iron deficiency has been a main target of the World Health Organization since 1992 and it also has been included in the Health 2020 of Taiwan, especially focus on 19-55 years old child-bearing women. According to the third National Nutrition Examination Survey in Taiwan, the total iron deficiency rate in women was 12.9% and the childbearing age was the main target group and the dietary iron-intake of premenopausal women was 76.7%, which was below dietary reference intakes.

**Purpose/Methods**

A nutrition intervention of iron improvement program was conducted for premenopausal staff in Keelung Hospital by using supportive system and establishing personnel skill. There were 6 classes in this program. Questionnaire of knowledge, daily iron intake and biochemical indices (ferritin) of nutritional status were also investigated before the program, after 4 months and in a follow up after 14 months. Data was analyzed using the one-way ANOVA and Tukey’s test method.

**Results**

The score of knowledge questionnaire were increased significantly from 69.9±1.8 to 96.9±1.9 during 16 months and daily iron intake was increased significantly from 9.0 ± 0.6mg to 18.3 ± 1.6mg in 4 months but no significant difference in serum ferritin before and after the intervention. According to the ferritin 12.0 μg/L cut point, we analyzed subjects’ data into normal ferritin (NF) group and low ferritin group (LF). The LF group’s knowledge performance in the 4th month and 14th month were significantly higher than the NF group. The NF group had significantly higher concentrations of ferritin in 4th month and 14th month than the LF group.

**Conclusions**

This Nutrition-Supportive Environment creation of iron improvement strategy improves knowledge and daily iron intake of subject’s staff and may be to prevent iron deficiency among premenopausal staff in healthcare workplace.

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**Love Exercise Enjoy Health: Promoting Employee Life Plan - Regular Exercise in the workplace**

**HSU Shu-Ling, LEE Min-Chen, LU Yuh-Pin, HSIAO Hsu-Feng, HONG Rong-Bin, HUANG Sheng-Te**

**Introduction**

Abnormal results, indicative of chronic illnesses such as “hypertension”, “excessive weight”, and “musculoskeletal pain”, are commonly found in physical examination of employees. Our hospital promotes this program “Love Exercise, Enjoy Health” to investigate whether the body mass index(BMI), high blood pressure and total cholesterol are significantly associated with employee participation in regular exercise programs. The ultimate goal is to reduce the number of people with abnormal results of BMI, high blood pressure and total cholesterol by 20, 5, and 20, respectively and increase flexibility by 200cm and 100 cm while performing seated forward bends and lateral bends.

**Purpose/Methods**

Five strategies in the Ottawa Charter are used as a framework, including 4 major strategies implemented by our Health Promotion programs: strong team, regular exercise, the embrace of health, and the pleasure of collecting prizes as strategic planning. In 2018, 28 regular exercise sessions were held with 2212 participants involved.

**Results**

The number of people with abnormal results of BMI, high blood pressure and total cholesterol before regular exercise was 117, 54 and 136, respectively; after regular exercise, 89, 49 and 114, respectively. The number of people with abnormal results that dropped back to the normal range was 28, 5 and 22, respectively. The measurement data before and after the test, seated forward bends and lateral bends, was 962 cm, 821 cm and 1311 cm, 933 cm, respectively. Their flexibility, as measured before and after the test, was increased to 349cm and 112cm.

**Conclusions**

Our concentration to both employees and the public, the key to our innovation, are incorporated into work culture in the hope of making employees become healthcare guardians. To achieve such goal, learning from our regular exercise programs “Love Exercise, Enjoy Health”, promoting our experience of raising the awareness of community health and enhancing their healthy life.

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Health I care five-heart - Health Promotion Programs for Hospital Employees’ Physical Fitness

WEI Shih Chu, CHEN Li Yang, FU Chao Yang

Introduction
Recent study confirmed that physical inactivity and lack of exercise are major risk factors for cardiovascular disease. This subject has been focused in governmental policy, and been applied in practice to improve employees’ health condition. With good qualities of physical fitness, preventing cardiovascular disease, releasing emotional stress and enhancing immune system are feasible. This study was intended to understand the health status of hospital staffs after the introduction of workplace health promotion program.

Purpose/Methods
The program had five aspects, one of which for regular exercise, including health exercises, sports clubs and treasure hunting etc. Finally, 74 staffs were included of body composition, cardiopulmonary fitness, body flexibility and muscle strength after program completed. The data was interpreted as advantages and disadvantages in fitness categories by comparing with the database of Standardized Norm of Service industry.

Results
After the introduction of the workplace health promotion program, the results showed that most employees needed to strengthen their cardiac endurance, while male employees generally have poor body flexibility and female employees poor body flexibility and muscular endurance. There was 33 employees had serial data in 2017 and 2018. The physical fitness in body flexibility and muscle strength of grasp was better with significantly difference in 2018. But the cardiac endurance was worse in 2018.

Conclusions
In general, hospital staffs had poor body flexibility and cardiopulmonary endurance in 2018. These data can provide the hospital administrators to setup new policies to improve employees’ health condition. It is necessary to design a set of guidelines and activities to enhance self-promotion in physical fitness.

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Employee Perceptions of Employee Assistance Programs (EAPs at a regional hospital in southern Taiwan

TZU-LIN Chang

Introduction
To explore the promotion situation, implementation effectiveness and needs of the staff assistance programs (EAPs) of a regional hospital in the south, and to build a warm and caring workplace through multi-care assistance measures.

Purpose/Methods
The questionnaire survey method using quantitative research includes three parts: basic personal data, activity satisfaction survey, and activity demand survey. Activity satisfaction (take 5 points scale: 1~5) is divided into employee assistance and care activities, health promotion activities, and education. Growth course and four aspects of leisure and recreation activities. (>=4 points) Satisfied, (<=2 points) is not satisfied.

Results
50.47% satisfied with employee assistance and care activities; 51.40% satisfied with health promotion activities; 52.34% satisfied with education growth courses; 45.79% satisfied with leisure and recreation activities. Employees’ actual EAPs satisfaction scores ranked highest in the final teeth activity (3.69 points), followed by professional ability improvement courses (3.67 points), self-growth and interpersonal relationship courses (3.63 points), health promotion courses (3.62 points), massage Shu Press activity (3.60 points), parent-child activities (3.57 points). The education growth curriculum has the highest demand for work professional knowledge courses (15.11%), the leisure recreation activities have the highest demand for self-improvement activities (25.19%), the health promotion activities have the highest demand for health care (29.31%), and the staff assistance and care activities are under work pressure. The highest demand for services (27.48%).

Conclusions
Future hospital planning EAPs measures should be customized according to different categories. The hospital should use the care area or organize activities to promote the function, and also conduct functional training for the contractor and change the promotion method.

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The effect of introducing Art Therapy courses to enhance employee mental health at hospital

LEE Yi-Ju, LIN Hsiu-Mei, FANG Chun-Kai, LEE Shu-Chen

Introduction
One-third of life is spent in the workplace. Research data shows that 10% of employees have taken time off due to depression, causing losses to individuals and companies. Based on the results of the patient safety culture survey in our hospital, it is recommended to increase the resilience of employees and the related courses to improve work-life balance. Therefore, the art therapy psychology curriculum is planned to promote self-awareness and self-exploration. The results show that this course can improve employees’ health intelligence and mental health, and improve employee resilience and work-life balance.

Purpose/Methods
Course: Planning the "Dome Art Treatment Workshop of the Baroque Church" course, combining creative art expression and psychotherapy. Period: 4 times from May to October 2017. Content: Professional lecturers lead in the classroom, with music, crayons, drawing paper, expressive art from the visual image
Electronic Poster Session

To Explore the Effect of Stretching Exercises on Musculoskeletal Problems, Self Motivation and Basic Psychological Needs in Nurses

CHEN SHU-CHUN, CHANG SHU-HUNG, LIN YU-LI, TUNG TAO-HSIN

Introduction

The literature shows that nurses have musculoskeletal problem in the workplace of up to 30.0%~91.6%, and the most useful way is exercise. To use the self-determination theory model proposed by Deci and Ryan (1985), to apply the strength of self motivation to interpret a behavior, and then find out its relevant predictors. The purpose: (1) Understand the musculoskeletal problems, self motivation, and basic psychological needs of nurses. (2) Verifying the effect of stretching exercise intervention on the musculoskeletal problems, self motivation and basic psychological needs of nurses.

Purpose/Methods

In large medical teaching centers, three neurological and three neurosurgery wards, two units were randomly selected to the experimental group or the control group. Excluding acute pain who have used the treatment regularly, the experimental group provided stretching exercise message, group dynamics and stretching exercise posters, and the control group only provided the posters. The first to the eighth week is intervention period and four weeks only provided the posters (total 12 weeks). Three structured questionnaires (Brief Pain Inventory, Sport Motivation Scale, and Basic Needs Scale) are filled out (in 1.8.12 weeks).

Results

41 experimental group and 47 control group had a prevalence of musculoskeletal problems of 70.5%, and the top three occurred: shoulder and neck (20.45%), waist (18.2%), hand (9.1%), and thigh (9.1%), autonomous motivation: intrinsic motivation > extraneous motivation > internal motivation > no motivation, identification motivation, basic psychological needs: relatedness > autonomy > competence, and the intra-group of the most severe pain (P=0.037) and the average pain degree (P=0.041) in the musculoskeletal problem, and the intra-group and between-group of non-autonomous motivation (P=0.008, P=0.022) and motivational intensity (P=0.002, P=0.014) and relatedness (P=0.022, P=0.022) have significant improvements and differences.

Conclusions

In the future, the head of the unit may plan a short-term stretching exercise to relieve the musculoskeletal problems of the nurses. Through different strategies, they can adapt to their psychological needs, strengthen their autonomy motivation, and actively promote personal health management.

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Discussion on the health of shift employees and abnormal working load

HUNG-AN Hsieh, HSIAO-FONG Yeh

Introduction

The health of shift employees can identify harmful diseases or risk factors through physical examination. Therefore, these data are important message. It can tell us the employees’ health conditions and other physical or mental symptoms. So that we could know when the employee should take rest, exchange work or reduce working hours. Therefore, we should take attention about these issues, the employee health examination must be implemented and taken seriously.

Purpose/Methods

Collect information by the health examination report and abnormal workload questionnaire of hospital employees on duty of the shift. Using the "Overwork Risk Assessment and Personal Health Management System" by the Occupational Safety and Health Administration and Business Intelligence (BI) tools to organize and statistical the employees health trends over the years.

Results

In 2018, among the hospital employees who had health examination information and need on duty of the shift. Because of work lead to cardiovascular and cerebrovascular diseases, the number of low-risk are 39, the medium risk are 41. Individuals with low risk of cardiovascular and cerebrovascular diseases are 76, the number of medium risk are 1 and high risk are 3. 10 years to get cardiovascular disease are 80 with low risk. Abnormal rate of health examination items compare with the year of 2017, cholesterol (25.36%) decreased by 5.41%, LDL-C (13.77%) decreased by 1.61%.
Conclusions
In nurses staff, the average personal fatigue score was 70 point and the average work fatigue score was 60 point. It means nursing staff are more prone to myocardium infarction, hypertension, obesity and other physical and mental symptoms and other diseases, and have more workload and mental stress lead to accumulate the stress and fatigue, the risk of cause work cardiovascular and cerebrovascular diseases are belong to moderate risk.

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Life Growth Camp - the Program of Promoting the Life Force of Nurses

WANG Tsyr-Fen, WU Ya-Li, CHAN Chik-Yi, LIU Chih-Ju

Introduction
Nursing staff often feel tension in the body and mind and get lost of strength and power in the work caused by high stress. The Nursing Fellowship provides nursing staff an off duty day to attend the one-day life growth camp. Through the program, nurses can get rest both physical and spiritual, and their life force can be inspected and improved.

Purpose/Methods
The purpose of this program is to expect the nurse staff being able to get rest and refreshment. The Nursing Fellowship (supported by Dept. of Pastoral Care and Dept. of Nursing) provides the program of ‘life growth camp’. We choose a comfortable resort for nurses to participate the program. By methods of relaxed body rhythm, inspirational life witness sharing, easy small group discussion, a relaxing spa, and taking a walk on the prairie, we hope those caregivers can relax themselves.

Results
After participating in the activity, the degree of body and soul satisfaction increased, and it was statistically significant (P<0.05). Comparing pretest and posttest, relaxation of mood is from scores 6.5 to 9.0. Power to change the current predicament is increased from scores 6.7 to 8.8. New direction and hope for life is increased from scores 6.8 up to 8.8. The overall satisfaction after participating was 9.33 points. Participants highly agree that they recommend colleagues to participate.

Conclusions
Through the camp activities, nurses can withdraw from their high tension works, and that greatly helps them improving their life force. It is expected to be held regularly, so that the nursing staff can temporarily withdraw from their high pressure works and can regain their strength.

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The perception of health from the salutogenic perspective in healthcare workers

MANTAS Susana, LLUCH Maria-Teresa, JUVINYà Dolors

Introduction
Reorientation of healthcare services towards more efficient health promotion interventions in the workplace is a question that is been delayed. Despite current policies and guidelines, it is the least developed key action in the Ottawa Charter. From the approach of the health promotion, focused on occupational health settings, the conceptual and metric principles of the positive perspective of mental health have been considered: the Multivariate Model of Positive Mental Health and the Salutogenic Model. Healthcare workers are a fundamental asset for the Medical Emergency System (SEM).

Purpose/Methods
The aim of the study was to evaluate the perception of mental health of the healthcare workers and to relate the variables referred to the context of work with positive mental health (CSM +) and Sense of Coherence (SOC). Descriptive, transversal and cor-relational study. The participants developed their work in the region of Girona. The sample was n = 493, with a participation rate of 82.35%. Regarding the degree of job satisfaction, 46.8% of the population said they were very satisfied.

Results
In general, SEM healthcare workers indicated a greater degree of job satisfaction in relation to satisfaction with personal life and optimistic outlook for the future, attitude of help towards others, coping skills in the face of stressful and / or conflictive situations, personal security, ability to adapt to changes as well as the ability to establish interpersonal relationships. With higher overall job satisfaction, SOC levels increased.

Conclusions
In general, the SEM healthcare workers presented high scores in the SOC and CSM + questionnaires.

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Provide Telecare services to workplace Promote employee health

WU Ju-Hsien, TANG Ming-Tsung, YANG Yu-Wen

Introduction
In 1997, the Luxembourg Declaration on Workplace Health Pro-motion in the European Union stated that workplace health pro-motion can be achieved through a combination of improving the work organization, promoting active participation, and encour-aging personal development. In 2007, the government of Taiwan cooperated with high-tech-nology companies and medical insti-tutions to set up a telecare platform. We expect to promote
workplace health through the integration of informative system and medical care services.

**Purpose/Methods**

We screened the health exam reports of 1500 employees working at a high-technology company, and identified those who with metabolic syndrome (e.g. overweight, hyperglycemia, hypertension or hyperlipidemia). 50 employees with were enrolled in the project. The participants were taught to use the telecare devices and asked to send the data of blood pressure and blood sugar checked at workplace or home to the medical institution weekly. The medical staff provided individualized health education online according to the record.

**Results**

The project was implemented between August and December 2017. Blood test and body-weight measurement were done at beginning and the end. 50 employees, including 37 males and 13 females participated the project. The average age of the participants was 46.7 years. In initial, there were 21 people with HBA1C ≥5.7%, and 33 people with overweight (BMI ≥24 kg/m2). After intervention for 4 months, 10 (47%) of 21 people showed glycemic improvement, and 11(33%) of 33 people got weight reduction.

**Conclusions**

Employees are important assets of the company, so that the company cares about the health employees and thus enhances the quality of the company. Through telecare services, the high-technology company employees would change their health behaviors and then get the benefits of glycemic improvement and weight reduction. Providing remote medical care services in the workplace can effectively change employee health and saving medical care cost.

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**Why conduct league of baseball clubs?**

**LEE Dongwon**

**Introduction**

Despite hospitals’ effort to promote their workers, significant achievements are not made. Thus, Korea HPH Network has managed baseball competitions since 2001, and around 420 people from 14 institutions have participated in this competition. The objective of this study is to measure participants’ achievements within their workplace based on their friendship grades. “Friendship” in this case means sharing interests and values based on faith, devotion, and affection between colleagues despite differences in gender, age, and position.

**Purpose/Methods**

47 structured questionnaires were distributed to both members of baseball club and non-members in equal numbers, within 3 areas. 1) 15 questions about relationships between superiors, colleagues and subordinates in friendship level field. 2) 20 questions about one’s job satisfaction, organizational commitment, team accomplishment recognition, turnover intention and stress in friendship accomplishment field. 3) 12 questions about expectations, equipments, resources and chances to earn success in friendship fidelity field. T-test was held to all raw data, through SPSS.

**Results**

In all three fields, employees in baseball club scored higher than employees who did not join the club. In detail, the average scores between non-members and members were 69.93 : 74.41 (t = 3.59, p<0.00) in friendship level field, 63.70 : 64.93(t = –2.45, p<0.01) in friendship accomplishment field and 70.99 : 72.10 (t = 0.98, p<0.02) in friendship fidelity field.

**Conclusions**

In all level, accomplishment and fidelity fields, baseball club members scored higher than non-members, and the data was statistically significant. Baseball club, even with small cost was making productive results. Specifically, turnover rate and stress rate, which were hospitals’ core problem, both got better through club activity. Thus, it is evident that club activities, including baseball club cause positive influence in hospital’s management and accomplishment.

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**Study on the Relationship between Positive Emotions and Work Engagement of Nursing Staff in Taiwan**

**LIN Tseng-Yu, LO Mu-Chen**

**Introduction**

Nurses account for approximately 50% of the total number of personnel in medical organizations in Taiwan and are irreplaceable and significant front-line healthcare providers. In the face of the “shortage of nurses” and at the request of “patient safety” and “medical quality”, it is necessary to explore the work engagement issues of nurses from different dimensions.

**Purpose/Methods**

The research questionnaire was distributed and recycled 510 questionnaires via Google. This study employed a structured questionnaire measured by a 5-point Likert scale with five options. And the study used Structural Equation Modeling as the main data analysis method. In this way, the verification factors and reliability analysis of each facet are performed. This research plan was approved by the Human Body Trial Review Committee, Kaohsiung Medical University Hospital.

**Results**

1. Analysis results, the load measured by each facet reached a significant level and the load value was greater than 0.6, the average variation extraction was above 0.5, and the combination reliability was also above 0.75. The measurement of each facet has been effective and internal consistency 2. The overall model matching test results show; CMIN/DF=3.344; RMSEA=.068; GFI=.983; AGFI=.954; NFI=.985; CFI=.989, all of the above indicators meet the theoretical requirements standard. 3. Positive emotions have a significant positive impact on job inputs (Estimate=.751, S.E.=.052, CR=14.526, p-value=.0001)
Conclusions
Positive emotion is conducive to enhance job engagement (vigor, absorption, and dedication). The results of this study show that, positive emotion has significant effect on work engagement. Positive emotion gains the highest recognition from nurses. If one has more positive emotions and less negative emotions, his/her work engagement will be higher. Therefore, in regard to nursing management policies, it is suggested to promote positive emotion.

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The Effectiveness of a Diversified Workplace Health Promotion Hospital
LIN Ching-Cheng, TASI Chun-Chi, LI Wan-Chen

Introduction
From the results of 2017 employee physical examination, both factors of “Health Risk” and “Overwork Risk” with high populations. In order to improve the stress load and develop healthy living habits, Hsiao-Kang Hospital develops health promotion workplace which not only care employees physical also mental and spirits well-being health.

Purpose/Methods
From January to October 2018, the hospital plan diverse health workplace activities. Physiological activities include aerobic exercises, stair climbing, running and healthy educational courses. Psychological activities combine stress reduction course, healing hand-made course and photography course. Social activities contain Family Movie Day and Staff Outings. Finally it conducts the results of 2018 employee physical examination to compare with the results of 2017.

Results
The rate of high blood pressure, high blood sugar and high cholesterol was 22.3% in 2017 and 20% in 2018, which decrease 2.3%. The Body Mass Index(BMI) rate was 44.44% and 42.43% in 2018, which decrease 2.01%. The Central Fatigue Index was 70.23% in 2017 and 63.19% in 2018, it decrease 7.04%.

Conclusions
The medical workplace is a high-stress environment which leads to un-health and overwork high risk. By diverse healthy activities, it effectively improved reduced the rate of high blood pressure, high blood sugar and high cholesterol, the rate of BMI and fatigue. We plan to design different type health programs for specific employees, and implement information intelligence management in future.

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Project on identifying key figures for measuring workplace health promotion
GROSS Nicole, SCHIMPELSBERGER Sarah, ÜBELACKER Anna, OPPENEDER Viviane

Introduction
Workplace health promotion is advocated to progress the health and well-being of employees. Within a thesis of the master’s program in Advanced Nursing Practice at the University of Paracelsus Medizinische Privatuniversität Salzburg there is a project in cooperation with the voestalpine AG Linz. Health promotion and determine key figures is one of the main topics of the masterthesis. Health is an asset which is difficult to measure, therefore the purpose of this project is to identify key figures. Health promotion expert will be interviewed to determine key figures and afterwards to be compared with results from the literature research. The evaluation and presentation of the results are treated confidentially, transparent and scientifically neutral. The aim of the expert survey is to identify the most important key figures for health measuring.

Purpose/Methods
The research design of this project will be mostly qualitative. First there will be an expert survey at the HPH conference in Warchau by explorative guided interviews. With the results of this survey there will be created a partly structured guided interview. In conclusion managers from voestalpine AG Linz will be interviewed. Results will be compared with the literary research and be written down. Another part of the master’s thesis is the quantitative analysis and interpretation of current data regarding to health promotion of the voestalpine AG Linz. In the end of the project there will be key figures and ideas shown with which health promotion could be measured.

Results
The project is just about to start, so there are no results yet. But to exhaust the health potential of the employees it is important to consider working circumstances and conditions.

Conclusions
Identifying key figures to measure health and how to preserve health sustainable is one of the major topics of this project.

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