



THE “Integrated management between hospital and territory of patients suffering from heart failure (HF)- the role of pharmacists in the community” PROJECT

A “GIFT” for the heart of citizens with heart failure

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Background

The GIFT experimental project is being implemented in a territory of the Autonomous Province of Trento (520,000 inhabitants), where hospital specialists (physicians, pharmacists, nurses, dieticians) of the Hospital of Rovereto and general practitioners working in the Vallagarina health district (89,500 inhabitants) have been involved in a shared management process of patients suffering from heart failure (HF) for years.



HF is a frequently occurring disease, associated with significant mortality and morbidity rates and extremely high social costs.

The compliance with performance indicators (compliance level with investigations or recommended therapies, etc.) by patients suffering from HF is more easily achieved during the hospitalisation period and generally decreases after dismissal, with a subsequent increase of hospitalisation rates, the worsening of the quality of life and the likely reduction of survival rates.

The research project aims at verifying if the involvement of pharmacists on the territory in the follow-up of patients suffering from HF contributes to improve the management of the disease.

Thanks to their capillary distribution on the territory, public pharmacies represent the most easily accessible point of care for citizens, where the “dispensing” of medicines offers the opportunity to provide information and advice on the correct life style, in order to improve the compliance with therapies and assess the occurrence of adverse effects.

Objectives

Primary objectives:

- Improve the patient's quality of life
- Reduce the number of hospitalisations for HF
- Reduce the accesses to emergency departments
- Reduce the length of stay in hospital

Secondary objectives:

- Improve the compliance with pharmacological therapies

Professionals involved

- 40 territory pharmacists working in 20 pharmacies (public and private) – Vallagarina Health District -Trento
- 2 hospital pharmacists – Hospital of Rovereto
- 2 pharmacy directors – Pharmaceutical Service – Care and rehabilitation management – Provincial Health Authorities APSS Trento
- 5 medical directors – Hospital of Rovereto
- 1 dietician - Hospital of Rovereto

Results

Group	Male		Female	
	No. of patients	Average age	No. of patients	Average age
CONTROL	5	77	5	82
INTERVENTION	12	78	11	72
TOTAL	17	78	16	75

The 1st stage ended on 31 March 2010, stage 2 and 3 are currently being implemented.

Patients recruited up to 31 March 2010: 33 with an average age of 77 years:

- 10 controls
- 23 interventions.

Conclusions and transferability

The project will last approximately two years and, if the result is positive, it may be implemented in the other districts of the Autonomous Province of Trento, with the involvement of all pharmacies and of the citizens suffering from HF.

This project is the first experience of this kind in Italy aiming at enhancing the role of pharmacists, both in hospitals and on the territory, as educators and point of reference for patients suffering from chronic diseases, like heart failure. The education of patients and caregivers provided in hospitals and enhanced at territorial level is a fundamental intervention in the management of the disease.

Methods

Project stages

1- targeted training for pharmacists: April 2009 – October 2009



With a targeted training course (9 meetings), territory pharmacists have been informed about the epidemiological relevance of heart failure and on the therapeutic management of the disease and have shared the most effective interventions, in compliance with their institutional role. They also defined the information tools to be used in pharmacies and devoted to the patients recruited in the study (materials supporting the information obtained in hospital).

Pharmacists themselves have also worked out the assessment instruments of their intervention (assessment grids).

2- Patients and caregivers education: continuous

All the patients suffering from HF hospitalised in the Operative Units taking part in the study (medicine, cardiology and geriatric medicine), together with relatives and caregivers, are specifically trained with the aid of printed materials, in order to enhance their *empowerment*.

This education stage involves different professional operators: nurses, dieticians and hospital pharmacists in order to comprehensively treat all the aspects of the disease.



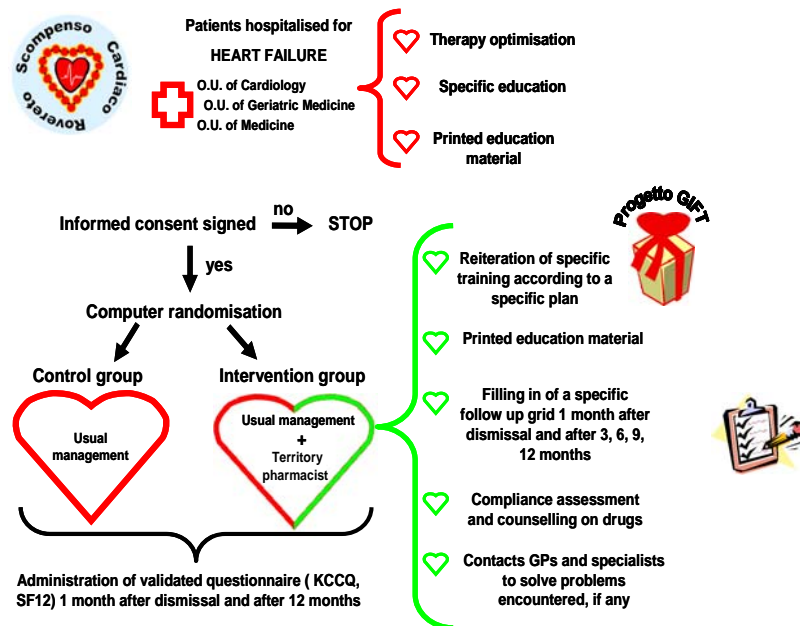
INFORMATION MATERIAL	
1-WHAT IS HEART FAILURE (H.F.)	
2-DISORDERS CAUSED BY H.F.	
3-WHICH ARE THE CAUSES OF H.F.	
4-WHAT CAN YOU DO	<ul style="list-style-type: none"> weight, pressure, breathing smoke food (salt, magnesium and potassium, alcohol, liquids, diet) physical exercise and sexual activity anti-flu vaccination travelling pregnancy and breast-feeding
5-WHAT CAN DRUGS DO	drugs
6- WHAT SHOULD YOU ASK YOUR DOCTOR	
7- WHEN YOU SHOULD INFORM YOUR DOCTOR	
8-WHEN YOU SHOULD IMMEDIATELY CONTACT THE DOCTOR	

3- Patient recruitment: from December 2009 until the achievement of 200 patients

Patients willing to take part in the study are thus recruited with their written informed consent, and randomised in an intervention and a control arm.

Patients in the intervention arm are followed by the territory pharmacist (reference pharmacist) according to a planned and structured path.

One month and one year after the hospitalisation, patients of both arms are asked to answer a questionnaire on the quality of life (administered by the same person): KCCQ (The Kansas City Cardiomyopathy Questionnaire) and SF 12 (Short Form Health Survey).



4- Data analysis December 2011

The GIFT project will end with the evaluation of the effectiveness of the pharmacist's intervention in the patient follow-up, with the analysis of data gathered in pharmacies (specific grid) and in the hospital (questionnaires administered to patients during the recruitment stage and at the end of the study).

The improvement of the quality of life in the intervention arm, if any, will be assessed, as well as the number of hospitalisations compared to the control arm. In order to assess the compliance with the therapy, the DDD/user will be calculated for each group of prescribed drugs.