Promoting Health Dietary Awareness among Elderly Population through Community-Based Healthcare Institutions: An Application of the Health Belief Model and Evaluation Tool

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Neihu Cathay Clinic / Wan-chai Community

Neihu Wanchai Community is a partner of Neihu Cathay Clinic. The community development association also provides an activity base for the elderly living in Neihu District, Taipei City.





Introduction

- According to the World Health Organization, noncommunicable diseases cause 41 million deaths globally each year, accounting for 71% of the total global mortality.
- In Taiwan, apart from accidents and injuries, the top 10 causes of death are predominantly chronic diseases such as cardiovascular diseases, diabetes, and hypertension.

Introduction

- The study results showed a significant decrease in overall mortality and disease-specific mortality among individuals who consumed 90-225 grams of whole grains daily, with the most significant reductions observed in the relative risk of cardiovascular diseases and cancer.
- Therefore, the consumption of whole grain products is considered to contribute to a lower risk of noncommunicable diseases.

Status Description

- according to the statistics from the Department of Health in Taiwan in the year 2021, over half of the top 10 causes of death in our country are related to chronic diseases, and the mortality rate from chronic diseases is on the rise. This underscores the importance and urgency of reducing the incidence of chronic diseases.
- A study by the World Health Organization (WHO) has shown that individuals who consume a higher intake of dietary fiber and whole grains have a lower risk of developing heart disease, stroke, diabetes, and other chronic diseases compared to those who consume less fiber.

Methods & Subjects

- This study aims to promote healthy dietary awareness among the elderly population through community-based healthcare institutions, using the HBM and evaluation tool.
- Nonparametric and paired-sample t-tests were used to analyze the data. Qualitative analysis was also employed to investigate the study's significance.

Finding

Table 1: Chi-square Test of Whole Grain Food Intake Behavior and Regulatory Factors, Personal Beliefs

		Pre-intention	Intention	Preparation	Action	Maintenance	X ²
		N(%)	N(%)	N(%)	N(%)	N(%)	P-Value
Gende	<u>er</u>						
Male		1 (50)	0(0)	1 (50)	0(0)	0(0)	2.543
Femo	ale	4(23.5)	9(52.9)	3(17.6)	1 (5.9)	0(0)	P=0.468
<u>Age</u>							
50-5	9	0(0)	1(100)	0(0)	0(0)	0(0)	2.806 P=0.833
60-6		4(30.8)	6(46.2)	2(15.4)	1 (7.7)	0(0)	
70-7	9	1 (20)	2(40)	2(40)	0(0)	0(0)	
<u>Marita</u>	<u>l Status</u>						
Singl	е	0(0)	1(100)	0(0)	0(0)	0(0)	2.897 P=0.822
Marr	ied	4(36.4)	4(36.4)	2(18.2)	1 (9.1)	0(0)	
Divorc Separa	ed, ated, Widowed	1(16.7)	4(66.6)	1(16.7)	0(0)	0(0)	
Educa	tion Level						
Elem or Be	entary School elow	0(0)	1(100)	0 (0)	0(0)	0(0)	5.556 P=0.783
High	School	4(30.8)	6(46.2)	2(15.4)	1 (7.6)	0(0)	
Unive	ersity	1 (25)	2(50)	1 (25)	0(0)	0(0)	
	luate School pove	0(0)	0(0)	1 (100)	0(0)	0(0)	
* Signif	icant at P < 0.05						

Results

The descriptive analysis results of the stages of whole grain food intake behavior also indicate that only one person in the target group is in the action stage (5.3%), while 21.1% of the elderly are in the preparation stage. Furthermore, 73.7% are currently not engaging in whole grain dietary behavior, with 26.3% of them having no intention of consuming whole grain foods, placing them in the pre-contemplation stage.

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The first week

From the results of the needs assessment, it is known that they still have some basic dietary concepts that have not yet been clarified, so knowledge courses and related activities are conducted in the first week.



The second week

The second week also includes knowledge courses and related activities, but the content focuses more on the understanding of whole grains, introducing in detail the characteristics of whole grains, which ingredients are whole grains, and how to identify whole grain-related products or foods.





The third week

- This week we explain in more detail the benefits that whole grains can bring. (Improve conscious interests)
- In addition, we also explain some diseases that the elderly need to pay attention to and their relationship with whole grains, hoping to increase the elderly's perceived severity and perceived risk.



The fourth week

In the last week, we actually went to the supermarket to buy some whole grain products, examining whether they could integrate what they had learned in the past three weeks. Participants had to distinguish and purchase whole grain and refined grain products by themselves. They also had to share why they chose a particular product and what their selection criteria were when they presented it to the group.





Results & Finding

- After conducting a needs assessment, most female participants (89.5%) from the Wan-Chai community, Taiwan, aged 58 to 75 years old, attended communal dining.
- Although they generally had high knowledge and positive attitudes towards diet, most participants did not perceive themselves as having a high risk or severity of chronic diseases. While social support for whole-grain consumption was present, the difficulty in obtaining whole-grain food was a common barrier.

Discussions & Conclusion

- A descriptive analysis of whole grain consumption stages showed that only 5.3% of participants were in the action stage, 21.1% in the preparation stage, and 73.7% were not consuming whole grain, with 26.3% not intending to do so.
- Community-based healthcare institutions, like HPH, can partner with hospitals and public health to strengthen primary care and promote public health. By applying the Health Belief Model (HBM) and evaluation tools to promote healthy dietary awareness among the elderly, they can contribute to the conference's theme of strengthening primary care.

Thanks for your listening...

