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Enhancing Nutrition and Function in Outram Community Hospital (OCH): A Novel Dietitian-Occupational Therapist (DIT-OT) Intervention for Older Adults

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Background:

Prior research suggests that older adults often prioritize convenience over nutritional value when selecting meals or purchasing ingredients due to limited nutritional knowledge and functional limitations^{1,2}.

This pilot program, "Diet Rehab: My Healthy Supermarket Tour" tackles these issues by empowering participants to make healthy choices and improve their confidence in activities of daily (ADL) living through simulated shopping experiences.

Aim:

This project aims to enhance patients' nutritional knowledge, improve numeracy skills relevant to financial management, and enhance their satisfaction through participating in a simulated shopping tour during their hospital stay.

Objectives:



Improve patients' financial literacy, decision-making through simulated shopping experience.



Enhance patient satisfaction in hospitals through engaging learning sessions.



Integrate ADL training and dietary counselling into a single gaming session to enhance cost-efficiency and workforce utilization.



Setting goals related to shopping provides patients with a sense of purpose and motivation to engage in therapy.

Methods:

From September to December 2022, patients from wards 7C and 9B in OCH were screened.

Patients with severe cognitive, mobility impairments or on specialized therapeutic diets were excluded.

Thirty participants were engaged in simulated supermarket tours that included food models, real food packaging, and fake money.

A dietitian (DIT) provided dietary education, while occupational therapists (OTs) assisted participants during simulated shopping while incorporating financial management training.

Paired T-tests using Microsoft Excel were employed to assess participants' knowledge gains, and participant satisfaction was evaluated through feedback collection.

Results:

7 sessions of shopping tour

30 patients participated (female=24, male= 6)

Group interactive education increased efficacy compared to one-to-one therapy.

All participants provided ratings of 'excellent' or 'good' based on their experience with this activity

96% participants expressed that this game effectively improved their comprehension of ingredient selection

93% demonstrated confidence in adopting a healthier dietary regimen informed by the game

t-Test: Paired Two Sample for Means

	Variable 1	Variable 2
Mean	26.4	30.6
Variance	5.8	0.3
Observations	5	5
Pearson Correlation	-0.606478435	
Hypothesized Mean Difference	0	
df	4	
t Stat	-3.384456449	
P(T<=t) one-tail	0.013835634	
t Critical one-tail	2.131846786	
P(T<=t) two-tail	0.027671268	
t Critical two-tail	2.776445105	

- ✓ Improvement in knowledge pre- and post- session is significant.
- ✓ However, it may be limited by the small sample size of participants.

One participant (Mdm. C) stated that she learned how to make healthy food choices and shop safely with this guided grocery shopping session.



Picture 1: Mdm. C participated in a simulated shopping session guided by OTs and a DIT in patient activity room of Ward 7C.



Picture 2: Participants chose carbohydrate sources to compose a healthy plate from a variety of food items.

Summary:

- ✓ To the best of our knowledge, this combined intervention of group nutrition education with functional training represents a novel care model in Singapore.
- ✓ This simulated shopping interactive game is a comprehensive intervention that effectively enhances both nutritional and functional independence, demonstrating outcomes comparable to specialized therapy.
- ✓ This adaptable intervention can be implemented across various healthcare settings, providing consistent patient benefits and facilitating widespread adoption.

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References:

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