

The Association of Health Literacy, Understanding of Health Information, and Food Choice in Female Caregivers



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Background

- ◆ Female caregivers play an important role to take care of their family health and food choice when one of family members is sick.
- ◆ Caregivers with inadequate health literacy skills have been shown to have poorer understanding of anticipatory guidance such as healthy food choice.
- ◆ Little is known about the relationships among health literacy, understanding of health information, and food choice in female caregivers at hospitals.

Study Purpose

- ◆ To explore the relationships among health literacy, understanding of health information, and food choice in female caregivers of adult patients

Methods

- ◆ Design: cross-sectional survey design
- ◆ Subjects: 217 female caregivers were recruited from 5 hospitals via convenience sampling
- ◆ Measures:
 - 1) Health literacy: 6 items of Newest Vital Sign (NVS)
 - 2) Understanding health information: 8 items of Mandarin health literacy scale (Lee S-YD, Tsai T-I, Tsai Y-W, 2013) from National Health Research Institutes
 - 3) Food choice: 12 items based on USDA Diet and health knowledge survey
- ◆ Data collection: IRB approval, self-administered questionnaire
- ◆ Data analysis: frequency and descriptive statistics, Pearson correlation coefficients

Results

- ◆ Mean age of female caregivers: 44.52 years old (SD=12.25), 46% graduated college and above, 68% housewife
- ◆ Level of health literacy
 - 1) Mean 3.62(SD=2.09) ranged from 0 to 6 indicating inadequate level
 - 2) Correction rates for NVS items: wide ranged from 47% to 77%
- ◆ Level of understanding health information : 3-point out of 5-point indicating greater need for further explanation

Table 1. Correction rates for NEW Vital Signs to measure health literacy

ITEMS	Correct Answer
1 If you eat the entire container, how many calories will you eat?	58.5%
2 If you are allowed to eat 60 grams of carbohydrates as a snack, how much Ice cream could you have?	56.2%
3 Your doctor advises you to reduce the amount of saturated fat in your diet. You usually have 42 g of saturated fat each day, which includes one serving of ice cream. If you stop eating ice cream, how many grams of saturated fat would you be consuming each day?	55.3%
4 If you usually eat 2,500 calories in a day, what percentage of your daily value of calories will you be eating if you eat one serving?	47.0%
5 Is it safe for you to eat this ice cream?	77.4%

Nutrition Facts
Serving Size ½ cup
Servings per container 4
Amount per serving
Calories 250 Fat Cal 120
%DV
Total Fat 13g 20%
Sat Fat 9g 40%
Cholesterol 28mg 12%
Sodium 55mg 2%
Total Carbohydrate 30g 12%
Dietary Fiber 2g
Sugars 23g
Protein 4g 8%
*Percentage Daily Values (DV) are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.
Ingredients: Cream, Skim Milk, Liquid Sugar, Water, Egg Yolks, Brown Sugar, Milkfat, Peanut Oil, Sugar, Butter, Salt, Carrageenan, Vanilla Extract.

- ◆ Belief of illness to food: believed to have strong relationships between illness and food nutrients such as calories, trans-fat, cholesterol, and sodium
- ◆ However, only 31% of women read food label.
- ◆ Women's better health literacy and greater perceived benefit of healthy diet pattern were associated with better food choice.

Conclusions

- ◆ Female caregivers reported inadequate health literacy but they believed illness and food nutrients were highly related.
- ◆ Health education and counseling for female caregivers may help promoting women and their family health.
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