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 Mandarine 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

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>Correct Answer</th>
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<tbody>
<tr>
<td>1. If you eat the entire container, how many calories will you eat?</td>
<td>56.3%</td>
</tr>
<tr>
<td>2. If you are allowed to eat 60 grams of carbohydrates as a snack,</td>
<td>56.2%</td>
</tr>
<tr>
<td>how much ice cream could you have?</td>
<td></td>
</tr>
<tr>
<td>3. Your doctor advises you to reduce the amount of saturated fat</td>
<td>55.3%</td>
</tr>
<tr>
<td>in your diet. You usually have 42 g of saturated fat each day,</td>
<td></td>
</tr>
<tr>
<td>which includes one serving of ice cream. If you stop eating ice</td>
<td></td>
</tr>
<tr>
<td>cream, how many grams of saturated fat would you be consuming</td>
<td></td>
</tr>
<tr>
<td>each day?</td>
<td></td>
</tr>
<tr>
<td>4. If you usually eat 2,500 calories in a day, what percentage of</td>
<td>47.0%</td>
</tr>
<tr>
<td>your daily value of calories will you be eating if you eat one</td>
<td></td>
</tr>
<tr>
<td>serving?</td>
<td></td>
</tr>
<tr>
<td>5. Is it safe for you to eat this ice cream?</td>
<td>77.4%</td>
</tr>
</tbody>
</table>

- 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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Bibliography