Nursing session

What is the effectiveness of nutrition education in life quality of the patients with stoma (OP030)

B. Dag (Turkey)
What is the effectiveness of nutritional education on the quality of life of patients with stoma?

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Developments in technology and medicine

Improvement in early diagnosis and treatment methods

Disease related deaths decrease

Life expectancy extends
One of the interventions which changes life style and affects quality of life

Creation of a Stoma
Bowel stoma is an artificial opening in which the bowel is anastomosed to abdominal wall.
Stoma which can be created in any ages

Temporary or permanent

The most common condition which requires permanent abdominal stoma

Colorectal Cancers
Body image changes with stoma

Physical (leakage of faeces, gas, odour, skin issues)
Psychological (reduction in self-esteem and self-confidence, depression, anxiety)

Social (abstracting him/herself from the community, quit a job, dependency to others)
Sexual problems

Quality of life is negatively influenced
Malnutrition occurs
Reasons of malnutrition in patients with stoma

- Decrease in food intake in preoperative period
- Limitation in food intake in postoperative period
- Refuse to eat in order not to excrete
- Malnutrition develops
- Hospitalization prolongs
- Nutrition related problems occur during hospitalization
Colorectal cancers are the forth in frequency among all cancers and the second among the causes of death from cancer.

We have studied on this issue because a competent rehabilitation contributes to quality of life of patients with stoma.
The present study was conducted to;

- Determine nutritional status
- Educate patients about stoma care and nutrition
- Determine the effect of nutrition on quality of life
MATERIALS AND METHOD
Inclusion Criteria

• Not being in terminal period
• Being conscious and mentally healthy
• Having *ileostomy* and/or *colostomy* opened
Study was conducted with 26 patients with a mean age of 48.81±19.08 years (21–86 years)
STUDY DESIGN
EDUCATION OF PATIENTS WITH STOMA

- Coping with the problems
- Gaining self care skills
- Regaining self confidence
- Maintaining quality of life
Education of stoma care

Preoperative period

- Getting psychologically prepared for the operation
- What is stoma? How does it work?
- Information regarding postoperative equipments

Postoperative period

- Stoma care
- Effect of stoma on daily living activities
- Psychological support
- Information on how to and where from obtain the equipments
The quality of life questionnaire (20 questions).
(by Hunt and Mc Kenna)
Likert-type scaling ranging from 1 to 5 “always” (1), “often” (2), “sometimes” (3), “rarely” (4), and “never” (5) “0” was the worst and “100” the best.

The quality of life questionnaire score is the average of answers to 20 items.
Answers were marked by the investigator for patients who were unable to mark.
The time to complete the questionnaire was 5-10 minutes on average.
It was administered to patients before the discharge and three months afterwards.
✓ I feel the need to know where the nearest toilet is
✓ I worry about noises from the stoma
✓ I worry that the pouch will loosen
✓ My stoma pouch limits the choice of clothes that I can wear
I feel tired during the day
I am afraid of meeting new people
It is difficult to hide the fact that I wear a pouch
My stoma makes it difficult for me to be with other people
I sleep badly during the night
I feel lonely even when I am with other people
I need to rest during the day
I worry that my condition is a burden to people close to me
I avoid close physical contact with my friends
I worry that my family feel awkward around me
I feel embarrassed about my body because of my stoma
It would be difficult for me to stay away from home overnight
I worry that the pouch rustles
I worry that the pouch may smell
My stoma makes me feel sexually unattractive
I become anxious when the pouch is full
Preparing for the nutrition education booklet

- The medical literature devoted to the diet of stoma patients was reviewed by the investigator.
- Sample booklet were assessed.
- Expert opinions obtained.
- The opinions of two stoma patients with different educational status on the clarity.
- Design of the booklet were also obtained before reproduction.

- Floruta C.V., CN. 28(1),28-31, 2001,
- Fulham J.; British Journal of Nursing 13(12); 702-708, 2004.
- Christ P.;. Ostomy Quarterly. Winter 36(2); 12-14, 1999,
- Floruta C.V
- Information for Patients (retrieved on 30.01.2008)
• Nutrition education was given face-to-face and one-to-one to the patients for 45 to 60 minutes for each patient.

• Education booklet was given to all patients.
Dietary program about colostomy and ileostomy

Advices aimed at nutritional problems (diarrhea, prevention of fecaloma formation, constipation, gas, bad smell)

Dietary advices about potassium, sodium, mineral and liquid loss
Living with stoma makes patients have physical and psychological difficulties.

Thus, nutritional monitorization of the patients with stoma is crucial.
So, we did not have any problems about giving education mainly because the patients were willing to receive education and get information.

Recommendations and guidelines about nutritional management in the early periods of rehabilitation of patients after stoma surgery are required.
✓ We called patients for check-ups (control) in postop 3. month.
✓ One week before the check-up, our team physician gave appointment to the patients.
✓ There were some questions after discharge (for example; traditional food consumption, effects of specific foods, whether they are harmful or not).
✓ We answered these questions by phone.
To reach the booklet, please write our e.mail adress:
“birguldag@yahoo.com”
“nersoz@gmail.com”
RESULTS
Table 1. Preoperative, Postoperative and Postoperative 3rd Month Anthropometric and Bioelectrical Impedance Measurements of the Patients

<table>
<thead>
<tr>
<th>Measurements</th>
<th>Preoperative</th>
<th>Postoperative</th>
<th>Postoperative 3rd Month</th>
<th>P*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Weight (kg)</td>
<td>69.90±12.80</td>
<td>66.33±12.04</td>
<td>69.07±12.30</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Body Mass Index (kg/m²)</td>
<td>25.06±4.17</td>
<td>23.82±4.00</td>
<td>24.80±3.72</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Fat percent</td>
<td>38.76±12.60</td>
<td>36.20±17.06</td>
<td>40.76±9.66</td>
<td>0.341</td>
</tr>
<tr>
<td>Fat mass</td>
<td>27.34±11.24</td>
<td>27.38±11.64</td>
<td>29.70±10.00</td>
<td>0.067</td>
</tr>
<tr>
<td>Muscle percent</td>
<td>61.53±12.90</td>
<td>58.06±18.38</td>
<td>58.46±8.50</td>
<td>0.382</td>
</tr>
<tr>
<td>Muscle mass</td>
<td>42.00±10.15</td>
<td>40.52±10.90</td>
<td>38.33±7.00</td>
<td>0.018</td>
</tr>
<tr>
<td>Water (L)</td>
<td>29.46±6.33</td>
<td>28.26±7.54</td>
<td>30.58±5.94</td>
<td>0.007</td>
</tr>
<tr>
<td>Basal Metabolic Rate (kcal/day)</td>
<td>1448.65±268.92</td>
<td>1310.92±227.61</td>
<td>1447.12±192.94</td>
<td>0.002</td>
</tr>
</tbody>
</table>

* Friedman test with Bonferroni adjustment
<table>
<thead>
<tr>
<th>NRS-2002</th>
<th>Preoperative</th>
<th>Postoperative</th>
<th>Postoperative 3\textsuperscript{rd} Month</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Not at-risk Score &lt; 3</td>
<td>12</td>
<td>46.2</td>
<td>8</td>
</tr>
<tr>
<td>At-risk Score ≥ 3</td>
<td>14</td>
<td>53.8</td>
<td>18</td>
</tr>
</tbody>
</table>

Table 2. Preoperative, Postoperative and Postoperative 3\textsuperscript{rd} Month Nutritional Status of the Patients Based on Nutritional Risk Screening (NRS-2002)
Table 3. Distribution of nutritional problems before and after the nutrition education program and intra-group comparison

<table>
<thead>
<tr>
<th>Type of the Stoma Problem</th>
<th>Before Nutrition Education Program</th>
<th>%</th>
<th>After 3 months</th>
<th>%</th>
<th>P**</th>
</tr>
</thead>
<tbody>
<tr>
<td>No problem</td>
<td>26</td>
<td>100.0</td>
<td>16</td>
<td>61.55</td>
<td></td>
</tr>
<tr>
<td>Gas</td>
<td>17*</td>
<td>53.84</td>
<td>5</td>
<td>19.25</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>6*</td>
<td>15.38</td>
<td>2</td>
<td>7.7</td>
<td></td>
</tr>
<tr>
<td>Skin irritation</td>
<td>4*</td>
<td>11.54</td>
<td>1</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td>Odour</td>
<td>3</td>
<td>11.54</td>
<td>2</td>
<td>7.7</td>
<td></td>
</tr>
<tr>
<td>Pain</td>
<td>2</td>
<td>7.7</td>
<td>1</td>
<td>3.8</td>
<td></td>
</tr>
</tbody>
</table>

*The number n is folded.
**From the McNemar test.
Table 4. Comparison of postoperative and postop 3rd month mean quality of life scores of patients participating in the nutrition education program

<table>
<thead>
<tr>
<th>Quality of Life Scale</th>
<th>Mean Score (Range)</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postoperative</td>
<td>50.70±16.44 (24.00-81.00)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Postop 3rd month</td>
<td>66.23±17.20 (25.00-85.00)</td>
<td></td>
</tr>
</tbody>
</table>

*From the Wilcoxon signed-rank test.
It was concluded that nutrition education program reduced the symptoms and contributed to quality of life of patients with stoma.
THANK YOU FOR YOUR ATTENTION