Assess the knowledge regarding colostomy care among staff nurses and nursing students in NMCH, Nellore

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Abstract
A variety of gastrointestinal/genitourinary etiologies may necessitate the creation of a fecal or urinary diversion. Teaching the patient how to care of a new also my can be a challenging experience for the nurse. The patient with an stormy needs Encouragement, support and counseling to learn how to integrate self-stomy care into daily activities.

Among different types of surgically created ostomies, a colostomy is an opening constructed in the colon (large intestine) to allow for the Elimination of stool. A colostomy may be located in the ascending, transverse or sigmoid colon. The point of surgical resection will determine the consistency of the stool output. An ileostomy is surgically constructed from ileum (Small intestine) it is created high in the gastrointestinal tract, therefore, stool output is of relatively high amount and of liquid consistency (Vasilevsky & Gardon 2004).

Methodology: Quantitative research approach was utilized to assess the knowledge regarding Bowel wash among the staff Nurses and nursing students in NMCH, Nellore. The sample size was 60, of the 30 were staff nurses and 30 were student nurses. Non-probability convenience sampling technique was used for selection. of subjects. Semi structured questionnaire was used to assess the knowledge of staff nurses and student nurses regarding colostomy care.

Results: Level of knowledge regarding colostomy care among staff nurses, 8(53.3%) had inadequate knowledge, 6(40%) had moderately adequate knowledge and 1(6.7%) had adequate knowledge. Shows that with regard to knowledge regarding colostomy among nursing students, 8(53.3%) had inadequate knowledge, 5 (33.3%) had moderate knowledge and 2(13.3%) had adequate knowledge.

Conclusion: The study concluded that majority of staff nurses and nursing students had inadequate knowledge regarding colostomy care.

Keywords: colostomy care, knowledge, staff nurses

Introduction
M. Joyce Black 2005 study that in preparation for discharge, client need support and knowledgeable advice as they to know the nearest location for purchase of ostomy supplies immediately after dismissal, home deliveries of supplies may be necessary. The enterostomal therapy nurse can help the client learn to manage and accept the ostomy and to achieve a smooth transition from the health care facility to the home. Any city has established ostomy rehabilitation clinics to help clients and most large clinic to help clients and most large communities have an ostomy association that maintains contacts with American cancer society. These supportive group are helpful because client can share their ostomy concern with other who have the similar problem.

A home health care referral can add to the client peace of mind, identify a problems that might not otherwise be known and ensure necessary follow up care.

Before discharge advice client that it may take several weeks for them to regain their strength after major bowel surgery further when segment have been removed from the bowel, bowel habit may alter until body adjust to the situation. A nurse may need to teach the client because wound may not be healed totally by the time the client is discharged.
1) Majority 70% of ostomates had colostomy.
2) Majority 76% of the ostomates had 0-10 years of duration of ostomy.
3) 84% of ostomates had a change in their clothing style because of ostomy.
4) Majority 66% of the ostomates had a change in their dies because of ostomy 38% of Ostomates has problem while traveling due to Ostomy (oshea 2001).
5) 48% of the Ostomates were practicing irrigation to regulate their bowl.
6) 40% Ostomates were using two piece pouches.
7) All 100% of Ostomates felt comfortable with their Ostomy care. (TNA JOURNAL-2010)

Statement of the Problem
A Study to Assess the Knowledge Regarding Colostomy Care among Staff Nurses and Nursing Students in Nmch, Nellore.

Objectives
- To assess the level of knowledge regarding colostomy care among staff nurses.
- To assess the level of knowledge regarding colostomy care among nursing students.
- To compare the level of knowledge between staff nurses and nursing students regarding colostomy care.
- To find out association between the level of knowledge regarding colostomy care among staff nurse with their selected demographic variables.
- To find out the association between the level of knowledge regarding colostomy care among nursing students with their selected demographic variables.

Assumptions
The staff nurse and nursing students have some knowledge regarding colostomy care.

Materials and Methods
Quantitative research approach was utilized to assess the knowledge regarding colostomy care among the staff Nurses and nursing students in NMCH, Nellore. The sample size was 60, of the 30 were staff nurses and 30 were student nurses. Non-probability convenience sampling technique was used for selection. Of subjects. Semi structured questionnaire was used to assess the knowledge of staff nurses and student nurses regarding colostomy care.

Criteria for Sample Selection
Inclusion Criteria
1. Staff nurses who are available at the time of data collection
2. Nurses who know well English
3. Student nurses who are available at the time of data collection

Exclusion Criteria
1. Nurses who are excluded based on the following criteria
2. Nurses who are not willing to participate in this study
3. Nurses who are on leave

Score Interpretation

<table>
<thead>
<tr>
<th>S. No</th>
<th>Level Of Knowledge</th>
<th>Score</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Inadequate knowledge</td>
<td>0-12</td>
<td>&lt;50%</td>
</tr>
<tr>
<td>2.</td>
<td>Moderately adequate knowledge</td>
<td>13-24</td>
<td>51-70%</td>
</tr>
<tr>
<td>3.</td>
<td>Adequate knowledge</td>
<td>25-36</td>
<td>&gt;71%</td>
</tr>
</tbody>
</table>

Plan for Data Analysis
Data analysis was done using descriptive statistics and inferential statistics.

Descriptive statistics:
- frequency and percentage distribution of demographic variables
- Mean & standard deviation

Inferential statistics
- Chi-square test to find association with knowledge of mothers.

Results

![Percentage distribution of staff nurse based on age.](image)
Fig 2: Percentage distribution of staff nurses based on gender

Fig 3: Percentage distribution of staff nurses based on educational qualification.

Fig 4: Percentage distribution of staff nurses based on total professional experience.

Fig 5: Percentage distribution of staff nurses based on CNE/workshop related to Colostomy care.

Fig 6: Percentage distribution of nursing students based on age

Fig 7: Percentage distribution of nursing students on educational qualification.

Fig 8: Percentage distribution of nursing students on year of course.

Fig 9: Percentage distribution of nursing students based on CNE/workshop, related to colostomy care.
**Fig 10:** Percentage distribution of staff nurses and nursing students on level of knowledge regarding colostomy care.

**Table 1:** Comparison of Mean Knowledge Score and Standard Deviation among Staff Nurses and Nursing Students. (N=30)

<table>
<thead>
<tr>
<th>Sample Categories</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Nurses</td>
<td>17</td>
<td>4.2</td>
</tr>
<tr>
<td>Nursing Students</td>
<td>16.3</td>
<td>4.3</td>
</tr>
</tbody>
</table>

**Table No: 1** Shows that with regards to comparison of level of knowledge regarding colostomy care between staff nurses and student nurses. In staff nurses, the mean value is 17 with standard deviation is 4.2 and nursing students the mean value is 16.3 with standard deviation is 4.3.

**Table 2:** Association between and level of knowledge regarding colostomy care among staff nurses with their selected socio demographic variables. (n=15)

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Inadequate</th>
<th>Moderate</th>
<th>Adequate</th>
<th>Chi-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Age in years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) 22-25 years</td>
<td>7</td>
<td>46.6</td>
<td>6</td>
<td>40</td>
</tr>
<tr>
<td>b) 26-30 years</td>
<td>1</td>
<td>6.7</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total professional experience</td>
<td>5</td>
<td>33.3</td>
<td>40</td>
<td>6.7</td>
</tr>
<tr>
<td>a) &gt; 1 year</td>
<td>7</td>
<td>46.6</td>
<td>6</td>
<td>40</td>
</tr>
<tr>
<td>b) 4-5 years</td>
<td>3</td>
<td>20</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**Table 3:** Association between the level of knowledge regarding colostomy care among nursing students with their selected socio demographic variables. (n=15)

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Inadequate</th>
<th>Moderate</th>
<th>Adequate</th>
<th>Chi-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Age in years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) 18-20 years</td>
<td>1</td>
<td>6.7</td>
<td>2</td>
<td>13.3</td>
</tr>
<tr>
<td>b) 20-21 years</td>
<td>1</td>
<td>6.7</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Year of course</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) 1 Year</td>
<td>1</td>
<td>6.7</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>d) 4 Year</td>
<td>1</td>
<td>6.7</td>
<td>2</td>
<td>13.3</td>
</tr>
</tbody>
</table>

**Description of demographic variables of staff nurses**
Shows that with regard to age of staff nurses, 14(93.3%) are between 22-25 years, with regard to gender all the, 14(93.33%) are females nurses, with regard to educational qualification of staff nurses, 14(93.33%) studied BSc (n), with regard to professional experience, 12 (80%), with regard to attended CNE programme 15 (100%) have not attended the CNE program.

**Description of demographic variables of nursing students**
with regard to age, 10(66.7%) are 18-19 years, with regard to educational status of the nursing students, 15(100%) are studying 3rd year BSC nursing, with regard to year of course 11(73%) are studying 1st year, 13(86.6%) received from curriculum, with regard to attended CNE, 15(100%) have not attended.
Findings of the Study Based on Objectives
The level of knowledge regarding colostomy care among staff nurse.

Fig 11: shows among 15 sample of staff nurses, 8(53.3%) have inadequate knowledge regarding colostomy care, 6(40%) have moderately adequate knowledge regarding colostomy care and, 1(6.7%) have adequate knowledge regarding colostomy care.

Salvadulena conducted a systematic review and identified 21 studies published between 1990 and 2007 that measure the incidence of stomal and peristomal complications. Due to differences in study design, operational definitions, and timing of measurements, Salvadulena concluded it is not possible to pool date and measure the incidence of stomal and peristomal complications. Variability in study designs and absence of operational definitions were identified as major problems is necessary to investigate challenges encountered by ostomates postoperatively.

The level of knowledge regarding colostomy care among nursing students in NMCH, Nellore.

Shows among 15 sample of nursing students 8(53.3%) have inadequate knowledge regarding colostomy care, 5(33.3%) have moderately adequate knowledge regarding colostomy care and, 3(13.3%) have adequate knowledge regarding colostomy care.

Stomal/peristomal assessment instruments: Bosio et al. conducted a prospective, observational study between 2003 and 2006 across eight ostomy centers in Italy. Patients were divided into two groups according to onset of complications (less of greater than 1 year). Peristomal skin was assessed at 0.4, 12 and 24 weeks. Peristomal skin complications were identified in 339 of 656 ostomy patient (52%, 272 men and 67 women.) From the data obtained in this study, a classification scheme based on recurrent clinical manifestations (lesions) and topographical location was created and the SACS Instrument was developed by seven enterostomal nurses and four surgeons from eight facilities in Italy. The five most common sessions (L) observed in the Bosio study and included in the instrument are hyperemic lesion (Peristomal skin reddening without loss of substance), erosive lesion with loss of substance not extending beyond the dermis, ulcerative lesion extending beyond the dermis, ulcerative fibrin/us/necrotic lesion, and proliferate lesions (granulomas, oxalate deposits, neoplasm). Skin lesion severity is assessed on a scale of 1 to X – eg. LI for less severe and LX for more severe skin complications. Five topographical (T) location quadrants are used to documents peristomal lesion location.

The association between the level of knowledge regarding colostomy care staff nurses and selected socio demographic variables.

There is no significant association between the demographic variables such as age, gender, educational qualification, total professional experience, attended any CNE/Workshop with level of knowledge regarding colostomy care.

The association between the level of knowledge of nursing students regarding colostomy care and selected socio demographic variables.

There is no significant association between the demographic variables such as age, attended any Workshop, educational qualification, year of course with level of knowledge regarding colostomy care.

In a descriptive study, Richbourg et al., using a survey questionnaire mailed to individuals who had undergone ostomy surgery at their facility, identified 34 people (76%) who had peristomal skin irritation. Participants rated peristomal skin irritation as one of their top five difficulties after hospital discharge. Wood et al. followed patients with an ileal conduit for up to 63.4 months after surgery and reported an overall stoma complications rate of 34.4% in addition, re-operation was required in 24.7% of the total patient population due to parastomal hernia and stoma retraction.

Reference