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## 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 stoma may be a challenging experience for the nurse. The patient with a stoma needs encouragement, support and counseling to learn how to integrate self-care into daily activities.

A variety of gastrointestinal/genitourinary etiologies may necessitate the creation of a fecal or urinary diversion. These may include biliary disease, inflammatory bowel disease, colorectal (colon), intestinal obstruction, gastrointestinal trauma and gynecological cancers (Beitz 2004).

Indications for creating a urinary stoma are bladder cancer, neurogenic bladder, interstitial cystitis & Refractory recidivating cystitis. The Etiology of the disease will determine if the ostomy is going to be temporary or permanent (Tomaselli & McGinis, 2004).

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

Some cities have 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 groups are helpful because clients can share their ostomy concern with others who have the similar problem.

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

Before discharge advise 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 diet 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

**Description of the Tool**

The tool consists of two parts.

**Part-I**

**Deal with demographic data**

Demographic variables including Age, education, occupation, income, place of residence, religion, type of family, sources of information, habits

**Part II**

Deals with knowledge questionnaire to assess the knowledge regarding colostomy care.

S. No	Level Of Knowledge	Score	Percentage
1.	Inadequate knowledge	0-12	<50%
2.	Moderately adequate knowledge	13-24	51-70%
3.	Adequate knowledge	25-36	>71%

**Score Interpretation**

**Data Collection Procedure**

The data collection procedure was done for a period of 1 week from 5/5/15 to 10/5/15. After obtaining the formal permission from the Narayana College of nursing. 30 samples were selected by non probability convenience sampling techniques. Nursing students and staff nurses, who fulfilled the inclusion criteria, were included for this study after obtaining informed consent from them and the confidentiality of shared was assured. For the present study knowledge questionnaire based interview method was adopted to collect the data, it took 30 minutes to complete the questionnaire for staff nurses and nursing student.

**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**

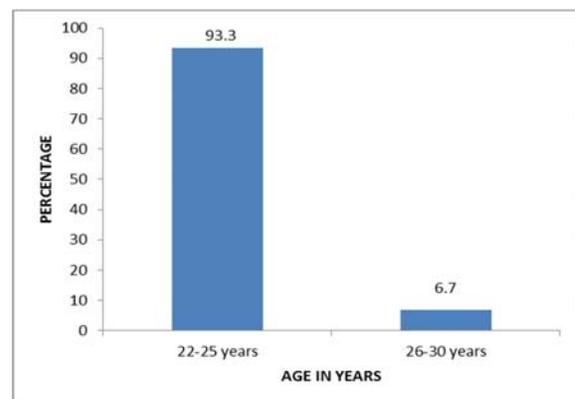


Fig 1: Percentage distribution of staff nurse based on age.

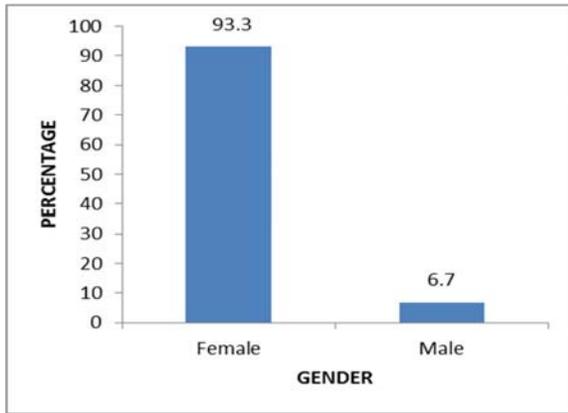


Fig 2: percentage distribution of staff nurses based on gender

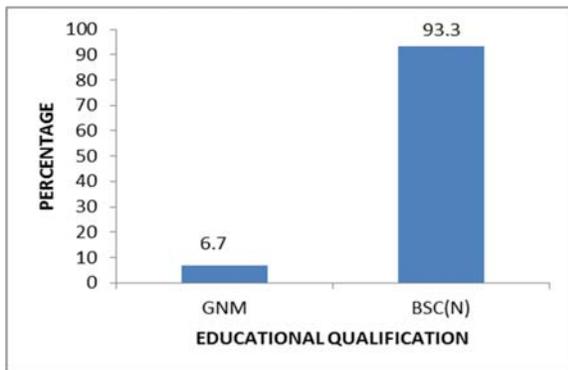


Fig 3: Percentage distribution of staff nurses based on educational qualification.

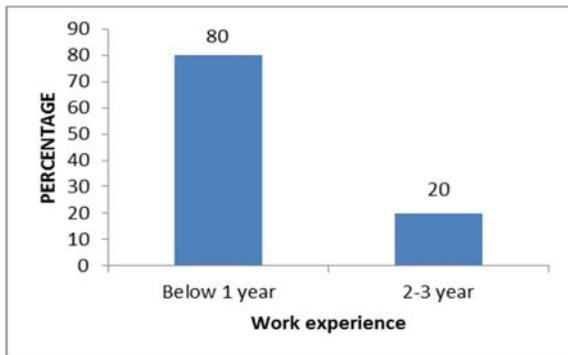


Fig 4: Percentage distribution of staff nurses based on total professional experience.

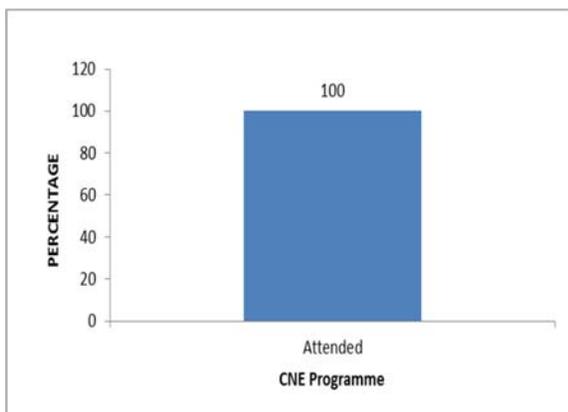


Fig 5: Percentage distribution of staff nurses based on CNE/workshop related to Colostomy care.

Frequency and percentage distribution of demographic variables of nursing students.

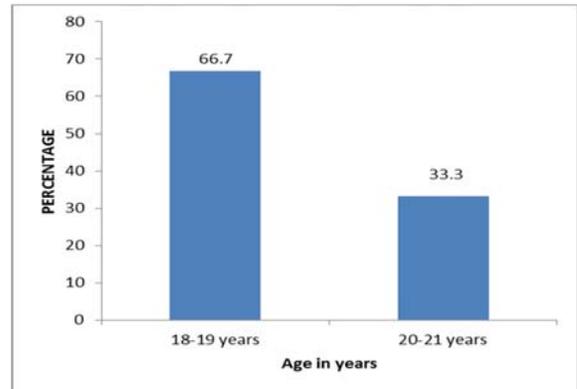


Fig 6: Percentage distribution of nursing students based on age

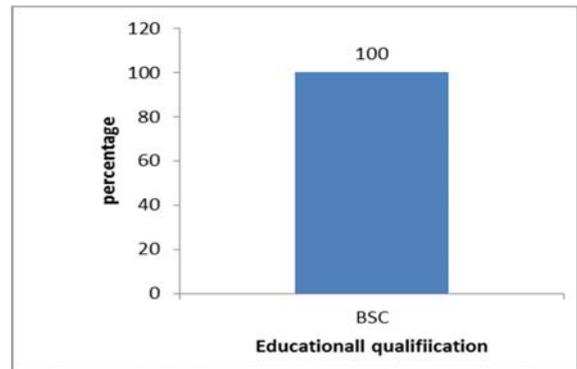


Fig 7: Percentage distribution of nursing students on educational qualification.

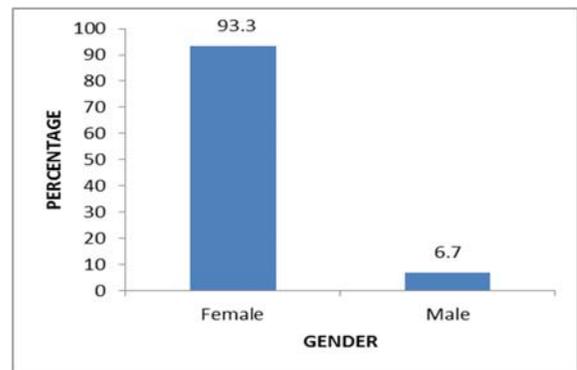


Fig 8: Percentage distribution of nursing students on year of course.

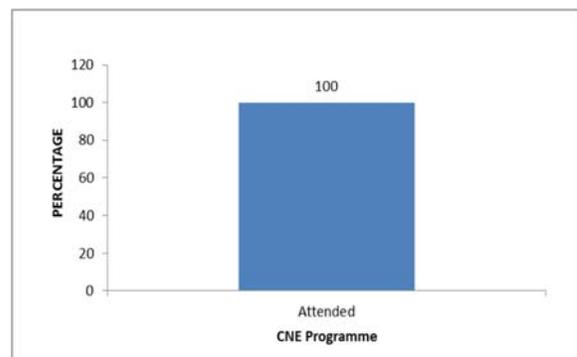
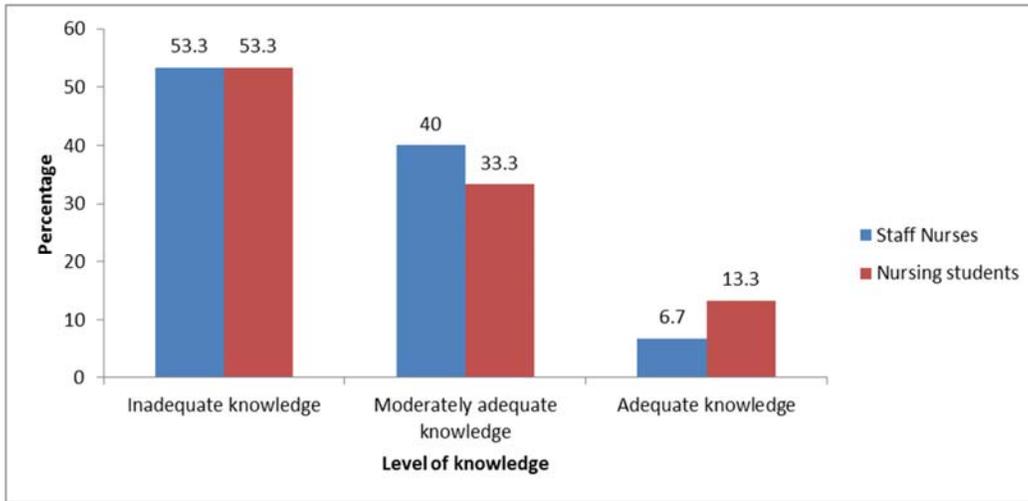


Fig 9: Percentage distribution of nursing students based on CNE/workshop, related to colostomy care.



**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)

Sample Categories	Mean	Standard Deviation
Staff Nurses	17	4.2
Nursing Students	16.3	4.3

**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)

Demographic Variables	Inadequate		Moderate		Adequate		Chi-Square
	f	%	f	%	f	%	
<b>Age in years</b>							C=0.95 df=2 T=5.99 NS at P=0.05
a)22-25 years	7	46.6	6	40	1	6.7	
b)26-30 years	1	6.7	0		0		
<b>Total professional experience</b>							C=2.691 df=2 T=5.991 NS at P=0.05
a)> 1 year	5	33.3	6	40	1	6.7	
b)4-5 years	3	20	0		0		

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

(n=15)

Demographic Variables	Inadequate		Moderate		Adequate		Chi-Square
	f	%	f	%	f	%	
<b>Age in years</b>							C=2.371 df=2 T=5.991 NS at P=0.05
a)18-20 years	1	6.7	2	13.3	6	40	
c)20-21 years	1	6.7	3	20	2	13.3	
<b>Year of course</b>							C=1.206 df=2 T=5.991 NS at P=0.05
a)I Year	1	6.7	3	20	6	40	
d)4 Year	1	6.7	2	13.3	2	13.3	

**Description of demographic variables of staff nurses**

Shows that with regard to age of staff nurses,14(93.3%) are between 22-25years, with regard to gender all the, 14(93.33%) are females nurses, with regard to educational qualification of staff nurses, 14(93.3%) studied BSc (n), with regard to professional experience, 12 (80%),with regard to attended CNE programme15 (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 ist 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.

Sulvadulena 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, Salvadalena concluded it is not possible to pool data 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 or 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 lesions (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 fibrinous/necrotic lesion, and proliferate lesions (granulomas, oxalate deposits, neoplasm). Skin lesion severity is assessed on a scale of 1 to X – eg. L1 for less severe and LX for more severe skin complications. Five topographical (T) location quadrants are used to document 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.

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