



A STUDY TO ASSESS THE EFFECT OF PLANNED TEACHING ON KNOWLEDGE OF OSTOMATES REGARDING STOMA CARE AT APOLLO HOSPITALS, NAVI MUMBAI.

Nursing

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ABSTRACT

A stoma is an artificial opening in the abdominal wall that is made during surgery, which changes normal body function to allow stools to pass after a disease or injury. The study was planned to assess the effect of planned teaching on knowledge of ostomates regarding stoma care at Apollo hospitals, Navi Mumbai. The 30 sample were tested with an experimental approach with one group pre-test – post-test design. Majority 50 % of patients belonged to the age group of 40-49 years, 80% were above 12 and 63% were living with stoma (1-6 month). The knowledge score gained by the respondents in the results shows that the mean value of knowledge in pre-test was 5.86 and at post assessment was 15.9. Planned teaching programme was highly effective as the “p” value for the test is 0.05 which proves that there is a improvement in the knowledge score of subjects towards stoma care.

KEYWORDS

INTRODUCTION

A stoma is an opening in the abdominal wall that is made during surgery, which changes normal body function to allow stools to pass after a disease or injury. The colon is introduced out through skin to form a stoma. The position of stoma depends on which part of the colon is exteriorized (Gayner, 1990) ¹. It was only in 1975; ostomy care was inaugurated in India at Mumbai by formation of Ostomy Association of India. The association was started at Tata Memorial Hospital under the Indian Cancer Society. In 1978, the first stoma clinic had started. Now there are many Ostomy Associations and Stoma Clinics established all over the country to guide an ostomate towards comprehensive rehabilitation Centre 2009 ². Intestinal ostomy is a procedure that is implemented to treat several colorectal diseases. In stoma and ileostomy surgeries, normal bowel function is interrupted, and waste is passed through the abdominal wall through an opening called a stoma into an appliance that must be emptied periodically. There are many indications for stoma, colon cancer and inflammatory bowel disease (Lewis, 2011) are among the most common causes ³.

Severe psychological stress post stoma is classified as (Gayner, 1990) as a result of skin irritation 76%, pouch leakage 62%, offensive odour 59%, reduction in pleasurable activities 54%, and depression /anxiety 53% (Umar *et al.*, 2009) ⁴. For these patients, it is worthwhile to assess quality of life in the evaluation of the outcomes of various therapeutic procedures along with their final impact on patient's lives (Voergaard *et al.*, 2007) ⁵. Making good decisions to control disease complications, treatment, and improving the quality of life is a major goal in treating and caring for patients with cancer. Post-operative patients with a stoma experience stress, physiological problems such as worry and shame. Immediately post-surgery, the stoma is red, swollen making it unappealing to the patient. This emotional distress, along with physiological problems and pain, isolation from others, and fear of death, will inevitably reduce quality of life. (Ratliff *et al.*, 2005) ⁶. In recent times nursing has evolved from the bedside nurse to an Enterostomal therapist or a nurse clinical specialist with ostomy care experience. Staff nurses and physicians are now referring ostomates to these specialists. The success of stoma is mainly contributed by these specialized nurses (Lian *et al.*, 2011) ⁷.

NEED FOR THE STUDY

Apollo hospitals, Navi Mumbai, is emerging as a stoma care centre with increased number of cases over the years. It was noticed that post surgery, new ostomates need a lot of assistance in adapting to the new stoma and change in their lifestyles. On interacting with such patients in Apollo hospitals, Navi Mumbai, it was found that new ostomates need assistance in practicing stoma care. The knowledge given during discharge needs to be strengthened hence a formal instruction with help of a structured teaching plan was found to be a need of the hour. Teaching practical skills in stoma care is a challenge in itself. Hence, as a researcher with wide experience in working with stoma patient in a Gastro-intestinal surgical unit, it was observed that knowledge was needed in the following aspects of stoma care which were, poor stoma

care skills, lack of awareness about stoma, adaptation and rehabilitation while living with stoma. Therefore, the study was conducted to assess the effect of planned teaching on knowledge of ostomates regarding stoma care at Apollo hospitals, Navi Mumbai.

OBJECTIVES OF THE STUDY

1. To collect the demographic data of ostomates.
2. To analyse the collected demographic data.
3. To compare the knowledge score of pre-test and post-test of ostomates after a planned teaching
4. To compare the knowledge score of pre-test with demographic data (Educational status, Age of patient, Age of stoma)

HYPOTHESIS (RESEARCH HYPOTHESIS)-

H0- There is no relationship between the effect of planned teaching on knowledge of ostomates regarding stoma care.

H1- There is a relationship between the effect of planned teaching on knowledge of ostomates regarding stoma care.

MATERIALS AND METHODS

Research Approach: Quantitative approach

Research Design: Pre-Experimental - One Group Pre-Test Post-Test Design.

Variables used:

- **Dependent** In this study knowledge regarding stoma care is the dependent variables
- **Independent:** In this study planned teaching is the independent variable

Setting of the study: Apollo Hospitals, Navi Mumbai.

Study Duration: Three months -September, October, November 2021.

Target population: Ostomates at Apollo hospitals, Navi Mumbai.

Sample Size: A total of 30 patients.

Sampling Method: Purposive sampling.

Inclusion Criteria: Ostomates at Apollo hospitals, Navi Mumbai who are ambulatory and living with stoma more than 1 month up to 1 year.

Exclusion Criteria: post-operative ostomates whose stoma care needs assistance (bedridden patients), living with stoma less than 1 month & more than 1 year.

Tool for data collection: Structured Questionnaire to assess the knowledge regarding stoma care.

Data Collection Procedure

A formal permission was obtained from the ethical committees of Apollo hospitals, Navi Mumbai. A total of 30 patients were selected for the study as per the inclusion criteria of study. Self- introduction was given to the patients along with their attendants. The purpose of the study was explained to the subjects and Questionnaire for the assessment of knowledge of stoma was given on the same day. Planned teaching on stoma was administered to the patient on the same day after the pre-test. Post-test assessment of knowledge of stoma patient was done by giving same Questionnaire on the same day.

Statistical Analysis: The data was analysed by using frequencies and percentages for demographic characteristics. The level of knowledge score was analysed by using Mean, Mean Difference, Median, and Standard Deviation. Paired 't' test was also done to find out the effect of planned teaching on the knowledge of ostomates regarding the stoma care.

RESULTS

A total of 30 stoma patients from Apollo hospitals, Navi Mumbai participated in the study. The sociodemographic data of the study subjects were analysed using descriptive statistics and were presented in terms of frequency and percentage as shown in Table 1.

Table No 1 Socio-demographic Information: N=30

CHARACTERISTICS	LEVELS	RESULTS, N(%)
Education status	ABOVE CLASS 12	24(80%)
	CLASS 11 - 12	5(16.7%)
	CLASS 9 - 10	1(3.3%)
	CLASS 1-8	0
	UNEDUCATED	0
Age of the patient	20-29 years	1(3.3%)
	30-39 years	12(40%)
	40-49 years	15(50%)
	50-59 years	2(6.7%)
Patient living with stoma	1- 6 month	19(63.3%)
	Up to 1 year	11(36.7%)
Pre-test score	VERY GOOD (16 to 20)	0
	GOOD (11 to 15)	2(6.7%)
	AVERAGE (6 to 10)	15(50%)
	POOR (1 to 5)	13(43.3%)
Post test score	VERY GOOD	20(66.7%)
	GOOD	7(23.3%)
	AVERAGE	2(6.7%)
	POOR	1(3.3%)

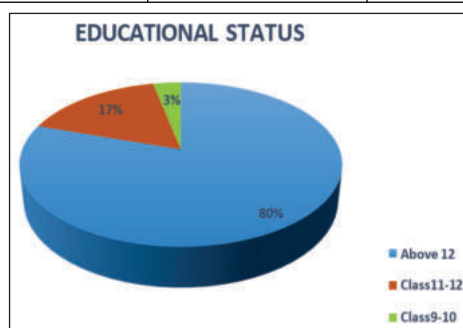


Figure No 1 Educational Status

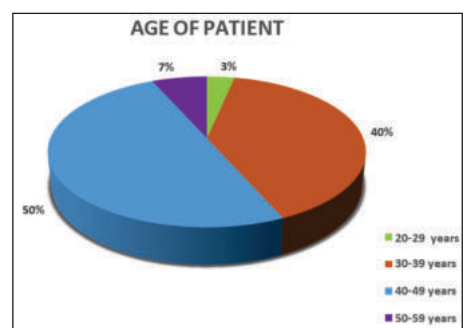


Figure No 2 Age Of Patients

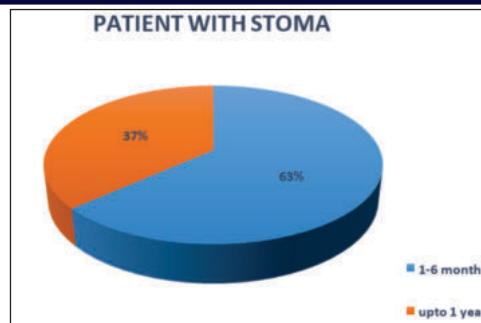


Figure No 3 Patient With Stoma

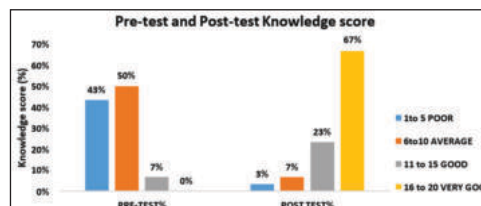


Figure No 4 Comparison Of Pre-test And Post-test Knowledge

Regarding the educational level of respondents, 80% were above 12 class, whereas 16.7% respondents were class 11 – 12 also class 9 – 10 respondents are 3.3%. The age of patients 40-49 years which is the largest age group comprises 50%, was the smallest are the age of patient group 20-29 years comprise 3.3% also age of patients 30-39 years of the group comprises as 40% whereas the age of patient 50-59 years of the group comprises 6.7%. Most of the patients with stoma 63.3% had 1- 6 months, 36.7% were up to 1 year. Planned teaching on knowledge score pre-test showed 50% as average score, 43.3% as poor score, 6.7% as good score and 0 as very good score. Post-test maximum score was- Very good score was 66.7%, good score was 23.3%, Average-6.7% and poor 0

Table No 2 Comparison Of Pre-test Knowledge With Educational Status

Educational status	Pre-test knowledge score			Total	P-value
	AVERAGE	GOOD	POOR		
Above 12	12	2	10	24	0.760
	50.00%	8.30%	41.70%	100.00%	
Class 11 - 12	3	0	2	5	
	60.00%	0.00%	40.00%	100.00%	
Class 9 - 10	0	0	1	1	
	0.00%	0.00%	100.00%	100.00%	
Total	15	2	13	30	
	50.00%	6.70%	43.30%	100.00%	

As per SPSS analysis, the knowledge score of pre-test with educational status Above 12th class and there was reported that average knowledge score 12(50%), education status class 11 – 12 were reported only 3 (60%). Whereas, poor knowledge was reported by 10(41.70%). The results conclude that statistically insignificant since the p-value is 0.760 there is no significant association between educational status and pre-test of knowledge.

Figure No 5 Comparison Of Pre-test Knowledge Score With Educational Status

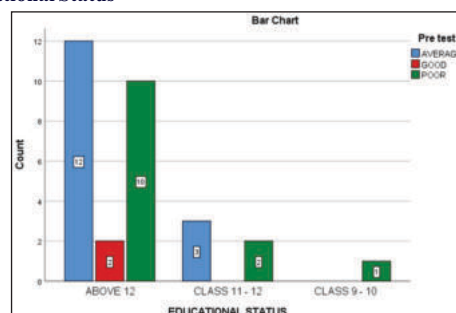


Table No 3 Comparison Of Pre-test Knowledge With Age Of Patient

Pre-test knowledge score				Total	P-value
Age of Patient	AVERAGE	GOOD	POOR		
20-29 years	0	0	1	1	0.597
%	0.00%	0.00%	7.70%	3.30%	
30-39 years	4	1	7	12	
%	26.70%	50.00%	53.80%	40.00%	
40-49 years	10	1	4	15	
%	66.70%	50.00%	30.80%	50.00%	
50-59 years	1	0	1	2	
%	6.70%	0.00%	7.70%	6.70%	
Total	15	2	13	30	
	100.00%	100.00%	100.00%	100.00%	

The knowledge score of pre-test with the age of patient there is average score reported 10(66.70%) as the age of patient 40-49 years and good or poor as the age of 20-29 years and age of 50-59 years of patient 0, but it is statistically insignificant since the p-value is 0.59 there is no significant association between age of patient and knowledge pre-test.

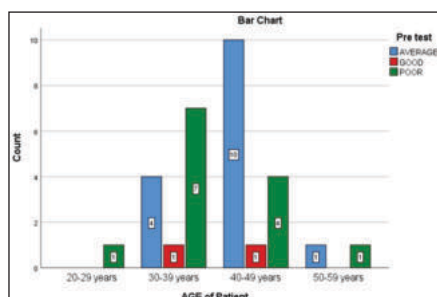


Figure No 6 Comparison Of Pre-test Knowledge Score With Age Of Patient

Table No 4 Comparison Of Pre-test Knowledge With Age Of Stoma

Pre-test knowledge score				Total	P-value
Patient with stoma	AVERAGE	GOOD	POOR		
1-6 month	8	0	11	19	0.036
%	53.30%	0.00%	84.60%	63.30%	
Up to 1 year	7	2	2	11	
%	46.70%	100.00%	15.40%	36.70%	
Total	15	2	13	30	
%	100.00%	100.00%	100.00%	100.00%	

In pre-test 11 patient reported with living stoma 1-6 month had poor knowledge. However, patient with living stoma up to 1 year was 2 with good knowledge regarding stoma care. Even though there is a statistically significant since the p-value is 0.03. There is a significant association between patients with stoma and knowledge of pre-test.

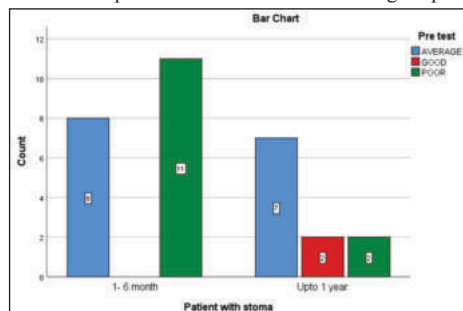


Table No 5 Paired T Test

	Paired Differences				T	Df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference			
				Lower Upper			
Pre-test - Post-test	-10.03333	3.94342	0.71997	-11.50583 -8.56084	-13.936	29	0.001

There is a significant difference between the pretest and the post-test p-value is 0.001. p value is less than 0.05.

DISCUSSION

The above study was aimed at assessing the knowledge of ostomates

pre and post planned teaching. A considerable rise in post test score was of seen which suggests that the planned teaching was effective in imparting knowledge to the ostomates. This study was conducted over a period of 3 months with a sample size of 30 which was purposively selected from Apollo Hospitals, Navi Mumbai. Questionnaire consisted of 20 items which were aimed at assessing knowledge of ostomates regarding stoma care. The session of planned teaching with suitable modifications were carried out. On the same day, post-test was carried out by re-administering the knowledge questionnaire. Statistically significant gain in the knowledge score was found while comparing the pre-test score with post-test score. The knowledge score gained by the respondents in the results shows that the mean value of knowledge in pre-test was 5.86 and at post-test was 15.9, the "p" value for the test is 0.001 (Table No 5), Paired 't' test revealed that subjects had significant knowledge gain after planned teaching. This finding was in agreement with the findings of the study conducted by Yashvi Chauhan et.al on effect of structured teaching program on patient's knowledge on colostomy care which showed that knowledge score gained by respondents in pre-test was 8.63 and post-test was 17.1 and 'p' value was 0.05 which was statistically significant^{8ss}.

CONCLUSION

Intervention of planned teaching on stoma care was effective in pre-experimental group to improve self-care management of stoma. The planned teaching on stoma care was effective in maintaining proper hygiene, prevent excoriation, self-care management, changing bag in stoma patients. Considering the increase in the post test score, the planned teaching was found to be effective and thus it was discussed and decided to use this planned teaching on a wider platform like community health and extended home care in ostomates for better recovery.

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