

Original Article

Nurses' Knowledge Regarding Bowel Stoma Care in Khartoum State Public Hospitals 2021

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Abstract

Background: education program plays a major role in teaching, enhancing, and improving nurses' knowledge and practice regarding bowel stoma care. **Aim:** To study nurses' knowledge regarding bowel stoma care at the public hospitals in Khartoum state. **Methods:** A descriptive cross sectional hospital base study was conducted in three governmental hospitals; fifty nurses were chosen by using Probability Proportional to size (PPS) sampling technique. Data were collected using questionnaire. Data were analyzed using Statistical Packages for Social Sciences (Version 23) presented in tables and figures using descriptive

percentages, means and stander deviation, chi sure test used for relation significance **Results:** shows that mean of total knowledge score were poor in majority of them. **Conclusion:** On light of the study results it can be concluded that there was a highly significant improvement in practice items between pre and post education program, and the study recommended that there should be an in-service training and periodic educational programs targeting nurses to improve nurse's knowledge.

Keywords: Educational program, Nurses, knowledge, stoma care.

Introduction

Colorectal cancer is a type of intestinal cancer that affects many people. According to statistics, this is the third most common tumor in males and the second most common in women.

(1).Recently it has been observed significant increasing in mortality rate. colostomy is still the most common treatment for CRC, with 100,000 colostomy patients in the UK, 750,000 in the US, and 1,000,000 in China having a permanent stoma.

(2) Individuals' excretion forms, as well as their identity, self-respect, sense of freedom, sexual life, nutritional status, social life, professional life, dressing cases, self-care learning, and functional capacities, are all influenced by stoma surgery.

(3)An ostomy addresses an expected danger to the elements of regular daily existence,

which is communicated by physical, psychological and social imbalance.

(4) Patients who undergo Colostomy treatment with a wide range of adjustments affecting their psychological and social functioning..

(5)The development of the stoma in the bowel addresses asignificant change in the individual's life and results in complex passionate, physical,social, and mental concerns. These worries sway people's life fulfillment, satisfaction,and personal satisfaction. patients with colostomy experience troubles working in work and social circumstance and have issues regarding sexuality and self-perception,challenges with stoma work, tension about protection when exhausting the pocket, and consistently restless about spillage, gas, voyaging, and skin bothering. Colostomy Patients

deal with these such problems as far as need to get reasonable data to adjust them to this new circumstance.(5).Evidence indicates that a common problem for an ostomy person is the development of peristomal skin irritation and pouch leakage , which has negative effect on quality of life.(6) A Nurse who has more than 46 years said , she have encountered many nurses who suggested having little training and even less clinical ride with sufferers who have fecal or urinary stomas. These nurses have stated that when they stumble upon an affected person who has had an ostomy, they are regularly negative on how to care for the stoma and how to assess quite

2 Several issues of the stoma and the surrounding skin(7). This lack of knowledge can make contributions to the nurse's stress and might also make the affected personal and household individuals to lose self-assurance in the nurse (7). Nurses need to know the characteristics of the normal stoma and expected appearance before they can recognize stoma complications (8).Nurses can play a role in promoting excellent health education by teaching basic capabilities and offering information about the following topics: intestinal ostomy management based on available resources and how to acquire the supplies. However, folks need to adapt to their care in a way that suits with their existence and day to day activities. During the postoperative duration, other psychological issues may additionally arise. People with a newly shaped stoma may additionally be undecided on how they can live with the stoma. They might additionally desire to know how they can best to relate with their partners, whether or not they can proceed to work,

and what to do if their stoma bag leaks. (9)

The nursing attendant as an educator should be involved in giving befitting education to patients with liberal input and assessment to advance instruction. Perioperative colostomy patient instruction can work with change, lessen complexities, and work on personal satisfaction. It has been accounted for that patient training may diminish the length of medical clinic stays, the recurrence of postoperative difficulties, and the recurrence of clinic readmissions. In addition, much expert exertion has been placed into patient's training and education.(5)Latest published study in 2020 conducted by specialized nurse it concluded that the education program has a positive effect on patient adjustment with the stoma and there was significant difference between pre and post assessment result.(4)(Fer. In similar research results that when preoperative ostomy education is provided in addition to standard preoperative education, anxiety is greatly reduced when compared to patients who only get routine preoperative education. (10).In addition to other study replies that ostomy care can be improved in hospital as the nurses and surgeons considered as care providers. (11) Other research conducted to assess the effect of education program on stoma patient quality of life and cost, it has been done by system review on seven articles, results reflect that all education programs has positive effect on patient quality of life as well as cost(12).standers of care need continuous evaluation and refreshment to increase information of nurses and surgeons. (13). A planned education program proved extremely helpful in improving individuals knowledge and attitudes toward colostomy care. (14).It plays a significant role in the development of self-care

agency, independence, and disease adaption in individuals. Self-care, by the way, is a crucial component of the transition process for patients with stomas following surgery, thus organized self-care is essential(3). Education program useful to increase ileostomy patients knowledge, care, and improve their self-efficacy. Also can be used for nursing teaching(15). Nurse Instruction using video showing method is as effective than Instruction alone(.16). Education postoperatively significantly reduced readmission after creation of ileostomy. (17). Providing ostomy care in the Arab world, where Islam is the prevalent religion, has its own set of cultural and contextual challenges. It is difficult for nurses to care for ostomates in Arab nations; they must be aware of and knowledgeable about ostomy care in this culture. (18). **Methodology:** A descriptive cross-sectional hospital base study used to study the nurses' knowledge regarding bowel stoma care 2021. The study conducted in Khartoum Governmental hospitals which have bowel stoma patients. Different qualifications of nurses who holding diploma, BSC and MSC degree of nursing science, who works in GIT surgery department were

chosen, three hospitals were selected out of seven by using Probability Proportional to Size (PPS) to specify the sample size which was 50 nurses. A questionnaire, to assess the level of knowledge was used. A pilot study was done and Cronbach Alpha coefficient for practice items was .878 so the study instruments were valid and reliable for conducting the research study. Data were collected and presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and quantitative variables categorical variables using chi-square test statistical significance considered at p-value <0.05 each question presented in the result (tables or figures). An official letter taken from post graduate study board University of ALneelain, approval from Khartoum state ministry of health to conduct the study. Formal headed letter sent to the managers of selected hospitals. Respect to humanity the participation was voluntary without any force or pressure. The researcher respects the right of participants written informed consent was taken individually from each participant, after explanation of purpose, justification of study in clear and simple words.

Result

Table (1) knowledge parts means and SD (N=50)

Items	N	Mean	
		pretest	posttest
Definitions	50	4.0800	7.4400
immediate postoperative care	50	6.7800	10.1200
Choosing and changing appliance	50	13.8600	20.4000
Discharge and home care	50	20.4800	27.6200

Table (2) study group level of knowledge about general information of stoma n=50

Item	Adequate		
		In Adequate	Poor
Definition bowel stomas	4 (8%)	11 (22%)	35(70%)
Definition colostomy	14 (28%)	10 (20%)	26(52%)
Definition ilieostomy	5 (10%)	6 (12%)	39(78%)
Immediate post operative care	25 (50%)	13 (26%)	12(24%)
Appearance of healthy stoma	9 (18%)	16 (32%)	25(50%)
Normal color of stoma	13 (26%)	7(14%)	30(60%)
The changing of appliance in first 24 h	14 (28%)	13(26%)	23(46%)
Adaptation phase	16 (32%)	8 (16%)	26(52%)
Characteristic of colostomy out put	13 (26%)	21 (42%)	16(32%)

Table (3) study group level of knowledge about nursing assessment and care of stoma pre & post program n=50

item	adequate	In adequate	poor
The categories of appliance	12(24%)	17(34%)	21(42%)
Advantages of two pice appliance	15(30%)	16(32%)	19(38%)
Choosing of stoma care equipment	18(36%)	24(48%)	8(16%)
When pouch should be emptied	11(22%)	17(34%)	22(44%)
Inspection of stoma	22(44%)	16(32%)	12(24%)
Role of stoma nurse in discharging plan	21(42%)	23(46%)	6(12%)
Aspects need to be informed to patient in planning of discharge	23(46%)	27(54%)	0(0%)
Determine of sign and symptoms of dehydration	18(36%)	27(54%)	5(10%)
Appropriate way of cleaning stoma	19(38%)	23(46%)	8(16%)
Sign & symptoms of stoma blockage	25(50%)	6(12%)	19(38%)
Solution for stoma irrigation	4(8%)	17(43%)	29(58%)
Foods should be avoided	19(38%)	14(28%)	17(34%)
General dietary tips	11(22%)	17(34%)	22(44%)
Common Questions & answers of patient	18(36%)	17(34%)	15(30%)

Table (4) cross tabulation between surgical word experience and knowledge

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	69.620 ^a	68	.423
Likelihood Ratio	79.044	68	.169
Linear-by-Linear Association	.087	1	.767
N of Valid Cases	50		
a. 105 cells (100.0%) have expected count less than 5. The minimum expected count is .24.			

Table (5) cross tabulation between qualification and knowledge

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	77.753 ^a	68	.196
Likelihood Ratio	64.282	68	.605
Linear-by-Linear Association	.072	1	.789
N of Valid Cases	50		
a. 105 cells (100.0%) have expected count less than 5. The minimum expected count is .04.			

Table (6) cross tabulation between training program and total level of knowledge

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	34.583 ^a	34	.440
Likelihood Ratio	35.672	34	.390
Linear-by-Linear Association	3.007	1	.083
N of Valid Cases	50		
a. 70 cells (100.0%) have expected count less than 5. The minimum expected count is .20.			

Discussion

The overall aim of this study is to assess nurses' knowledge regarding bowel stoma care, findings of the study revealed that most respondents were predominantly female (92%). As regard to age (44%) of them were less than thirty years old (20-30 years), as well as to years of experience (46%) of them have less than two years' experience this. As it comes to qualification the majority (66%) were bachelors. As regard to candidates having stoma care training program most of them (80%), they never enrolled in training program before. For relations chi square test results revealed there is no relation between age and knowledge (p value=.21), Same as to sex no relation to knowledge (p value=.19). on the other side experience shows no

relation between experience and knowledge (p value=.42), In order to qualification there is no significance relation between qualification and knowledge (p value=.21), There is no significance relation between area of having training program and knowledge (p value=.09). There is no significance relation between when enrolled in training program and knowledge (p value=.67). as a summary Overall total knowledge score was poor mean = 45.20 with SD= 17.64.

Conclusion: Majority of nurses have poor knowledge regarding stoma care.

Recommendation: Further research is needed regarding the bowel stoma care.

Designing standardized stoma care guideline by ministry of health depend on Sudanese patients'

context, cultures, and religion.

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Acknowledgement

Firstly, I am grateful to ALLAH, the kindest and most merciful helping me to Achievethis work.

My thanks extend to my supervisor, Dr. Hegazi Mohamed Ahmed for his supervision, assistance, guidance, help and encouragement. I want to extend my acknowledgement to Dr. Sharf eldin Shuib for guidance and help. Finally, I want to thank and appreciate Bahri teaching hospital, Omdurman teaching hospital and Ibn Sina specialized hospital gastrointestinal tract surgical word staff nurses including head nurse and nursing director of mentioned hospital for helping me to apply the educational program.