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ORIGINAL ARTICLE

Knowledge of Patients Regarding Self Care Practice with Permanent Colostomy in a Tertiary Care Hospital in Lahore, Pakistan

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ABSTRACT

After surgery patients with intestinal colostomy have some complications and alterations in their life. This is due to lack of information and postoperative care. More over one million patients are living with permanent colostomy and the number is growing by the rate of 100 000 annually. To remove their pouch, clean the stoma and skin surrounding the stoma, empty and dispose of waste matter from the stoma, patients with a new stoma be required to master various psychomotor abilities. This descriptive cross sectional study was carried out with 76 colostomy patients. Out of 76 patients 48.7% of the patients were males and females were 51.3%. According to the findings of this study, it is concluded that 100% patients had Inadequate Self Care which is <70%.

Conclusion: For such groups of patients, an education protocol should be held on regular basis, incorporating family and caregivers so that they can engage in the colostomy patient's care.

Study Design: A Descriptive Cross Sectional Study design was used.

Settings: Data was acquired from a surgical department of a tertiary hospital in Lahore using a convenient sampling strategy.

Study Participants: This study comprised 76 patients who had a permanent colostomy and were between the ages of 24 years to above 60 years.

Results: The conclusion of the findings of this study is that 100% patients had Inadequate self care which is <70%.

Keywords: knowledge, practice, colostomy, stoma care

INTRODUCTION

An intestinal stoma has long been one of the most common life-saving surgical procedures performed around the world, and it serves a critical role in the treatment of both congenital and acquired gastrointestinal diseases. Stomas are used for a variety of purposes, including diverting stool flow, protecting the anastigmatic site, bowel decompression, or a combination of these causes. Colostomy and ileostomy are two of the most often done ostomies in surgical practice(Massenga et al., 2019).

More over a million people living with permanent colostomies, and the ratio is increasing at a rate of 100,000 annually. Patients living with a new stoma should acquire various psychomotor skills in order to eliminate their pouch, clean the stoma and skin surrounding it, empty and dispose of waste matter from the pouch. Stoma self-care education has been linked to better colostomy adjustment (Ceylan, 2017).

Colostomy complications occur between 21 and 70 percent of people. While the chance of having a problem is always present, it is highest in the first five years after the stoma is created. Patient education and training for life with a colostomy should begin as soon as feasible after surgery. The participation in colostomy support groups and counselling by nurses have been shown to lower complication rates and improve long-standing results and psychosocial adjustment(Shanmugan, 2019).

Stoma is a phase that is both long and difficult. . Patients must take care of themselves, but they have no idea how to treat a stoma, which causes them anxiety and fear. Returning home after being discharged from the hospital is one of the most difficult period. According to a survey, 49 percent of stoma sufferers are unable to care for themselves. It is essential to encourage stoma self-care practices during the adaptation process (Goldblatt, 2018).

Colostomy patients are in deficient knowledge level regarding care of colostomy, resulting in many complications leading to many readmissions. Stoma patients commonly felt unprepared in the first few weeks after the stoma formed due to a lack of awareness about the stoma. Colostomy patient education increases self-management skills, reduces complications, and reduces readmissions in the hospitals (Abdelmohsen, 2020).

Many abdominal surgeries performed by general surgeons and others include the creation of a stoma. Generally creation of stoma use is in the treatment of colorectal tumors, trauma, diverticulitis, inflammatory bowel disease.Clostomies generate physical and psychological alterations that necessitate significant adaptation by patients. Patients with colostomies have to change their lifestyles and learn new skills to care for their stoma for self care (Collado-Boira et al., 2021).

METHODOLOGY

Study Design: The descriptive cross sectional study design was used in this research.

Settings: Data was collected from a surgical department of a tertiary hospital in Lahore using a convenient sampling strategy.

Study Participants: 76 patients who had a permanent colostomy and were between the ages of 24 years to above 60 years.

Study Instrument: Self care of colostomy patients was measured using Ostomy Self-Care Index Scale (OSCI). It consists of 32 items, each of which is evaluated on a scale of 1 to 5. The maximum possible total score is 160, while the lowest possible score is 32. When the total score on the OSCI scale is 70% or higher, it is regarded adequate; when the entire score is less than 70%, it is considered inadequate(Villa et al., 2019).

Data Analysis: The data analysis was evaluated by the Statistical Package for Social Sciences version 29.0. Frequencies and percentages were used to analyze descriptive statistics.

Ethical Considerations: Ethical permission was taken from the institutional review board (IRB) committee of the University of Lahore. Moreover, the consent was taken from all study participants in written form.

RESULTS

The frequency and distribution of socio-demographic the patients' characteristics are displayed in Table 1.Males made up 48.7% of the patients, while females made up 51.3 percent. According to age group of 42.1 % of the patients 51-60 years as well as 23.7 % were 41-50 years. Mostly patients were (56.6%) married and 43.4% were unmarried. The majority of the patients (43.4%) had only acquired primary education, while Educational level o the participants in this research show that 9.2% patients were illiterate; most of the patients 43.4% of them received primary education, while 38.2% 38.2% had received intermediate education. The stoma causes for studied patients (34.2%) were ulcerative colitis,(22.4%) were crohn disease,(40.8%) were colon disease,(17.1%) were trauma,(10.5%) were diverticular disease and (9.2%) were colon disease. Regarding chronic diseases, it

was found that (40.8%) complained from hypertension and (52.2%) with no co morbidity. Most of the patients (75%) were non smoker while 25% were smoker. Regarding the type of stoma (100%) had permanent types of the stoma. The majority of the patients (76%) underwent elective surgery, whereas (23.7%) underwent emergency surgery. The duration of stoma site nearly 100% were less than one month. With regard to who performed stoma care 75 % by self while 25% with by caregiver. The items of self care were observed on a 5-point Likert scale (1 = never, 2= rarely, 3 = sometime, 4= often,5=always).

Table 2 shows the frequency percentage of the self care questionnaire regarding colostomy care of patients. Regarding the checking and confirm that the stoma appliance and the collecting bags are suitable to your requirements revealed that 27(35.5%) response never, 32(42.1%) response rarely, 12(15.8%) response sometimes, 2(2.6%) response often and 3(3.9%) response always. The participant's response regarding Remove the stoma appliance as well as collecting bags from top to the bottom during substitution 23(30.3%) response never,28(36.8%) response rarely, 19(25.0%) response sometimes, 4(5.3%) response often and 2(2.6%)response always. About 27(35.5%) patients never clean the skin in the region of the stoma, 25(32.9%) response rarely, 19(25.0%) response sometimes, 4 (5.3%) response often, and 1(1.3%) response always. Approximately 34(44.7%) never, 26(34.2%) rarely, 11(14.5%) sometimes, 3(3.9%) often, and 2(2.6%) always recognize the problem in the stoma and skin surrounding it in the previous month. In response to self care related to eating and drinking according to information 28(36.8%) response never, 31(40.8%) response rarely, 13(17.1%) response sometimes, 3(3.9%) response often and 1(1.3%) response always. The participant's response regarding for stoma appliances leakage (faeces or urine) 28(36.8%) response never, 31(40.8%) response rarely, 13(17.1%) response sometimes, 3(3.9%) response often, and 1(1.3%) response always. In response to regarding how quickly did you figure out it was a stoma issue if you had problem in the stoma and skin surrounding it in the previous month 32(42.1%) response never, 28(36.8%) response rarely, 14(18.4%)response sometimes, and 2(2.6%)response always. The participants response regarding identify changes in stoma and the skin around it when they occur when they occur 41(53.9%) response never, 29(38.2%) response rarely, 4(5.3%)response sometimes, 1(1.3%)response often, and 1(1.3%)response always. In response to assess how effective a remedy is for stomal skin problems 40(52.6%) response never, 23(30.3%)response rarely, 10(13.2%)response sometimes, 1(1.3%) response often and 2(2.6%) response always.

DISCUSSION

The aim of the present study was to assess the knowledge of self care program on self care practices among patients with colostomy. This goal was accomplished through assessing patient's practices regarding colostomy care. The conclusion will be divided into two parts: the first part linked to patients' socio demographic features and medical history. The findings relating to the patient's knowledge of self-care were discussed in the second section. In terms of age, nearly half of the patients in the current study were between the ages of 50 to 60 years.

Mostly patients were (56.6%) married and 43.4% were unmarried. This result resembles with a study done in 2018 which revealed that males made up 86 percent of the patients, while females made up 14 percent; 54 percent of the patients were between the ages of 41 and 50, and 74 percent were married(Abdullah,2018).According to present study stoma cause for patients 40.8%) was colon disease. According to another study done in 2017, revealed that cause of colostomy 73.3% was bowel cancer in patients. According to present study 100% patients had inadequate knowledge which is less than 70%(Mohamed, Salem, & Mohamed, 2017).

According to another study inadequate colostomy self-care knowledge was found in 86.7 percent of the study participants(El-Rahman, 2020).Also this finding of this study agrees with the outcomes of the study done in 2016,reported by who revealed that, the lowest score of knowledge in colostomy patients regarding self care practices for stoma and its surrounding areas was (15.49%), skin care (14.08%), drug use (12.68%), situations that require an open stoma (%11.27), nutrition (11.27%), stoma care products (9.86%), and the content that can come from the stoma (7.04%)(Culha et al., 2016).

Table 1: Demographic Profile of Participants

Socio-Demographic characteristics	Frequency	Percentage%
1. Gender		
Male	37	48.7
Female	39	51.3
Age Group		
25-30yrs	9	11.8
31-40 yrs	10	13.2
41-50yrs	18	23.7
51-60yrs	32	42.1
>60yrs	7	9.2
3.Martial Status		
Unmarried	33	43.4
Married	43	56.6
4. Education		
Illiterate	7	9.2
Primary	33	43.4
Intermediate	29	38.2
Secondary	4	5.3
University	3	3.9
5. Weight		
20-30kg	2	2.6
31-40kg	18	23.7
41-50kg	30	39.5
51-60kg	23	30.3
> 60 kg	3	3.9
6. Height		
90cm-120cm	6	7.9
121cm-150cm	39	51.3
151cm-182cm	31	40.8
7.Present medical diagnosis		
Bowel or colon disease	31	40.8
Trauma	8	10.5
Ulcerative Colitis	17	22.4
Crohn Disease	13	17.1
Diverticular Disease	7	9.2
8.Having other medical problem		
Diabetes	0	0
Heart Disease	0	0
Hypertension	31	40.8
No co morbidity	45	52.2
9. Smoking habits		
Yes	19	25
No	57	75
10. Kind of Ostomy		
Ileostomy	13	17.1
Colostomy	63	82.9
11. Type of Ostomy		
Permanent	76	100
Temporary	0	0
12. Ostomy Surgery type		
Elective	58	76.3
Emergency	18	23.7
13. Stoma Site Duration		
< 1 month	76	100
≤ 2 months	0	0
≤ 3 months	0	0
14. Pouch types		
One piece	37	48.7
Two pieces	39	51.3
15. Who performed stoma care		
Oneself	57	75
Caregiver	19	25
Nurse		

Table 2: Self care practices of Participants

Sr #	Questions	Frequency Percentage					Mean ±SD
		Never	Rarely	Sometime	Often	Always	
1.	confirm that the stoma appliance and the collecting bags are suitable to your requirements.	27(35.5%)	32(42.1%)	12(15.8%)	2(2.6%)	3(3.9%)	1.97±.993
2.	Check the stoma appliance and make sure it and the collecting bags are in good working order before using	30(39.5%)	18(36.8%)	15(19.7%)	2(2.6%)	1(1.3%)	1.89±.903
3.	Remove the stoma appliance as well as collecting bags from top to the bottom during substitution	23(30.3%)	28(36.8%)	19(25.0%)	4(5.3%)	2(2.6%)	2.13±.998
4.	Clean the skin in the region of the stoma	27(35.5%)	25(32.9%)	19(25.0%)	4(5.3%)	1(1.3%)	2.04±.972
5.	Dry dabbing the skin surrounding the stoma	28(36.8%)	27(35.5%)	15(19.7%)	3(3.9%)	3(3.9%)	2.03±1.045
6.	In a new one stoma appliance fit the size of the stoma bag.	34(44.7%)	26(34.2%)	11(14.5%)	3(3.9%)	2(2.6%)	1.86±.989
7.	Fit a new stoma appliance from downward to up by attaching the bottom edge of the stoma appliance to the lower border of the stoma	26(34.2%)	28(36.8%)	19(25.0%)	2(2.6%)	1(1.3%)	2.00±.909
8.	Change stoma appliance based on the information you obtained	36(47.4%)	27(35.5%)	9(11.8%)	3(3.9%)	1(1.3%)	1.76±.907
9.	Eating and drinking according to obtained information	28(36.8%)	31(40.8%)	13(17.1%)	3(3.9%)	1(1.3%)	1.92±.906
10.	Monitor for stoma appliances leakage (faeces or urine).	28(36.8%)	31(40.8%)	13(17.1%)	3(3.9%)	1(1.3%)	1.95±.951
11.	Check the condition of the collecting bag's filling.	25(32.9%)	33(43.4%)	16(21.1%)	1(1.3%)	1(1.3%)	1.95±.847
12.	Check the stoma condition.	24(31.6%)	30(39.5%)	19(25.0%)	2(2.6%)	1(1.3%)	2.03±.894
13.	Observe the skin around your stoma.	26(34.2%)	32(42.1%)	16(21.1%)	1(1.3%)	1(1.3%)	1.93±.854
14.	Observe the quantity and the alterations in the urine and faeces.	35(46.1%)	29(38.2%)	9(11.8%)	1(1.3%)	2(2.6%)	1.76±.907
15.	Monitor the impact of food and drink on the faeces and urine (too liquid/solid faeces, concentrated urine).	38(50.0%)	24(31.6%)	11(14.5%)	22.6%)	1(1.3%)	1.74±.900
16.	Check your weight.	36(47.4%)	24(31.6%)	14(18.4%)	1(1.3%)	1(1.3%)	1.78±.888
17.	Monitor your stoma appliance's supply.	37(48.7%)	25(32.9%)	12(15.8%)	1(1.3%)	1(1.3%)	1.74±.870
18.	How quickly did you figure out it was a stoma issue if you had problem in the stoma and skin surrounding it in the previous month?	32(42.1%)	28(36.8%)	14(18.4%)	0%	2(2.6%)	1.84±.910
19.	Change your diet or drink more fluids to reduce or eliminate the problem	29(38.2%)	28(36.8%)	17(22.4%)	1(1.3%)	1(1.3%)	1.91±.882
20.	Change the technique in management of your stoma and the skin around it	25(32.9%)	30(39.5%)	18(23.7%)	2(2.6%)	1(1.3%)	2.00±.894
21.	Contact your stoma therapist, nurse, or doctor. for guidance.	36(47.4%)	23(30.3%)	14(18.4%)	2(2.6%)	1(1.3%)	1.80±.924
22.	At your next visit, tell your stoma therapist/nurse/doctor about the problems.	41(53.9%)	25(32.9%)	10(13.2%)	0%	0%	1.59±.715
23.	Maintaining the stoma and the peristomal skin in excellent condition without any difficulty.	40(52.6%)	28(36.8%)	8(10.5%)	0%	0%	1.58±.678
24.	Follow the stoma treatment instructions you have been given.	37 (48.7%)	30(39.5%)	6(7.9%)S	1(1.3%)	2(2.6%)	1.70±.880
25.	Persist to the stoma management treatment recommendations you've been given. even if it is difficult.	41(53.9%)	27(35.5%)	5(6.6%)	2(2.6%)	1(1.3%)	1.62±.832
26.	Monitoring the condition of stoma and the skin in the region of it.	34(44.7%)	29(38.2%)	11(14.5%)	1(1.3%)	1(1.3%)	1.76±.846
27.	Persist to examine the condition of stoma and the skin in the region of the stoma.	38(50.0%)	29(38.2%)	7(9.2%)	1(1.3%)	1(1.3%)	1.66±.809
28.	Recognize changes in your stoma and the peristomal skin around it when they occur.	41(53.9%)	29(38.2%)	4(5.3%)	1(1.3%)	1(1.3%)	1.58±.771
29.	Evaluate the significance stoma problems and skin issues related to stoma.	33(43.4%)	31(40.8%)	10(13.2%)	1(1.3%)	1(1.3%)	1.76±.831
30.	Do something that will alleviate your stoma and stoma-related skin issues.	33(43.4%)	26(34.2%)	12(15.8%)	3(3.9%)	2(2.6%)	1.88±.993
31.	Persist to keep trying to search for a solution for a stoma and the skin around the stoma. even if it is complicated/hard	38(50.0%)	28(36.8%)	8(10.5%)	1(1.3%)	1(1.3%)	1.67±.823
32.	Evaluate the efficacy of a remedy for stoma and skin problems surrounding the stoma.	40(52.6%)	23(30.3%)	10(13.2%)	1(1.3%)	2(2.6%)	1.71±.935

Table 3.Overall Self Care Scores

SELF CARE	SCORE	N	%	Mean ± SD
Adequate Self Care	>70%	0	0	0.000
Inadequate Self Care	<70%	76	100%	58.54±5.777

Recommendations: Self care practices are an essential element for the adjustment of patients with stomas following surgery, so patients should get scheduled self-care education. Follow-up treatment for patients with intestinal colostomies is provided through clinical visits and phone conversations, which help to identify and solve patients' difficulties. Patients with stomas should be included in the colostomy care team's self-care programme, as well as the prevention and treatment of physical issues (Alenezi, 2016).

Limitation: Only one tertiary hospital was used in the study.

REFERENCES

1. Abdelmohsen, S. A. (2020). Effectiveness of Structured Education on Patient's Knowledge and Practice Regarding Colostomy Care. *Asia-Pacific journal of oncology nursing*, *7*(4), 370.
2. Abdullah, I., Abdulmutalib, M., Abdullah, E., & Nagshabandi, A. (2018). Effect of an Educational Protocol on Knowledge and Self-Care Practices among Patients with the Intestinal Ostomy. *American Journal of Nursing Research*, *6*(6), 553-561.
3. Alenezi, A. N., & Mansour, E. A. (2016). Impact of stoma care education in minimizing the incidence of stoma skin complications. *Bahrain Medical Bulletin, 158*(5894), 1-3.
4. Ceylan, Hatice, and Fatma Vural. "Living with stoma-a phenomenological study." *J Nurs Res Pract* 1, no. 1 (2017): 6-12.
5. Collado-Boira, E. J., Machancoses, F. H., Folch-Ayora, A., Salas-Medina, P., Bernat-Adell, M., Bernalte-Martí, V., & Temprado-Albalat, M. (2021). Self-Care and Health-Related Quality of Life in Patients with Drainage Enterostomy: A Multicenter, Cross Sectional Study. *International Journal of Environmental Research and Public Health, 18*(5), 2443.
6. Culha, I., Kosgeroglu, N., & Bolluk, O. (2016). Effectiveness of self-care education on patients with stomas. *JournalofNursingand Health Science [Internet], 5*, 70-76.
7. El-Rahman, A., Ali, W., Mekkawy, M. M., & Ayoub, M. T. (2020). Effect of Nursing Instructions on Self Care for Colostomy Patients. *Assiut Scientific Nursing Journal*, *8*(23), 96-105.
8. Goldblatt, J., Buxey, K., Paul, E., Foot-Connolly, R., Leech, T., & Bell, S. (2018). Study on the time taken for patients to achieve the ability to self-care their new stoma. *ANZ journal of surgery*, *88*(6), 503-506.
9. Massenga, A., Chibwae, A., Nuri, A. A., Bugimbi, M., Munisi, Y. K., Mfinanga, R., & Chalya, P. L. (2019). Indications for and complications of intestinal stomas in the children and adults at a tertiary care hospital in a resource-limited setting: a Tanzanian experience. *BMC gastroenterology, 19*(1), 1-10.
10. Mohamed, S. S., Salem, G., & Mohamed, H. A. (2017). Effect of self-care management program on self-efficacy among patients with colostomy. *Am J Nurs Res, 5*(5), 191-199.
11. Shanmugan, S. (2019). Complications and Dilemmas in Colorectal Surgery. *Clinics in colon and rectal surgery, 32*(03), 147-148.
12. Villa, G., Vellone, E., Sciara, S., Stievano, A., Proietti, M. G., Manara, D. F., Pantaleo, G. (2019). Two new tools for self-care in ostomy patients and their informal caregivers: Psychosocial, clinical, and operative aspects. *International Journal of Urological Nursing, 13*(1), 23-30.