Original Article

Impact of Ostomy Surgery on Hospitalized Patients at a Tertiary Care Hospital in Pakistan

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Objective: To evaluate the practical, psychological and social consequence of ostomies on patients in our setup. To judge the level of patient satisfaction and knowledge about stoma care. To high-light common post-operative concerns of patients.

Study Design: Cross sectional descriptive study

Place and Duration: Department of General Surgery, Pakistan Institute of Medical Sciences from April 2007-June 2007.

Materials and Methods: 30 patients aged 18-80yrs of both sexes were purposively sampled. Data collection using a proforma and data analysed using SPSS version 14.0 for windows software.

Results: A total of 30 patients aged between 18-80yrs were sampled, mean age was 35 yrs. 77% of our sample underwent a temporary diversion and 23% a permanent one. 60% of patients had no idea or were inconclusive about their diagnosis during admission. At discharge 6 patients were able to manage their stoma independently.

Conclusion: In-patient specialist stoma nurse care and out-patient stoma clinics for rehabilitation and follow-up are essential components lacking in the management of ostomy surgery to patients in our setup.

Key words: Ostomy surgery, Stoma care.

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Introduction

To the professional eye, an ostomy refers to a surgically created opening in a patient's body for discharge of body waste products. To the ostomate however, it means substantive changes not only in bodily appearance and functional ability but also in overall personal hygiene; this has major impact both on the manner in which they perceive themselves and on their quality of life in general.[1,2] The World Health Organization (WHO) defines quality of life as "individuals' perceptions of their position in life in the context of the culture and value systems in which they live, and in relation to their goals , expectations , standards and concerns".[3] This statement focuses on four broad domains: physical/occupational function , psychological state , social interaction , and somatic sensation all of which are to be borne in mind as impact factors when approaching a patient for ostomy counseling. It is important for us to realize however, that for patients in a developing country such as ours, these aspects must be applied in context to their level of awareness and understanding.

Figures suggest that it takes an average of four to twelve months for patients to adjust on an ostomy[4] and that patient access to specialist ostomy care nurses is particularly important during the first 3 to 6 months following surgery.[5] The Montreux study gave results that were fairly consistent in all patients throughout Europe. 'Stoma Care Quality of life Index' (SCQLI) scores were significantly higher in patients who had a good relationship with the stoma care nurse and felt confident about changing the appliance than those who did not . Stronger feelings of self efficacy shortly after surgery predicted fewer psychosocial problems in the course of first post-op year.[6] With this in mind we are forced to envisage the practical and psychological impact osteomies are having on patients in the developing world where no such facility or alternative is available to the majority. Raising awareness about the medical/socioeconomic implications this is having on our society and implementing changes to further raise the level of care received by patients facing ostomy surgery is our central goal. For this we must highlight problems encountered by patients at the grass root level and provide solutions that not only recognize various limitations but also seek to resolve them in keeping with

the exclusive needs of ostomates in the developing world.

Materials and Methods

This cross-sectional descriptive study was under taken at the General Surgery Department, Pakistan Institute of Medical Sciences, (P.I.M.S) from April 2007 –June 2007. 30 patients aged between 18yrs-80yrs of both sexes were purposively sampled. Data collection was with the aid of a questionnaire and analysis using SPSS version 14.0 & Microsoft excel software.

Inclusion criteria: Elective and emergency ostomy surgery performed under care of General Surgery Department, PIMS, Islamabad. Faecal diversions were only included which were both permanent and temporary.

Exclusion criteria: Urinary diversions and patients under the age of 8 yrs were excluded.

Results

30 patients aged between 18yrs-80yrs were sampled , mean age was 35 yrs. 40% of the population was female (n = 12) and 60% male (n =18). In our sampled population 67% (n = 20) of patients underwent emergency ostomy surgery and 33% (n = 10) were operated as elective cases.

Table I shows the frequency with which each disease presented.

Table I: Frequency of disease presentation

`	No of cases	% of cases
Abdominal tuberculosis	5	17
Spontaneous perforation	4	13
Carcinoma :		
Ascending colon	1	
Descending colon	1	
Caecum	1	24
Rectum	3	
Sigmoid	1	
Iatrogenic perforation	4	13
Crohn's disease	1	3
Traumatic perforations	5	17
Intestinal Obstruction	4	13
Total	**N= 30**	**100%**

The most commonly affected disease site overall was the ileum followed closely by the descending colon.

In total we performed 13 ileostomies , 13 colostomies , 3 ileo-colostomies and 1 ileo- caecotomy. 77% (n =23) of cases required a temporary diversion whilst 23% (n =7) faced an ostomy indefinitely. Of those requiring a temporary procedure 23% were found to be clinically depressed with the highest incidence in the 18-30 year age range.43% of permanent ostomy patients had clinical depression with highest incidence in the 31-50 year age range. Table II shows the level of patient awareness, knowledge and satisfaction regarding their stoma preoperatively

Table II: Pre-operative patient awareness, knowledge and satisfaction after ostomy counseling

Patient response (n =30)		No of patients
Awareness about Diagnosis	Complete	40
	Inconclusive	47
	None	13
		100%
Knowledge About stoma	Complete	20
	Inconclusive	73
	None	7
		100%
Satisfaction with Counselling	Complete	57
	Inconclusive	37
	None	6
		100%

98% of patients had never seen or heard about a stoma before their own encounter.

Figure I below shows a comparison between patients concern preoperatively with those post ostomy surgery.

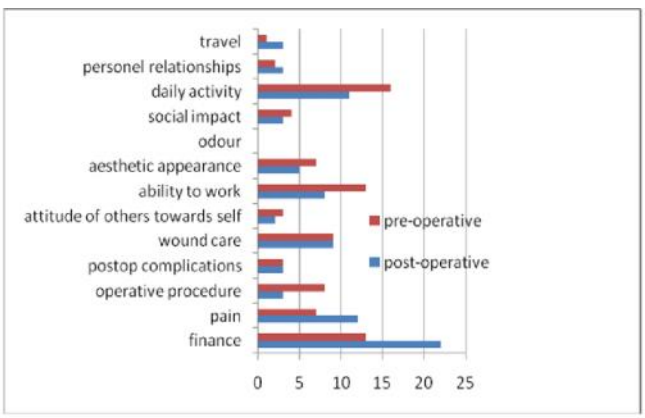
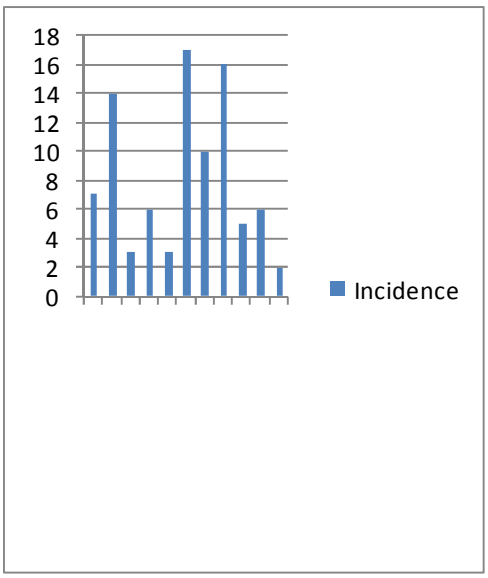
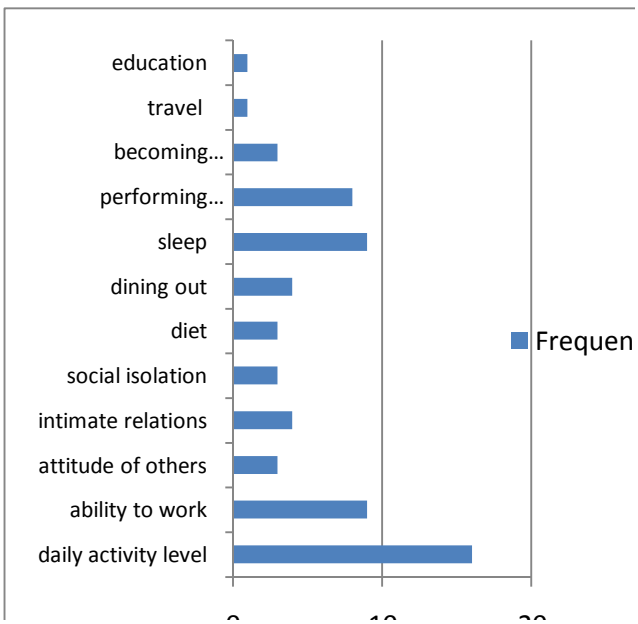


Figure I: Comparing pre-operative patient concerns with those post ostomy surgery


18
16
14
12
10
8
6
4
2
0
Incidence


education
travel
becoming...
performing...
sleep
dining out
diet
social isolation
intimate relations
attitude of others
ability to work
daily activity level
Frequen

greatest challenge to individuals.[7]

At discharge only 20 %(n=6) of patients were able to manage their stoma independently . Discharge planning and establishing goals for rehabilitation , an ongoing process , should be preceded by a holistic assessment.[6] This should ideally be carried out by a specialist practitioner with knowledge and experience in that area such that a greater percentage of patients feel confident about themselves and the management of their stoma when they go home. Ostomates desire assistance with these problems and will benefit from long-term follow-up by an ostomy nurse.[8]

The three most frequently encountered causes for patients requiring ostomy surgery were carcinoma, intestinal perforation secondary to abdominal tuberculosis and road traffic accidents. This highlights the need to prioritize management at the grass root level through consideration of the fundamentals behind ostomy surgery. Primary prevention based by widespread screening programmes and multidisciplinary approach are tools to alleviating the burden of ostomy surgery where it is potentially avoidable

Reaction to intestinal or urinary diversion surgery very much varies from one individual to the other. To some it will be a problem, to the other a challenge; where one person considers it life-saving, another finds it a devastating experience.[1] It is therefore mandatory to ensure that patients undergoing stoma formation are helped into making practical as well as psychosocial adjustments to the surgery as early as possible[9] and that assistance offered be tailored to individual needs and disease development.[4] Most importantly , clear communication , information and the ability to participate and be actively involved in the treatment are prerequisites for patient satisfaction for care.[2] Improved preoperative assessment and counselling with longer follow-up by the stoma department would be helpful in the management of these patients and probably would contribute to improvement in the quality of their lives[10]

A specialized ostomy nurse for in-patient care would help in practical stoma management and reduce complication rates.

Extensive pre-operative and immediate post operative psychological support would provide long term satisfaction and ease of adjustment to the ostomy. Stronger feelings of self efficacy shortly after surgery predict fewer psychosocial problems in the course of the first post-op year.[5] Addressing psychosocial concerns should become part of the care routinely given to stoma patients. We recommend more emphasis on dispelling negative thoughts and encouraging social interactions.[11]

Conclusion

In-patient specialist stoma nurse care and out-patient stoma clinics for rehabilitation and follow-up are essential components lacking in the management of ostomy surgery to patients in our setup.

Hospital based wound/ostomy care clinics for out patient education/followup would look to identify ostomy adjustment problems early and encourage independence.

Assistance at the government level both for provision of financial support to non-affording patients from Zakat and bait-ul-mal and integrated health programmes are all steps towards improving the overall managements of ostomates as well as reducing the burden of this common public health issue on tertiary care.

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