



Enterostomal Therapy Service: Ten-year Experience at B.P. Koirala Memorial Cancer Hospital

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ABSTRACT

Introduction: Enterostomal therapy (ET) is the newly evolving subspecialty area of nursing. None of the university started the ET courses in Nepal. Very few ET nurses catering the needs of osteomates in different hospital. Increasing burden of colorectal and urinary bladder cancer increases the ostomy population. There are no definite data regarding the ostomy population in national context. So, this is the neglected area of care in most cancer hospital of Nepal. The objective of this study is to find out the total number of ostomy population in terms of types of ostomies, age, sex, geographical distribution, complications and stoma service availability at BP Koirala Memorial Cancer Hospital

Methods: A descriptive study was carried out retrospectively at, BP Koirala Memorial Cancer Hospital, Bharatpur Nepal and approved by nursing department. All available data were abstracted from stoma clinic from 2008 to 2018.

Results: There were total 659 ostomates registered in the stoma clinic. Among them majority 63% were male. There were main three categories of ostomate namely colostomies (66.7%) 440, Ileostomies (9.8%) 65 and urostomies (23.3%) 154. Ostomate represented from 56 districts. International osteomate also took services from the clinic. Peristomal skin excoriation, Parastomal hernia, stoma prolapsed were complications reported by the osteomates.

Conclusion. This aspect of ostomy care and management deserves an investment of research to find out the reliable data.

Keywords: Osteomates, colostomy, urostomy, ileostomy.

Introduction

The word 'stoma' comes from the Greek word meaning 'mouth' or 'opening'. An ostomy is an operation that creates an opening from an area inside the body to the outside. The most common intestinal stomas are ileostomy, colostomy and Urostomy. The person taking care of patients having intestinal stoma is known as the Enterostomal Therapist. This is the subspecialty areas of nursing with advance certified course. There is a short history of initiation of this type of subspecialty course globally. In 1958 Rupert Turnbull, Jr., MD

, was the surgeon who enlisted Norma N. Gill to help his patient at the Cleveland clinic to overcome the shock of ostomy surgery and resume a normal, active lifestyle (Blakely, 1996).¹ Ms. Gill, who herself had an ostomy, began a program to educate not only patients with ostomies, but also to educate nurses and surgeon in the care of a person with stoma. Ms. Gill and Dr. Turnbull recognized the unmet needs of the person with a stoma and began the development of the profession referred to as Enterostomal therapy. They established the first training program at the Cleveland Clinic. The first Enterostomal therapist were required

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either to have an ostomy themselves or have a family member with stoma. Over time, enterostomal therapy practice evolved into a nursing specialty. The role of the enterostomal therapy nurse was developed to meet patients' unmet needs; that role is now a certified nursing specialty in the tri- specialty areas of wound, ostomy and continence nursing.¹

In Nepal, Ostomy Service was started from Tribhuwan University Teaching Hospital (TUTH) and Patan Mission Hospital in inpatient basis. Nurses had only hands on skill and supported by the operating surgeon. Later one two Nurses were sent to TATA Memorial Hospital India for certified Enterostomal Therapy training. After returning from TATA, one had worked in TUTH and another one had worked in the Patan Mission Hospital.

After the establishment of B. P. Koirala Memorial Cancer Hospital (BPKMCH), an Enterostomal Therapy service was extended in the Nation. B. P. Koirala Memorial Cancer Hospital provided educational opportunity to 3 senior nurses for certified Enterostomal therapy course in India and Japan in different periods of time (2001 to 2010).

The objectives of this study are 1) To find out the total number of ostomy population at B. P. Koirala Memorial Cancer Hospital in terms of geographical distribution, age/sex distribution, types of ostomies, complications and reasons for visiting the clinic and 2) To explore the services availability in the stoma Clinic at B. P. Koirala Memorial Cancer Hospital

Methods

A descriptive study was carried out retrospectively at, B. P. Koirala Memorial Cancer Hospital, Bharatpur Nepal and approved by Nursing Department. All available data were abstracted from stoma clinic from 2008 to 2018. Data were analyzed in terms of types of stoma, age distribution, sex distribution, geographical distribution, complications of stoma and reason for visiting the stoma clinic. The review of the records did not require patient approval and informed consent. In order to facilitate interpretation, the analyzed data are presented in the tables.

Results

Table 1 indicates the number of three categories of ostomy population visiting stoma clinic at BPKMCH. Majority were colostomy cases (66.7%).

Table 1: Total Number of ostomy cases visiting stoma clinic at BPKMCH from 2008- 2018

Category of Ostomate	Male	Female	Total
Colostomy	259	181	440
Ileostomy	43	22	65
Urostomy	114	40	154
Total	416	243	659

Table 2 indicates that majority of the colostomates were male (55%). Even the early aged, middle aged people are living with colon stoma. Majority of the urostomates and ileostomates were male (75.9% and 66% respectively).

Table 2: Distribution of colostomy, urostomy and ileostomy cases by age and sex

Age in years	Colostomy			Urostomy			Ileostomy		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Below 20	8	4	12	0	0	0	9	2	11
21-30	42	27	69	2	2	4	6	3	9
31-40	56	36	92	15	4	19	8	5	13
41-50	38	58	96	20	9	29	9	7	16
51-60	41	39	80	35	8	43	5	3	8
Above 60	58	33	91	45	14	59	6	2	8
Total	243	197	440	117	37	154	43	22	65

Table 3 shows the trend of stoma clinic visit by ostomy client. Trend is decreasing though the number of ostomate is increasing. Reason behind is home care

management teaching given to them is effective and their learning is enhanced by their ostomate friend's experience sharing session at stoma clinic.



Table 3: Trend of ostomate visit at stoma clinic from 2008 to 2018

Year	Ostomate Visiting Stoma Clinic				Total No. of Visit
	Colostomy/ Ileostomy		Urostomy		
	Male	Female	Male	Female	
2008	Not categorized				129
2009	“	“	“	“	50
2010	459	378	155	88	1080
2011	496	467	275	79	1317
2012	610	524	300	75	1509
2013	664	557	327	80	1628
2014	955	687	623	210	2475
2015	820	649	480	169	2118
2016	809	577	355	104	1845
2017	607	381	216	94	1298
2018	474	356	237	70	1137

Table 4 shows the catchment areas of the hospital. International ostomates also came to stoma clinic for services.

Table 4: District wise Distribution of Ostomate (n=659)

SN	District	No.	SN	District	No.	SN	District	No.
1	Gorkha	19	20	Jhapa	24	39	Doti	2
2	Parbat	8	21	Kathmandu	6	40	Pyuthan	8
3	Morang	27	22	Sankhuwasabha	6	41	Banke	9
4	Chitwan	60	23	Myagdi	5	42	Arghakhanchi	8
5	Bara	18	24	Parsa	21	43	Sindhuli	3
6	Kaski	22	25	Panchthar	5	44	Dhankuta	2
7	Gulmi	14	26	Sarlahi	9	45	Taplejung	2
8	Makawanpur	25	27	Sunsari	25	46	Dailekh	9
9	Rautahat	7	28	Palpa	9	47	Achham	1
10	Ilam	9	29	Saptari	8	48	Rukum	2
11	Dang	23	30	kailali	9	49	Darchula	2
12	Siraha	17	31	Baglung	8	50	Lalitpur	4
13	Rupandehi	22	32	Mahottari	10	51	Bajhang	1
14	Lamjung	14	33	Bardiya	11	52	Bhojpur	4
15	Tanahun	28	34	Kapilbastu	11	53	Dadeldhura	3
16	Syangja	7	35	Udayapur	5	54	Baitadi	2
17	Kanchanpur	17	36	Dhanusa	12	55	Khotang	2
18	Dhading	6	37	Solukhumbu	4	56	Jajarkot	2
19	Nawalparasi	44	38	Surkhet	5	57	Foreign (India)	10

Most of the ostomates visited the clinic for follow-up in different department (Table 5).

Table 5: Reasons for visiting stoma clinic by ostomates

Reasons for visiting	Colostomy	Urostomy	Iliostomy
To get ostomy appliance only	200	70	35
Doctor's follow up time	240	84	30
To know about the appropriate use of appliance		-	-

Twenty-five (38.4%) Iliostomy clients developed the peristomal skin excoriation ranging from mild to severe. Whereas only 15% colostomy client had skin excoriation. Only 6% urostomates had allergic contact dermatitis. Parastomal hernia (3.4%) and stomal prolapse (2.7%) were also found to be in minimal percentage.

Table 6: Types of complications of stoma among the ostomates

Complications	Colostomy	Urostomy	Iliostomy
Peristomal Skin excoriation	70	10	25
Parastomal Hernia	15	-	-
Stoma prolapse	12	-	2
Allergic contact dermatitis	8	6	

Table 7: Stoma Care Initiatives at BP Koirala Memorial Cancer Hospital

Date	Initiatives
Service limited to indoor only	
2000AD	Stoma care started in indoor basis with the help of operating surgeon.
2001	Hospital sent one nurse for ET Training in TATA. Then after certified ET started stoma care. But She left the hospital within one year of training
2003	Again, another nurse sent for ET Certified course in Japan. But she did not serve the patient at BPKMCH. She left the job
Service started in Outpatient Department	
2004	Stoma Clinic started in outpatient department. Experienced nurses run the outpatient clinic along with the care in inpatients. Friends of osteomates from America started to help our osteomates by sending ostomy appliances and accessories.
2005	Annual ostomy meet day celebration on 11 th Falgun every year
2007	Stoma care society formed in Chitwan Osteomate themselves started to serve the would be Osteomate/ new cases in the stoma clinic as a counsellor, which is a beauty of our stoma clinic. Executive members of society used to have frequent meeting. They have a fund-raising program also
2010	BPKMCH then again sent one nursing staff for ET Training in TATA India. She is still working
2010 onwards	Indoor and outpatient services continued. Service covered the, stoma care, counselling, fistula management, wound management. Short term training to the staff from hospital, other institutes staffs and students

Discussion

There are no accurate data regarding the osteomate living with stoma globally. There were 750,000 registered ostomates in the United States. In India there were 300,000 registered ostomates. More than 102,000 people in the UK have a stoma.^{2,3}

Two studies attempted to clarify the average age of person with stoma as well as how the population segmented with surgeries. The studies revealed the average age of a person with a colostomy to be 70.6 yrs. An ileostomy to be 67.8yrs, and a Urostomy 66.7 yrs. The findings from this study is not consistent with the previous study.³ Our findings revealed that majority of colostomy and ileostomy persons were below the age of 50 years, which is surprising, and challenge remains for identification of causes of colorectal cancer in the earlier stage of life.

These same studies revealed an equal number of three major types of ostomy surgeries: Colostomy 36.1%, Ileostomy 32% and urostomy 31%.³ Findings of this study are again contradict with the literature findings. Colostomy surgeries were 77%, Urostomy surgeries were 23% and remaining 9% were ileostomy surgeries.³ Ninety eight percent colostomy surgery were part of colorectal cancer treatment. Urostomy surgeries were part of balder cancer treatment and pelvic exentration.

No definitive gender-based data are currently available from the ostomy population. Our study revealed that majority of all types of osteomates were male.

Peristomal skin affects 18% to 73%of patients., Iliostomies, and particular loop ileostomies, are responsible for the greatest proportion of Peristomal complications. Complications ranges from mild irritation to full thickness ulcerations leading to pain anxiety, and in some cases significant social isolation related to the pouching system leaks.^{4,5} Our finding is consistent with this study as 38% of ileostomy people have Peristomal skin excoriation. Inappropriate stoma site, not fitting ostomy appliances, wrong selection of appliances, inappropriate technique of changing appliances are some of the causes of leaking. Persistent leaking resulting Peristomal skin excoriation. Inappropriate stoma siting was found in the cases who were operated outside of the BP Koirala Memorial Cancer Hospital. So preoperative stoma site marking is important for the postoperative rehabilitation of the stoma surgery.

There are limited literatures regarding the incidence of parastomal hernia among the osteomates. Over all, the rate of Parastomal herna for a loop colostomy



and end colostomy ranges from 0 to 38.8% and 4 to 48.1% respectively. The rate for a loop ileostomy and end ileostomy ranges from 0 to 6.2% and 1.8% to 28.3% respectively. The likely explanation for lower rates of Parastomal hernia for loop ostomies is due to their reversal prior to the development of Parastomal hernia.⁶ This study findings is consistent with the literature as 3.4% colostomate had a parastomal hernia.

Stoma prolapsed is a common late complication after stoma formation with reported incidence rates of 2-26%. The high variability amongst rates can be attributed to variations in anatomical site (iliostomy, transverse or sigmoid colostomy), stoma formation technique (loop vs end stoma), disease process (benign vs malignant) and emergent or elective creation.⁷ In our setting, only 2.7% ostomates had stoma prolapsed. All of them were cancer cases.

Allergic contact dermatitis was reported by only 1.8% of the colostomy clients and 3.8% urostomy clients. Frequent use of antiseptic solution / cream and frequent change of ostomy appliances were the contributing factors of contact dermatitis.⁸

Retention of professional human resource working in this field remains challenging to the institution. B. P. Koirala Memorial Cancer Hospital had given a priority for the stoma care services. Institute established the relation with international organization (Friends of ostomates) for the support of osteomate in Nepal. Friends of ostomate, America is continually supporting to our osteomate by sending ostomy appliance and accessories free of cost 2 times in a year. Till date our ostomates are managing their stoma by using those supplies. Now it is a high time to think the alternative of donation.

Conclusion

There is an increasing trend of ostomy population in hospital. There are no national data available regarding the ostomy population. This aspect of ostomy care and management deserves an investment of research to find out the reliable data. More targeted and reliable statistics about this population could be powerful tools to make the appropriate plan and policies.

Rehabilitation after stoma surgery remains the

challenge for both hospital as well as family. There are unique need and problems of the ostomates. Home care management, availability of the appliances and dignified living are major concerns of the care team members.

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