

Clinical profile and post-operative lifestyle changes in cancer and non-cancer patients with ostomy

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ABSTRACT

Aim: The aim of this was to investigate some clinical profiles and lifestyle changes in stoma patients.

Background: Stoma patients experienced multiple complications due to their ostomy formation.

Patients and methods: A cross-sectional study performed on 102 random samples of stoma patients. Any patient with adequate physical and mental capability to participate and having had an ostomy in place for at least 3 months was eligible to enter the study. Participants asked to answer study questions concerning age, sex, type of stoma, having permanent or temporary ostomy, underlying cause of stoma formation, type of cancers cause of stoma. Patient also questioned about some lifestyle changes because of stoma including: changing diet, sexual satisfaction (if sexually active after stoma formation), sense of depression, changing job, change clothing style.

Results: Colostomy was the most common type of stoma followed by ileostomy and urostomy. In 80.4% of patients under study the stoma was permanent. Most patients had a stoma because of cancer (77.5%), with colon cancer (41.2%) being the most common malignant diagnosis. The mean age of cancer patients (56.1 ± 10.9) with stoma was significantly higher than non-cancer patients (44.7 ± 12.9) ($p < 0.05$). A significant differences were found regarding to sexual satisfaction after stoma formation between the two groups ($p < 0.05$) and the cancer group was less sexually satisfied post-ostomy.

Conclusion: In conclusion, stoma formation can caused multiple problems for both cancer and non-cancer patients. Counseling of patient is an important component of care that could help stoma patients to adjust with new situations.

Keywords: Ostomy, Cancer, Life style.

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Introduction

The most common underlying conditions resulting in the need for ostomy -a surgically that creates an opening on the abdomen for waste

products to eliminate from the body(1)- are colorectal cancer, bladder cancer, ulcerative colitis and Crohn's disease, inflammatory bowel disease (2). For non-cancer patients, Colitis, ulcerative colitis and Crohn's disease are the most common reasons for ileostomy formation (3).

Previous studies on the psychosocial impact of stoma formation have suggested that it can result

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in psychological morbidity (4-6). Nugent et al. (6) reported that over 50% of the stoma patients stated that having a stoma had hardly any or no effect on their ability to find work. They also pointed that, 20% of patients with colostomy or 15% of those with ileostomy have been forced to change their job and approximately 10% of the stoma patients had serious problems with diet and clothing due to their stoma. Other work suggests that stoma patients will adapt positively to their stoma (7). Practical problems were also found to be the most common reason for restricting social activities (8).

Many studies have been investigated the sexual function in stoma patients (9-12). Stoma patients have worries about sexual problems (6, 8, 13, 14). It is estimated that 43% and 45% of patients with colostomy or ileostomy had problems with their sex lives, respectively (6). Persson et al. study showed that patients with either ileostomy, colostomy or urostomy felt their sexual attractiveness had decreased after ostomy formation (14).

Iranian study on this issue is scant. One Iranian study indicated that psychosocial problems is as high as reports from other countries (15). The same author with another study found Iranian patients undergoing stoma surgery encountered with a heavy threat to their sense of physical integrity and self-concept with the change to their body image in relation to bodily functions (16).

While a few study in Iran have been performed to investigation of clinical profiles of stoma patients and their postoperative complications, the present study aimed to investigate the epidemiological and clinical profiles of a sample of Iranian stoma patients. We also aimed to evaluate some lifestyle changes associated with stoma.

Patients and Methods

A cross-sectional study performed on 102 random samples of stoma patients from Iranian Ostomy Society (IOS) members (March to

October 2011). Any patient with adequate physical and mental capability to participate and having had an ostomy in place for at least 3 months was eligible to enter the study.

After explanation of the study aim, patients were asked to give their written consent to participate. The study received the approval from Ethics Committee.

Participants asked to answer study questions concerning age, sex, marital status, type of stoma (colostomy, ileostomy, urostomy), duration of having a stoma (permanent, temporary), underlying cause of stoma formation (cancers, crohn's disease, ulcerative colitis, polyp, trauma and others), type of cancers cause of stoma (colon, rectum, bladder, gynecologic and prostate cancer). Patient also questioned about some lifestyle changes because of stoma including: changing diet, sexual satisfaction (if sexually active after stoma formation), sense of depression, changing job, change clothing style.

Pearson's chi-square test was used to compare nominal variables. Independent-samples t- test was used to compare numeric variables. Continuous variables are presented as mean \pm standard deviation and categorized data as frequency and percentage. All statistical tests were two-sided, and p-values less than 0.05 were considered significant. All data were analyzed using SPSS 13.0 software.

Results

Among the 102 stoma patients who participated in the survey, 58 (56.9%) were male and 44 (43.1%) were female. The mean age \pm SD of all participants was 53.5 ± 12.3 years. The mean age \pm SD of the male and female subjects were 56.7 ± 11.7 years and 49.4 ± 11.9 years, respectively ($p < 0.05$). Male to female ratio was 58 to 44. Table 1 shows the patients demographic and clinical characteristics.

Table 1. Demographical and clinical profiles of stoma patients

	Number	Percent
Type of ostomy		
Ileostomy	21	20.6
Colostomy	69	67.6
Urostomy	9	8.8
Colostomy & Urostomy	2	2.0
Colostomy & Ileostomy	1	1.0
Time from ostomy		
Permanent	82	80.4
Temporary	20	19.6
Underlying cause of ostomy		
Cancers	79	77.5
Crohn disease	2	2.0
Ulcerative colitis	9	8.8
Polyp	2	2.0
Trauma	1	1.0
Peritonitis	1	1.0
Obstruction	1	1.0
Fistula	1	1.0
Congenital	1	1.0
Necrosis	2	2.0
Radiation	1	1.0
Cancers cause of ostomy		
Colon	42	41.2
Rectum	26	25.5
Bladder	6	5.9
Gynecologic cancer	4	3.9
Prostate	1	1.0

Colostomy was the most common type of stoma followed by ileostomy and urostomy. In 80.4% of patients under study the stoma was permanent. Most patients had a stoma because of cancer (77.5%), with colon cancer (41.2%) being the most common malignant diagnosis.

For further analysis, we divided the patients into two groups as cancer vs. non-cancer according to underlying cause of stoma. The mean age of cancer group (56.1 ± 10.9) was significantly higher than non-cancer group (44.7 ± 12.9) ($p < 0.05$).

Table 2 shows the number and percentage of stoma patients with or without cancer who

answered to questions related to sexual satisfaction, sense of psychological problems, clothing, diet and job. A significant differences were found regarding to sexual satisfaction after stoma formation between the two groups ($p < 0.05$) and the cancer group was less sexually satisfied post-ostomy.

Table 2. Frequency of life style changes in stoma patients with or without cancer

	Cancer	Non-Cancer	p-value
No of patients	79	23	
Change diet because of Ostomy			
Have	65(82.3)	19(82.6)	0.971
Not have	14(17.7)	4(4.4)	
Sexually satisfaction			
Have	22(34.9)	10(62.5)	0.045
Not have	41(65.1)	6(37.5)	
Depressed consequence of Ostomy			
Yes	48(60.8)	16(76.2)	0.190
No	31(39.2)	5(23.8)	
Change job because of Ostomy			
Have	12(15.2)	5(21.7)	0.681
Not have	67(84.8)	18(78.3)	
Changed clothing style			
Have	43(54.4)	15(65.2)	0.35
Not have	36(45.6)	8(34.8)	

Discussion

In this cross-sectional study, patients referred to the Iranian Ostomy Association were investigated. We aimed to survey some clinical profiles and lifestyle changes after stoma formation in these patients.

Colorectal cancer which is fifth most common cancer in men and third in women in Iran (17-19), is the most frequently cause of stoma formation in the patients under study. Stoma for non-cancer patients occur primarily due to inflammatory bowel disease including: ulcerative colitis and crohn's disease. Our results are in line with other studies (3,16, 20).

It is widely established that stoma patients encountered with a variety of psychosocial, emotional, sexual, and social problems (15,21-23). Stoma patients face permanent changes to

their accepted body image and lifestyle (21, 24, 25). Kuzu et al. (26) found that permanent ostomy significantly decreased quality of life in stoma patient. White and Hunt (5) reported that about 25% of stoma patients experience psychosocial symptoms after surgery.

In the present study, cancer and non-cancer patients had similar behaviors, except for the predominance of sexual problems in the cancer group. In addition, our patients either cancer or non-cancer group have experienced high level of depression (61% vs. 76%) and low level of sexual satisfaction (35% vs. 63%). The prevalence of psychiatric disorders in Iranian general population has been reported 11% to 21% (27-30). In comparison with the reports from general population, stoma patients experienced very higher levels of psychiatric problems. Becker et al. (23) showed that emotional, social and sexual problems was seen in 29%, 35% and 23%, respectively. Thomas et al. (22) reported that 17% of males and 19% of females had moderate to severe psychiatric disturbance. Wade (31), with study on colostomy patients showed a lower levels of anxiety(7%) and depression(9%). It seems that Iranian stoma patients have a higher level of psychiatric problems than those reported from other countries which might be related mainly to technical problems in surgical methods and stoma care.

In addition, our patients have been changed their diet and clothing styles. Crouse et al. (20) with survey on 599 permanent stoma patients, have observed that both cancer and non-cancer group reported needing to change diet and clothing styles. They also reported that non-cancer patients were more needed to change their daily foods.

In conclusion, stoma formation can cause multiple problems especially sexual dissatisfaction, psychiatric disorders and altering in dietary patterns for both cancer and non-cancer patients. Counseling of patient is an important

component of care that could help stoma patients to adjust with new situations. Future studies are needed to better understanding of post-operative quality of life of stoma patients with standard instruments and higher sample size.

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