http://www.medscidiscovery.com

OPEN ACCESS JOURNAL ISSN: 2148-6832

MSD Medical Science and Discovery
2018; 5(12):393-8

Research Article Doi: 10.17546/msd.489993

The problems of patients with stoma and its effects on daily living activities

Esma Özşaker[1]*, Tuğçe Yeşilyaprak[1]

Abstract

Objective: This study was conducted to determine the problems of individuals with stoma and its effects on the daily life activities

Material and Methods: The study was conducted individuals with at least one month's stoma, agreed to participate in the study, over the age of 18 years, between January 1 and June 1, 2016 in individuals attending a General Surgery Clinic of a University. In the study, used survey form was prepared by the researchers in the direction of the literature.

Results: The mean age of patients was 56.67±11.07 and 70.4% were male. When social lives of the individuals were examined after stoma, it was found that 22.2% of them prevented the daily activities of the stoma, 14.8% of them had changed in their family, friends and neighbors relations, The 7.42% were embarrassed due to stoma, The 27.8% of them went to liquid beverage restriction, The 16.7% have decreased appetite due to smell. No statistically significant difference was found between the sexes, pre-stoma education status, stoma type and stoma duration according to daily life activities, nutritional status, mental status, dressing and social life (p> 0,005).

Conclusion: It has been determined that stoma influences social life together with mental problems at individuals and restricts their daily activities.

Keywords: Stoma, Nursing, Quality of Life

Introduction

Stoma is the anastomosis of gastrointestinal tract organs (1,2). The term stoma means mouth in Greek language (1, 2, 3). Stoma are called as permanent and temporary stoma according to the anastomosis time while they are called as colostomy, ileostomy, urostomy according to the organ which they are anastomosed (3). The most common causes of anostomosis are bowel cancers and inflammatory bowel diseases (2, 4).

Stoma affect the patients' quality of life although they help them to continue their lives (5, 6, 7). There are some physiological problems in persons having stomata such as leakage, infection, odor, fatigue, deterioration of sleep pattern, pain, retraction in the stoma area (8, 9). In the period after stoma surgery, bleeding, fistula, bowel obstruction, prolapsus may be seen. In the study performed of Özaydın et al, it was determined that the most common complications in patients with stoma were prolapsus, odor and skin irritations (10).

The physiological changes caused by the anostomosis may psychologically affect the individuals.

The body image and self-confidence of the patients are as a result of stoma. However, individuals with stoma experience some psychological problems such as anxiety, a decrease in self-esteem, a desire to stay alone, introversion and social withdrawal may occur (3, 11).

Moreover, lifestyle changes of patient such as resignment, the reduction of working hours and getting away from friends may observe (1).

This study was carried out to determine the problems of patients with stoma and its effects on daily living activities.

Received 29-11-2018 **Accepted** 09-12-2018 **Available Online** 10-12-2018 **Published** 30-12-2018
1 Ege University, Faculty of Nursing, Dept of Surgical Nursing, İzmir, TR
*** Corresponding Author:** Esma Özşaker **E-mail:** esmaozseker@yahoo.com **Phone:** +90 (232) 311 55 00

http://dx.doi.org/10.17546/msd.489993

Material and Methods

This descriptive study was carried out in the general surgery clinic of an university hospital in İzmir between the 1 January 2016 and 1 June 2016. The sample of the study consisted of 54 patients who were in the general surgery clinic at the time of the study, who were over 18 years of age, who had a stoma duration of at least one month.

A personal identification form was used by the researchers for data collection. This form was prepared by the researchers by searching the literature on the subject in order to collect data about the sociodemographic and daily activities of the patients. The form consisted of a total of 50 questions while 4 of them were open-ended. 12 of the questions in the form were related to sociodemographic data while 38 of the questions in the form were related to daily life activities. The data were collected by face to face interview method. Each interview lasted about 20 minutes.

Research data were analyzed via the SPSS (Statistical Package for Social Sciences) program for Windows 25.0 SPSS (Inc., Chicago, IL, USA). Descriptive statistics were used to evaluate the research data.

Ethics committee approval was obtained from Ege University Nursing Faculty Scientific Ethics Committee (Date:07.12.2015, No: 27344949 / 145). The aim and procedures of the study were explained to the patient with stoma and participants were informed that their participation in the study was voluntarily.

The limitation of this study is that it is a cross-sectional study; therefore, the results are limited in terms of revealing the cause–effect relationship. The results of this study cannot be generalized to all patients with stoma.

Results

The mean age of the participants was 56.67±11.07 years. The mean duration of anastomosis was 7.6±18.20 months while minimum and maximum durations of anastomosis were 1 month and 96 months, respectively. Table 1 shows the sociodemographic characteristics and stoma stories of the individuals (Table 1).

When the social life of patients with stoma was examined, it was found that 53.7% of them had difficulty in performing their religious duties due to stoma; 50% of them had restricted their exercises; 46.3% of them had difficulty in going up stairs; 63.0% of them had sleep problems with the fear of stoma detriment. It was also found that 51.9% of the patients who were included in the study rearranged their feeding hours due to stoma; 27.8% of them had a food / beverage restriction; 55.6% of them had difficulties in bathing; 53.7% of them changed their clothing style; 51.9% of them had difficulties in choosing clothes (Table 2).

When the data about the stoma care of the participated patients were examined, it was found that 38.9% of the patients did their own stoma care; 66.7% of them felt safe during care. During the care, the patients mostly had difficulties related to the placement of stoma adapter in the skin (27.3%), the attachment of the stoma bag to the adapter (27.3%) and skin cleaning (22.7%). The most common problems related to the stoma area were found to be redness (25.9%), leakage (25.9%) and odor (24.1%). It was also found that 24.1% of patients with stoma experienced psychological problems; the most common psychological problems were fear (37.5%), low self-esteem (25%) and the adoption to stoma (20.8%) (Table 2).

In the study, when stoma training status and type of stoma were compared with their problems of stoma care having problems during daily activities and the change in mood, there was no statistically significant relationship between parameters ($p>0.005$) (Table 3).

Additionaly, there was no statistically significant difference between the change in family/friend/neighbor relationships and the participants in terms of stoma duration, the fear of gassing, the statuses of being ashamed because of the stoma, the visibility of stoma in the clothing, the change in the way of dressing, the change in mood and the change in family/friend/neighbor relationships ($p>0.005$) (Table 4).

Table 1: Demographic Characteristics of Patients with Stoma and Their Distribution According to Stoma History

Demographic Characteristics and Stoma History			
Gender	Male	38	70.4
	Female	16	29.6
Marital Status	Married	48	88.9
	Single	6	11.1
Education	Primary Education	30	55.6
	High School	18	33.3
	University	6	11.1
Type of Stoma surgery	Colostomy	38	70.4
	Ileostomy	16	29.6
Surgical Type	Elective	34	63.0
	Emergency	20	27.0
Type of Stoma	Temporary	32	59.3
	Permanent	22	40.7
Total		54	100

http://dx.doi.org/10.17546/msd.489993

Table 2: The effect of daily living activity on patients with stoma

Daily Living Activities		n	%
Social Life*	Difficulty in performing their religious duties	29	53.7
	Restricted their exercises	27	50.0
	Difficulty in going up stairs	25	46.3
Fooding*	Feeding Time Arrangements	28	51.9
	Rearranged their feeding hours	27	50.0
	Food / beverage restriction	15	27.8
	Change of appetite	12	16.7
Hygiene*	Difficulties in bathing	30	55.6
	Changed their clothing style	29	53.7
	Difficulties in choosing clothes	28	51.9
Problems of Stoma Care*	Placement of stoma adapter in the skin	6	27.3
	Attachment of the stoma bag to the adapter	6	27.3
	Skin cleaning	5	22.7
	Apply Stoma Powder	4	18.2
	Change of stoma bag	4	18.2
	Remove the stoma adepter	3	13.6
	Apply paste surrounding the stoma	3	13.6
	Measuring of stoma adepter	2	9.1
	Cutting of stoma adepter	2	9.1
Stoma Problems*	Diarrhea	20	37.0
	Leakage	14	25.9
	Redness	14	25.9
	Odor	13	24.1
	Gas	12	22.2
	Bleeding	10	18.5
	Disruption of the blood supply stoma	7	13.0
	Constipation	5	9.3
	Hernia	5	9.3
	Prolapsus	2	3.7
	İnfection	1	1.9
Psychological Problems*	Fear	9	37.5
	Low self-esteem	6	25.0
	Adoption to stoma	5	20.8
	Getting away from friends/family	4	14.8

* The respondents were selected more than one answer

 http://dx.doi.org/10.17546/msd.489993

Table 3: The effect of stoma training status and stoma types on the stoma care, daily living activities and physiological factor s

		Stoma Training Status				Type of Stoma			
		Yes n(%)	No n(%)	X^2	p	Temporary n(%)	Permanent n(%)	X^2	p
Problems of Stoma Care Stoma	Yes	19(45.2)	23(54.8)	1.658	0.320	6(27.3)	16(72.7)	2.854	0.098
	No	3(25.0)	9(75.0)			16(50.0)	16(50.0)		
Problems of Daily Liiving Activities	Yes	12(48.0)	13(52.0)	0.075	0.500	11(50.0)	11(50.0)	0.001	0.609
	No	15(51.7)	14(48.3)			16(50.0)	16(50.0)		
Psychological Problems	Yes	13(52.0)	12(48.0)	1.078	0.411	9(40.9)	13(59.1)	0.118	0.783
	No	11(3.9)	18(62.1)			15(46.9)	17(53.1)		

Table 4: The change of family/friend/neighbor relationships on patients with stoma

		The change in family/friend/neighbor relationships			
		Yes n (%)	No n (%)	X^2	p
Types of Stoma	Temporary	12(41.4)	17(58.6)	1.153	0.283
	Permanent	15(56.0)	11(44.0)		
Fear of Gas	Yes	15(57.7)	11(42.3)	0.687	0.407
	No	13(46.4)	15(53.6)		
Being ashamed because of the stoma	Yes	14(53.8)	12(46.2)	1.153	0.283
	No	11(39.3)	17(60.7)		
The appearance of the stoma from clothing	Yes	15(57.7)	11(42.3)	0.321	0.571
	No	14(50.0)	14(50.0)		
Changed their clothing style	Yes	15(57.7)	11(42.3)	2.639	0.104
	No	10(35.7)	18(64.3)		
Experienced psychological problems	Yes	12(46.2)	14(53.8)	0.059	0.808
	No	12(42.9)	16(57.1)		

Discussion

Colostomy is a common treatment modality for the management of gastrointestinal problems but it affects the daily living activities of individuals (2, 3, 11, 12). Social lives of patients with stoma can be affected by the experienced problems such as leakage around the stoma, stoma dressing, hernia formation and edema (13). When the patients' social life after the stoma was examined, 53.7% of the patients were not able to perform their religious duties due to stomata; 50% of them were not able to make exercise due to stomata; 46.3% of them had difficulty during going up stairs; the daily activities of 22.2% of them were disrupted by stoma. In the study of Nasvall et al. (2017), it was determined that the physical activity of the patients was significantly affected after stoma (13). In the literature, it was stated that the activities such as walking and cycling are important for the patients with stoma and stoma do not disrupt social life (14). Therefore, the importance of increasing physical activities should be emphasized to the patients with stoma during discharge training and physical activity should be encouraged by providing emotional support to patients.

The lack of gas control and odor due to stoma causes nutritional changes in individuals. Patients with stoma avoid eating various fruits and vegetables, especially milk and anxiety also causes a decrease in appetite of patients (13, 15). It was determined that 51.9% of the patients rearranged their meal times due to stoma; 27.8% of them had fluid and food restriction; 16.7% of them had a change in their appetite. Similarly, other studies found that individuals had nutritional problems in the early stages of ostomy (7, 8, 12, 15, 16). Nutritional training should be provided to ensure the diet of patients with stoma. Karadağ et al. (2003) recommended that no change in meal times, the addition of snacks, low and frequent feeding for bringing bad smell and gas under control in patients with stoma (17). They also recommended that the stoma bag is removed and the adapter cover is closed for preventing the smell-dependent appetite loss in patients with stoma.

In patients with stoma, It is stated that individuals' choice of clothes and their perception of body is affected depending on changes in stoma, weight and body appearance (7, 8).

In this study, it was found that 53.7% of the patients changed their clothing style after stoma procedure while 51.9% of them had difficulties in choosing clothes. In similar studies, it was similarly found that the patients with stoma had difficulty in choosing clothes; they were depressed and embarrassed (7, 8, 18, 19). The integration of family members in the training, emphasizing the importance of their social support to patients can be effective in ensuring positive body perception in patients.

In patients with stoma, skin problems develop as a result of the placement difficulty of the adapter in the skin and related leakage (2). The participants mostly experienced difficulties in the placement of stoma adapter in the skin (27.3%), attachment of the stoma bag to the adapter (27.3%), skin cleaning (22.7%) during stoma care. The most common problems related to the stoma area were redness (25.9%), leakage (25.9%) and smell (24.1%). In other studies, it was found that the individuals with stoma mostly experienced smell, leakage, pain and hernia problems (2, 12, 16, 19, 20). It is stated that the use of modern stomatal devices in the reduction of stoma related problems, the determination of the stoma place with the patient before the operation and the follow-up of the patient by the stoma care nurse may be effective in reducing the problems (2, 20). In the prevention of problems such as leaking, bleeding and infection, the maintenance of the ideal weight, cutting of the adapter with appropriate diameter, covering stoma area of the remaining gaps with support products, following aseptic rules during care are also effective method (21, 22).

Trying to adapt to a new order brings along emotional challenges. Psychological problems such as changes in body perception, fear, anxiety, deterioration in sexual functions and social withdrawal are frequently experienced due to stoma (1). In the study, it was determined that 37.5% of the patients with stoma experienced fear; 25% of them had lack of self-confidence; 20% of them were not able to adapt to stoma; 14.8% of them experienced deterioration in family relationships. Dabirian et al. (2011) found that the individuals had problems with their family members after ostomy. Identifying the physical and emotional needs of the patients, providing counseling and gaining their independence by patients in a short time can help them to adopt their new lives (12, 23). It is thought that following of patients with stoma by stoma care nurse after discharge and providing expert support for patients with psychological problems can be effective in reducing the problems experienced by patients.

The limitation of this study is that it is a cross-sectional study; therefore, the results are limited in terms of revealing the cause–effect relationship. The results of this study cannot be generalized to all patients with stoma.

Conclusion

As a result of the study, social life of the patients with stoma was affected; results also indicate that their daily life activities such as nutrition, physical activity, personal hygiene were restricted; they experienced difficulties in stoma care and psychological problems. According to the results of the study, it is recommended that trainings should be given to patients to support their daily life activities; patients should be followed-up of after discharge; the problems of patients should be determined and related support should be provided.

Acknowledgement: We thank the patients who participated in the study.

Conflict of Interest: The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Author's Contributions: EO, TY: Research concept and design; data collecting, analysis and interpretation of data. **EO, TY:** Preparation of article, and Revisions. All authors approved the final version of the manuscript

Ethical issues: All Authors declare, Originality and ethical approval of research. Responsibilities of research, responsibilities against local ethics commission are under the Authors responsibilities.

References

1. Vural F. (2012). Stomalı Hastalarda Yaşam Kalitesi. Cerrahi Bakım ve Yaşam Kalitesi Sempozyum Kitabi (s. 33-38). içinde Manisa.
2. Hubbard G. Taylor C. Beeken B. Campbell A. Gracey J. Grimmett C.Ozakinci G. Slater S. Gorely T. (2017). Research Priorities Abouth Stoma Releated Quality of Life from the Perspective of People with a Stoma. A Pilot Survey.Health Expectation, 20:1421-1427
3. Ayaz, S. Stomalı Bireyde Beden İmajı ve Benlik Saygısı. Türkiye Klinikleri 2008; 28:154-159.
4. Kılıç E, Taycan E, Belli A, Özmen M. Kalıcı Ostomi Ameliyatının beden Algısı, Benlik Saygısı, Eş Uyumu ve Cinsel İşlevler Üzerine Etkisi. Türk Psikiyatri dergisi, 2007;18(4):302-310.
5. Üstündağ H, Demir N, Zengin N, Gül A. Stomalı Bireylerde beden İmajı ve Benlik Saygısı. Türkiye Klinikleri 2007; 27: 525-527.
6. Grant M, Ferrell B, Dean G, Uman G, Chu D, Krouse R. Revision and psychometric testing of the City of Hope Quality of Life–Ostomy Questionnaire. Quality of Life Research 2004;13: 1445–1457.
7. Grant M, McMullen CK, Altschuler A, Mohler MJ, Hornbrook MC, Herrinton LJ, et al. Gender differences in quality of life among long-term colorectal cancer survivors with ostomies. Oncol Nurs Forum 2011; 38: 587–96.
8. Anaraki F, Vafaie M, Behboo R, Maghsoodi N, Esmaeilpour S, Safaee A. Quality of Life Outcomes in Patients Living with Stoma. Indian J Palliat Care 2012;18(3): 176–180.
9. Rouholiman D, Gamble JG, Dobrota SD, Encisco EM, Shah AG, Grajales FJ, R Kin R, CD, and Larry F Chu, Improving Health-Related Quality of Life of Patients With an Ostomy Using a Novel Digital Wearable Device: Protocol for a Pilot Study. JMIR Res Protoc 2018;7(3): e82.
10. Özaydın İ, Taşkın AE, İskender A. Stoma ile İlgili Komplikasyonların Retrospektif Analizi. Journal of Clinical and Experimental İnsvestigations 2013;4(1):63-66.
11. Karaveli S, Özbayır T, Karacabay K. Kolorektal Kanser Ameliyatı Geçiren Hastaların Ameliyat Öncesi ve Sonrası Dönemde Yaşadıkları Sorunların İncelenmesi. Anadolu Hemşirelik ve Sağlık Bilimleri Dergisi 2014; 17: 2.
12. Dabirian A, Yaghmaei F, Rassouli M, Tafreshi MZ. Quality of life in ostomy patients: a qualitative study. Patient Preference and Adherence 2011;5: 1–5

13. Nausvall P, Dahlstrand U, Lo¨wenmark T, Rutega J, Gunnarsson U, Striga KQuality of life in patients with a permanent stoma after rectal cancer surgery. Qual Life Res 2017;26:55–64

14. Duruk NHemşirelerin intestinal Stoma bakımına ilişkin bilgileri, TC. Hacettepe Üniversitesi Sağlık Bilimleri Enstitüsü, Yüksek Lisans Tezi, Ankara 2007;8-10, 22-34.

15. Krouse R, Grant M, Ferrell B, Dean G, Nelson R, Chu D. Quality of life outcomes in 599 cancer and non-cancer patients with colostomies. J Surg Res. 2007; 138: 79–87.

16. Gooszen AW, Geelkerken RH, Hermans J, Lagaay MB, Gooszen HG. Quality of life with a temporary stoma: Ileostomy vs.colostomy. Dis Colon Rectum 2000; 43: 650–5.

17. Karadağ A, Menteş B, Ayaz, S, İrkörücü O, Alabaz Ö. Kolostomili ve İleostomili Hastaların Bakımına Yönelik Rehber Kitap. Ayhun Ofset. Ankara: 2003;7-39.

18. Neuman HB, Patil S, Fuzesi S, Wong WD, Weiser MR, Guillem JG, et al Impact of a temporary stoma on the quality of life of rectal cancer patients undergoing treatment. Ann Surg Oncol; 2011; 18:1397–403.

19. Verweij NM, Bonhof CS, Schiphorst AHW, Maas HA, Mols F Pronk A, and Hamaker ME Quality of life in elderly patients with an ostomy – a study from the population-based PROFILES registry. The Association of Coloproctology of Great Britain and Ireland 2017;20, 92-102

20. Mahjoubi B, Kiani Goodarzi K, Mohammad-Sadeghi H. Quality of life in stoma patients: Appropriate and inappropriate stoma sites. World J Surg. 2010;34:147–52

21. Erkoç EU, Alabaz Ö, Karadağ A. Stoma .Ed: Alemdaroğlu K., Akçal T., Buğra D., Kolon Rektum ve Anal Bölge Hastalıkları.Türk Kolon ve Rektum Cerrahisi Derneği, 1.Baskı, İstanbul:2003;309-329.

22. Parascandolo ME. Multiple ostomy complications in a patient with Crohn's Disease : a case study. JWOCN 2001;28(5): 236-243.

23. Pittman J, Rawl SM, Schmidt CM. Ostomi'li gazi kanserlerde ostomi komplikasyonları ve yaşam kalitesi ile ilgili demografik ve klinik faktörler. J Yara Ostomi Kontinans Hemşireliği 2008;35;493–503