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Original Article

Evaluating the relation between spiritual attitude and the quality of life among ostomy patients referring to the public and private medical centers of Isfahan

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ABSTRACT

Background & Aim: Considering the increased life expectancy of patients with colorectal cancer, concerns about the quality of life of these patients have increased. Regarding the importance of spirituality in lingered surgeries such as intestinal stomatitis, and the necessity of providing cares for these patients to give them hope for continuing living and accepting the treatment, the present study was conducted to evaluate the relation between spiritual attitude and quality of life among ostomy patients.
Methods & Materials: The present study was a descriptive analytical cross-sectional study that was conducted on 82 ostomy patients who referred to public and private wound centers of Isfahan and were selected through convenience sampling. Data gathering tool was a three-part questionnaire (demographic characteristics, spiritual attitude, and quality of life in ostomy patients). Data were analyzed using descriptive and inferential statistics with the help of SPSS software version 18.
Results: According to the results, the relation of income and the duration of ostomy with the quality of life of the patients and also between the type of ostomy and the total score of quality of life and patients' spiritual attitude were statistically significant ($p < 0.05$). Also a significant direct relation existed between the total score of spiritual attitude and its dimensions with the total score of quality of life and its dimensions ($p < 0.001$).
Conclusions: According to the results of the present study, nurses, as a professional group, by providing nursing supports and fulfilling spiritual needs of the patients during the hospitalization, besides enhancing the spiritual health of the patients, could improve their quality of life too.

Introduction

Ostomy (ileostomy or colostomy) is creating a wall on the abdomen which is used to help the intestines for discharging. Based on the type of surgery and the extent of the disease, colostomy might be temporary or permanent (1). Colorectal cancer is the most common cancer of the gastrointestinal system in the United States and the Europe and is respectively, the third and the fourth common cancer among Iranian men and women and after the inflammatory bowel diseases (15%) and diverticulitis (11%), is the most common disease that might lead to stoma (2). Despite all the advancements in medical and surgical treatments, ostomy surgery is still one of the main treatments for many of the patients with colorectal cancers (3). Although the global statistics for the occurrence colorectal diseases is easily accessible, no accurate international statistics for ostomy exists yet. It has been reported that about one million people in the United States and 102 thousand people in England have intestinal stomatitis. In Iran also an accurate statistics of ostomy patients is not available, but according to the reports of the Iranian Ostomy Association, about 30 thousand ostomy patients are living in our

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country(4). The experience of a gastrointestinal disease that would lead to ostomy surgery would cause a drastic change in individual's life; because the patient would be forced to adjust to many physical problems such as skin irritation, leakage from the bag and changes in the diet and also psycho-social problems such as feeling dissatisfied with the body and consequently changes in the self-image and decreased self-esteem (5)(6). On the other hand considering the increased life expectancy in patients with colorectal cancer, the concerns about the quality of life among these patients have significantly increased (7). The quality of life is a complicated multidimensional concept and according to the definition by the World Health Organization, includes both the positive aspect of well-being and negative aspect of being sick and at least contains physical, mental and social performance dimensions (8). In this regard Dabirian et al (2011) in their study that was conducted on ostomy patients revealed that 80% of the patients would experience changes in their lifestyle (9).

Tsunoda et al (2012) in studying patients with colorectal cancer resulted that ostomy would change the quality of life in these patients; in a way that after achieving a proper condition and closure of the stoma, patients' quality of life would significantly be improved (10). Considering all the studies that have been conducted on the quality of life in these patients, a few studies have evaluated the spirituality and spiritual attitude among these patients; while having chronic diseases and undergoing lingered surgeries such as intestinal stoma might lead to questioning the meaning and purpose of life (11). According to various studies, religion, spiritual beliefs and praying might affect compatibility with treatment and its outcomes (12)(13). So, considering the increased rate of chronic diseases and their impact on different aspects of patient's quality of life from the point of diagnosis and the necessity for regarding the spiritual dimension in providing holistic care for ostomy patients, the aim of the present study was to evaluate the relation between spiritual attitude and quality of life in stomy patients referring to the health centers of Isfahan in 2015.

Methods

The present study was a single-stage, single group descriptive, analytical correlational cross-sectional study. Participants were selected using convenience sampling method from all the ostomy patients who referred to the public and private medical centers of Isfahan from April to September 2015. The inclusion criteria were having a type of permanent or temporary stoma, being at least 18 years old, having mental, speech, visual and hearing health, at least one month being passed from the time of surgery and willingness to participate in eth study; so 82 patients were enrolled in the study. Data were gathered through questioning and reviewing patients' medical files.

Data gathering tool was a three-part questionnaire. The first part was about the patients' demographic characteristics such as age, sex, educational level, marital status, economic status, condition of the ostomy, type of the ostomy, reason for the ostomy, and duration of having the stoma (months). The second and third parts of the questionnaire respectively evaluated the spiritual attitude and quality of life (COH-QOL) of ostomy patients. The spiritual attitude questionnaire contains 43 questions which are scored with a 5-point Likert scale as "completely agree", "agree", "somehow agree", "disagree" and "completely disagree". The related scores for the choices are 4= completely agree, 3= agree, 2= somehow agree, 1= disagree and 0= completely disagree. The questions 5, 10, 15, 20 and 25 are scored in reverse. This questionnaire contains two dimensions of spiritual ability and spiritual attitude. The first dimension includes 24 questions and discusses the cognitive aspect of the spiritual attitude including believing in God and understanding His presence, understanding the meaning and purpose of life, trusting in God, hope, paying attention to yourself and God, and believing in the righteousness of religious acts and also the emotional aspect of the spiritual attitude including feeling of calm,

positive relationship with God, and understanding the love and attention of God. The second dimension contains 19 questions and discusses the behavioral aspect of spiritual attitude including having good relations with others, mercy and forgiveness, striving for perfection and attaining excellence, reliance upon God, serving others, being responsible and trusting in yourself .

Reliability of this questionnaire was measured in the study of Shahidi and Faraj Nia (2012) using "test retest method" on 40 participants with a 5-week (35 days) interval; the calculated correlation coefficient was 0.61. Also the internal consistency of the questionnaire was calculated and its Cronbach's α for the entire questionnaire was 0.91 (4).

City ofHope Quality of Life Ostomy Questionnaire (COH-QOL) has three parts: the first part has 13 questions and is about the demographic and disease characteristics. The second part is about the effect of ostomy on life style (lifestyle impact) which has 34 questions with one-word answers about job, health insurance status, sexual activity, mental concerns, clothing, diet, daily care for the stoma and consumption of different food groups. The questions of this part are not scores and are just used for describing the participants. The third part of the questionnaire evaluates the effect of ostomy on quality of life (quality of life impact) which has 43 questions in the domain of physical health (questions 1 to 11), mental health (questions 12 to 24), social health (questions 25 to 36) and spiritual health (questions 37 to 43) of quality of life. These questions are scores based on a 10-point Likert scale from 0 to 10 and will be used for calculating the mean score of quality of life. In reverse questions (questions 1-18, 12, 15, 19, 22-30, 32-34, 37) gaining a score of 0 would indicate the highest quality of life and a score of 10 would indicate the lowest quality of life. Content validity of this questionnaire was approved in the study of Naseh et al (2012) where its Cronbach's α was reported as 0.95 and the correlation coefficient for the physical, mental, social and spiritual domains of quality of life were respectively 0.82, 0.88. 0.83 and 0.78 (5). Also in the study of Baldwin et al (2008) its Cronbach's α was 0.95 and the validity of the physical (0.88), mental (0.83), social (0.90) and spiritual (0.81) domains were approved (14).After taking recommendation letter from the nursing and midwifery faculty of Isfahan University of Medical Sciences, collection of nursing and midwifery research centers and the wound care center, the researcher referred to the managers of the clinics and public and private medical centers of Isfahan and after explaining the study to the authorities and gaining their approval, started the sampling. After explaining the aims of the study and insuring the confidentiality of the data, informed consent was obtained from all the participants. The gathered data were analyzed using SPSS software version 18 and descriptive and inferential statistics (chi-square test, correlation coefficient, Pearson coefficient, Spearman coefficient, and regression).

Results

According to the results most of the participants were men (57.1%) with a mean age of 62.94 ± 13.31 years (Table 1). Results of the Spearman correlation coefficient showed a significant direct relation between the duration of ostomy and the income level with the quality of life in the patients ($p< 0.001$). Also results of one-way variance analysis indicated a significant direct relation between the type of ostomy and patients' total score of quality of life and spiritual attitude ($p< 0.001$). Results also showed that from the domains of quality of life, social domain of quality of life had the lowest score (36 ± 15.13) and physical domain had the highest score (54.9 ± 14.3). From the domain of spiritual attitude, the lowest score belonged to the behavioral domain (67.43 ± 11.55). Pearson correlation coefficient showed a direct relation between the total score of quality of life and its dimensions and the total score of spiritual attitude and its dimension ($p< 0.001$) (Table2).

Table 1. Pearson correlation coefficient between the demographic characteristics and the total score of quality of life and spiritual attitude

Variable	Number	Percent	Total score of quality of life	Total score of spiritual attitude
			P value	P value
Gender				
Male	48	57.1	0.075 t = 1.805	0.578 t = 0.546
Female	36	42.9		
Duration of ostomy				
Less than 1 year	7	8.13	0.000 r = 0.411	0.089 r = 0.187
1-2 years	9	10.5		
2-4 years	9	10.5		
4-6 years	10	11.62		
6-8 years	10	11.62		
8-10 years	18	21		
More than 10 year	23	26.63		
Marital status				
Single	6	7.1	0.22 F = 1.53	0.06 F = 2.96
Married	64	76.2		
Widowed	10	11.9		
Type of ostomy				
Temporary colostomy	5	6	0.002 F = 5.284	0.043 F = 2.839
Permanent colostomy	51	60.7		
Temporary ileostomy	6	7.1		
Permanent ileostomy	20	23.8		
Educational level				
Illiterate	18	21.4	0.150 r = 0.158	0.415 r = -0.09
Elementary school	16	19		
Middle school	16	19		
High school	10	11.9		
Diploma	14	16.7		
College	10	11.9		
Income level				
Incompetent	37	44	0.000 r = 0.460	0.171 r = 0.264
Medium	41	48.8		
Good	4	4.8		

Table 2. Pearson correlation coefficient between the scores of quality of life and its dimensions and spiritual attitude and its dimensions

Spiritual attitude / Quality of life	Cognitive score		Behavioral score		Total score of spiritual attitude	
	r	P value	r	P value	r	P value
Physical	0.308	0.004	0.355	0.019	0.362	< 0.001
Mental	0.584	< 0.001	0.550	< 0.001	0.6	< 0.001
Social	0.411	< 0.001	0.372	< 0.001	0.443	< 0.001
Spiritual	0.713	< 0.001	0.706	< 0.001	0.691	< 0.001
Total score of quality of life	0.563	< 0.001	0.523	< 0.001	0.588	< 0.001

Discussion

The present study was conducted to evaluate the relation between spiritual attitude and quality of life in ostomy patients referring to the medical centers of Isfahan. According to the results, most of the participants were men (57.1%) with a mean age of 62.94 ± 13.31 years and most of them permanent colostomy or ileostomy. In this regard, in the study of Magela (2014) most of the participants were men of 60 and older and patients with permanent ostomy had the highest prevalence (15).

According to the results, the relation of duration of ostomy and the income level with quality of life was statistically significant; in a way that the longer passed from the ostomy surgery and the higher was the income level of the patients, their quality of life was more improved. Results of the studies by Sarabi (2006) also, similar to the results of the

present study, showed that over time and by having better compatibility with the disease, ostomy patients would present better performance and their quality of life would be less impacted by their disease (16). In the study of Coons et al (2007), the interference between ostomy and patients' occupational activities and also the problems related to the costs of caring for and maintaining the stoma were considered as effective factors on patients' quality of life (17). Rafiei et al (2012) in their study concluded that having a high quality of life for most patients was related to their moderate and good economic status (2). So it seems that better economic condition would provide more access to supportive sources and medical and counseling services for the patients, so they would able to pay the costs of ostomy more easily and consequently experience a higher quality of life.

Another result of the present study showed a significant relation between the type of ostomy and patients' quality of life and spiritual attitude; meaning that patients with permanent ileostomy (colostomy) had a higher quality of life and spiritual attitude. In this regard results of a study by Yang et al (2014) showed that quality of life in patients with permanent ostomy, three months after the surgery, would significantly improve in some dimensions(18). But the study of Denlinger et al (2009) revealed that permanent ostomy could affect the quality of life in ostomy patients by declining their positive body image and increasing their financial concerns (19).

Based on the results of the present study, the highest and the lowest scores in the dimensions of patients' quality of life respectively belonged to the physical and social dimensions. Coons et al (2007), similar to the present study, reported the interference between stoma and patients' occupational activities as an effective factor on the quality of the life of ostomy patients (17). But in the study of Ramezankhani (11) that was conducted to evaluate the relation between spiritual health and quality of life in patients with type II diabetes, the mean score of social health was higher than the other dimensions of quality of life. Also about the physical dimension, unlike the resent study, Sarabi (2008) in their study showed that the physical health dimension had the lowest score among all the dimensions of quality of life (16). It is probable that this difference is caused by the fact that in the study of Sarabi most of the participants were patients with temporary ostomy who have not yet found the strength to cope with the new condition; so they would gain a lower score in the physical health dimension.

Results about the spiritual attitude and its dimensions showed that the behavioral dimension had the lowest score. This result is in line with the study of Nik Farjam (2011) which was conducted to determine the effectiveness of religious teachings on improvement of quality of life in patients with schizophrenia (20). To justify the achieved results it could be said that, beyond performing religious practices, when the individual believes that he/she is being supported from a higher power, it would affect their quality of life.

The present study found a direct relation between the total score of quality of life and its dimensions and the total score of spiritual attitude and its dimensions. In line with the present study, study of Nik farjam (2011) showed that religious and spiritual teachings for patients with schizophrenia might be effective in increasing their satisfaction with the quality of life (20). Kazemi et al (2012) also in their study revealed that different religions would provide teachings for their followers and the level of commitment to and acting based on these teachings could be effective on decreasing or increasing the pressure of life events and individual's psychological condition (21). The study of Bahreinian et al (2010) resulted that patients' religiousness and spirituality has a direct significant relation with their quality of life (22). In fact it could be concluded that practicing religious and spiritual beliefs which contain the sense of security, self-esteem and hope for the future could make individual's interactions and relations with

others more effective, decrease their tendency toward mental disorders, and help them adjust to the disease faster and decrease the effect of the disease on their quality of life.

Based on the results of the present study, teaching and practicing spiritual stuff might an empowering source for the patients and could increase their compatibility pace and consequently increase the rate of their improvement. Nurses, as a professional team, could enhance the spiritual health and consequently improve the quality of life of the patients by providing nursing supports and fulfilling the spiritual needs of the patients during the period of hospitalization.

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Conflict of Interest

The authors of this study declare no conflicts of interest.

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