



Impact of Group Psycho-education on Self-Efficacy in Patients With Intestinal Stoma

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Abstract

Background: Clinical studies on patients with stoma show that these people are the group who need several adaptations. It was found that self-efficacy, as a source of personal coping, can facilitate this process and make it easier to accept stoma and increases compatibility with it. This study aimed to investigate the effect of group Psychoeducation on self-efficacy in patients with intestinal stoma in some of medical university hospitals of Iran.

Methods: This study is a semi-experimental study. The study society was formed from patients with intestinal stoma who were interested to attend training sessions. A total of 24 eligible patients, who had the entrance criteria, were chosen by convenient sampling and were trained for 6 1-hour sessions in groups of 6 and 8. Their efficacy was assessed before training, immediately after completion of the last session, and also 3 weeks later.

Results: The data analysis via repeated measure test showed that the mean amount of self-efficacy, before and after training, is significantly different ($P < 0.05$). The self-efficacy score, which was 59.37 before training, reached the score of 64.25 immediately after the training sessions and 68.50 3 weeks later.

Conclusions: The results showed that group Psychoeducation was effective in increasing self-efficacy in patients with intestinal stoma. In fact, it was found that making patients doing group exchanges with people with similar problems improves their self-efficacy dramatically.

Keywords: Group Psychoeducation, Self-Efficacy, Intestinal Stoma

1. Background

Stoma means opening the intestinal system or the urinary tract in the abdominal wall (1). Stoma is creating an opening in the intestine via a surgical procedure, which can be permanent or temporary. It makes the discharge of bowel contents out of the body possible (2). The need to make a colostomy may be due to colon cancer, trauma, diverticulitis, inflammatory bowel disease, and ischemic colitis in order of frequency (3). Every day, a large number of patients are exposed to the important decision to lose their normal bowel action and have an intestinal stoma surgery (4). More than 1 million people in the United States of America and 102000 people in the UK have intestinal stoma. Each year the number of such individuals is growing (5). Each year 100000 individuals in United States of America (3) and 13500 people in the UK (6) have stoma. According to the latest report of the Iranian Stoma Association, about 30000 stoma patients live in our country (5 and

4), which 70% of them have colostomy, 20% ileostomy, and 10% are Ureostomy. Although physical symptoms and effects of patients with stoma may recover, the psychological effects may persist for many years (6). Clinical studies on patients with stoma show that these people are the group who need several adaptations (7). It was found that self-efficacy, as a source of personal coping, can facilitate this process and make it easier to accept stoma and increases compatibility with it. Self-efficacy is a psychological concept, which has been derived from Albert Bandura learning theory (1977) and focuses on the one's perceptions of his own skills and abilities in accomplishment of respectable performances successfully (8). On the other hand, it has also been known that those people, who in special situations (education, communication, employment, etc.), don't have enough personal effectiveness, can be trained to trust their ability to succeed more, strengthen their self-worth, and the possibility of being successful (9). Several studies have shown that educational programs for pa-

tients based on self-training can be an effective strategy to improve knowledge, skills, self-efficacy, and repairing behaviors associated with the disease to help contribute in their treatment (10, 11). Sadeghi SenaAbadi also pointed in his study that self-care education is effective on patients with stoma (12).

Patients with a stoma, more than anything else, need to receive training in order to improve the level of self-care and increase their information regarding self-control, intelligence, and self-efficacy, due to the psychological problems and chronic nature of the disease mentioned at the top (2). The patient group education is a cost-effective method of training (7). Efforts to achieve more effective therapy ways have always been a problem of service jobs and in fact, the endeavor has always been for achieving this. Many years ago a method engendered in the field of psychotherapy tried to treat individuals' personality problems with putting them in groups with specific characteristics. This different method of treatment went through so many troubles until its modern form, known as group counseling or group psychotherapy, was formed (13). In this method, the patient realizes his communication weak points in contact to others and learns the effective communication via received points from other patients at the same age and the therapist. In the group context, patients receive necessary education on anger management and train to get the meaning of others figures (14).

Today, nurses use several different methods of patient education, which each of these training methods can have different effects on the psychological complications of patients. Group psycho educational method has limited sessions and uses interpersonal interactions in a group. This method can be implemented at any time. Therefore, if it becomes effective, this approach can be a good way for nurses, particularly psychiatric nurses.

2. Methods

This research is a semi-experimental study with pre-test, post-test, which has investigated the effect of group mental training on self-efficacy in patients with intestinal stoma. The study society was a group of patients referring to Shafa, Razi, Imam (governmental), and Apadana (private) hospitals. The inclusion criteria included: age 16 years and more, no history of mental illness, able to speak Persian or Arabic, at least 1 month after having a stoma surgery, and being interested in participating in the study. The sample size formula is:

In this study, the researchers started working after presentation of the proposal to the ethics committee of Ahvaz Jundishapur University of Medical Sciences and receiving the IR.AJUMS.REC.1394.468 code. After obtaining written

and deliberate testimonial from the units of the study, that started working on patients with intestinal stoma who were referred to the Imam, Shafa, Razi, and Apadana hospitals for receiving treatment and support services and had the inclusion criteria of this study. Patients came together in hospital training classes in groups of 6 and 8. Once they introduced themselves and were explained regarding the goals of this study, they were asked to start sharing their problems and then they given the Scherrer self-efficacy questionnaire, which has 17 questions and its score is of 17 to 85 to complete. According to the Likert scale, each question on scale is ranged from strongly disagree to strongly agree.

Bakhtiari Rahmani Barati (1996) assessed the validity of the scale score obtained from the scale characters traits. The correlation between self-efficacy scale to measure personality traits predicted average was (0.61) at a significant level. Vaqry, in 1998, evaluated the reliability of this scale achieved by Cronbachs alpha (0.85).

After completing the questionnaires, the group psychoeducation, included training of psychology care issues, such as how to cope with stoma, how to interact with others having the same problem, other ways of increasing self-efficacy, and self-confidence, how to overcome the fear of being in community, the practical issues of how to change and wash a colostomy, and how to take care of it, which was given to them as a CD file. The training was done during 6 1-hour training sessions, which 3 of the sessions were held daily in 3 consecutive days and the rest of the 3 sessions were held intermittently once a week in 3 following weeks. After collecting data, they were analyzed using SPSS software version 21 and repeated measure analysis test was used.

The data gathering tool included 2 questionnaires: Demographic questionnaire, which included 14 questions and the Scherrer general self-efficacy questionnaire. The questionnaire contains 3 sub-scales, which includes the tendency to start casting, liking to continue efforts, and insisting on doing homework in case of failure. The maximum score that a person can gain from this scale is 85 and minimum score is 17.

3. Results

In this study, after analyzing data from 24 patients, it was revealed that the patient samples' mean age is 47.9 (12.5%) males and (16.6%) were women. The most frequent observation between men and women related to people aged over 50 years. The data also showed that the highest observed frequency was for the people with a secondary school degree and the lowest frequency was for illiterate people. According to the data of this study we can see

that the highest frequency rate of income is for the 800 - 1300000 group, which contains 45.8% of the money for income and the lowest frequency belongs to the more than 2 million group, which is 8.3% of the income to be included. Most people find themselves in poor economic situations (50%) and (1%) of them, which makes up the lowest frequency, express their economic situation as excellent (Table 1).

The mean score of self-efficacy before, immediately after education, and 3 weeks after is shown in Table 2. This table shows the positive impact of group training on patients' self-efficacy. This goal was measured with Scherrer self-efficacy scale. The self-efficacy score increased from an average of 59.37 ± 2.52 before training to 64.25 ± 1.97 immediately after training and reached 68.50 ± 1.87 3 weeks after training, which was affected by this intervention and shows significant differences in self-efficacy scores before and after training ($P = 0.000$). The level of efficacy in patients has improved from moderate to high. Due to the study goals, the analysis of repeated data variance showed that the mean score of self-efficacy after training and 3 weeks after training has significantly increased ($P < 0.001$). It also showed that the significant effects of this intervention on the different dimensions of self-efficacy (Table 3).

Table 4 compares the self-efficacy differences between the 2 sex, men and women, which are significant in this regard. Therefore, the self-efficacy was greater in men and this intervention has been thoroughly more impressive for them.

4. Discussion

This study examined the effect of group psychoeducation on self-efficacy in patients with intestinal stoma. The results of this study are collected from the data analysis of 24 patients participating in 3 phases of this study: before intervention, immediately after intervention, and 3 weeks after intervention.

The results showed that group psychoeducation increases self-efficacy. An important prerequisite for successful self-management and behavior change is reinforcing self-efficacy. In this field a randomized trial was done by Altuntas and coworkers, which investigated the effects of group training on patients with stoma and showed that this training has a positive impact on all of the dimensions of the quality of life of these patients, which is a favorable result with the study results.

The results showed that the lowest score of the self-efficacy belongs to the tendency to start casting, therefore, its score increase from 15.12 ± 0.786 to 16.66 ± 0.610 . The highest score belongs to the insisting on doing homework

Table 1. Demographic Data

Variant	Frequency (Percent)
Gender	
Female	12 (50%)
Male	12 (50%)
Age	
20 - 30 years	2 (8.2%)
31 - 40 years	4 (16.6%)
41 - 50 years	7 (29.1%)
More than 50 years	11 (45%)
Matrimony	
Single	3 (12.5%)
Married	17 (70%)
Divorced	3 (12.5%)
Widow	1 (4.2%)
Education degree	
Illiterate	1 (4.2%)
Junior high school	8 (33.3%)
Secondary high school	9 (37.2%)
University degree	6 (25%)
Occupation	
Worker	9 (37.2%)
Employee	5 (20%)
Free job	8 (33%)
Unemployed	2 (8.3%)
Amount of income	
800 - 1300000	11 (45.8%)
1400000 - 1900000	5 (20.8%)
More than 2 million	2 (8.3%)
No income	6 (25%)
Economic situation	
Poor	12 (50%)
Average	10 (41.7%)
Good	1 (4.2%)
Excellent	1 (4.2%)

in case of failure, therefore, its score increased of 23.75 ± 1.41 to 28.16 ± 1.37 .

Barlow and colleagues have done a similar study to evaluate the effect of education on patients with stoma, the results of the study are similar to current study. Barlow believes that education is effective in enhancing knowledge and self-efficacy, therefore, the mean efficacy in patients be-

Table 2. Comparison of the Self-Efficacy Before and After Group Psychoeducation in Patients with Intestinal Stoma

Before Training	Immediately After Training	3 Weeks After Training	P Value
59.3	64.2	68.5	0.000

Table 3. The Effect of Group Psychoeducation on Self-Efficacy in Patients with Intestinal Stoma

Sub Scale	Time	Average	Standard Deviation	P Value
Tendency to start casting	Before intervention	15.12	0.786	0.05
	Immediately after intervention	16.70	0.713	
	3 weeks after intervention	16.66	0.610	
Liking to continue efforts	Before intervention	20.20	0.881	0.000
	Immediately after intervention	20.91	0.90	
	3 weeks after intervention	22.50	0.956	
Insisting on doing homework in case of failure	Before intervention	23.75	1.41	0.000
	Immediately after intervention	26.62	1.36	
	3 weeks after intervention	28.16	1.37	

Table 4. Comparison of Self-Efficacy Differences Between the 2 Sex, Men and Women

	Female (12 Persons)	Male (12 Persons)	Total	P Value
Self-efficacy1	55.25	63.50	24	0.000
Self-efficacy2	61.66	66.83		
Self-efficacy3	65.41	71.58		

fore and after training increased from 3.34 to 4.06 (15).

Baljany study investigates the effects of education in self-efficacy promotion in patients with stoma, which means that the average is 3.34 to 4.06 before and after training (16).

The study also reviews the study of Biola anjelina, which is titled The Effect of Structured Education on self concept, self-care, and awareness of illness. His study measured the self-efficacy used Mathias self efficacy scale, and in this study the average of self-efficacy score reached 38.82 to 45.58, which showed a significant difference ($P < 0.05$) (1).

Training and support can play a key role in the treatment of problems related to stoma (16). These 2 elements are also effective. Thus, Altuntas, in his study, showed that education for patients with stoma reduces the cost and the duration of hospitalization of these patients. In their study, they also showed that the stoma care nurse has a significant role in the prevention and treatment of physical, emotional, and social problems. Patient education is one of the nursing tasks in a variety of cultures. It is also essential in the progress of stoma acceptance by the patient and

encouraging the patient to participate in the care of their stoma (17).

HEV and coworkers believe that since knowledge improvement leads to a follow up, control and treatment improvement, implementation of a comprehensive training program for these patients is essential. Vaford and colleagues, in a systematic review of Syngla and coworkers as well as Amerso studies that examine the effect of group education on the patients' knowledge, noted that this method is effective for increasing the patients' knowledge and satisfaction. Evidence suggests cost-effectiveness, better acceptance of changes in lifestyle and higher satisfaction with treatment after group training (18).

In addition, Kaveh, in his study, investigated the effect of implementation of a self-management program for promotion of self-efficacy in patients with primary hypertension. He also showed that this intervention has shown a significant difference in self-efficacy level ($P = 0.000$) (19).

4.1. Conclusion

Generally, the results showed that creating mental training sessions and engage patients in group exchanges

with people with similar problems dramatically improves the self-efficacy. This can reduce the patient's psychological problems in communicating with others and increases attendance among patients. Therefore, it is proposed to provide group education programs in hospitals for group discussions for these people in order to reduce the psychological problems of patients.

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