



Evaluating the Effect of Group Therapy Based on Coping Strategies in Mental Adjustment of Women with Gynecologic Cancer

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ABSTRACT

Gynecologic cancer is one of the most important topics of oncology and social medicine. Most people suffering from cancer experience a period of mental and mental stress, which reduces their quality of life and their daily functioning. Group therapy based on coping strategies is one of the most appropriate methods for mental adjustment of these patients. Thus, the objective of this research was to evaluate the effectiveness of group therapy based on coping strategies in the mental adjustment of women with gynecologic cancer, admitted to educational and therapeutic centers of Urmia. This research was conducted to evaluate the effect of group therapy based on coping strategies in the mental adjustment of gynecologic cancer women. A total of 70 women with gynecologic cancer were selected by random sampling method and using a random number table. They were selected after providing full explanation on the research and obtaining the consent of the patients to participate in the research. Each of the subgroups of the intervention group received group therapy based on coping strategies in accordance with the intervention package during the 2-hour eight sessions. Group therapy based on coping strategies affected the mental adjustment in all domains, including cognitive avoidance, fatalism, anxious preoccupation, helplessness/hopelessness, and fighting spirit among women with gynecologic cancer ($p < 0.001$). Group therapy based on coping strategies is effective in the mental adjustment of women with gynecologic cancer. By conducting a group therapy, patients will be helped develop a clear vision for their future by thinking about the future and spend their daily life with hope and vitality without fear of disease.

Key words: Group Therapy, Coping Strategies, Mental Adaptation, Gynecologic Cancer

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INTRODUCTION

Cancer is a complex, common, and debilitating disease [1]. In this regard, gynecologic cancers are one of the most important topics of oncology and social medicine, which account for 1.3% of total cancers in women [2]. Cancers, which affect the

female genitalia, are called gynecologic cancer. It is specific to women. It includes uterus, ovarian, vulva, cervix and vaginal cancers [3,4]. Female cancers are one of the most common cancers among women. Gynecologic cancers account for 25% of female cancers in developing countries and 16% of female cancers in developed countries [5]. In the United States, nearly 80000 new gynecologic cancers are diagnosed annually. Cancer is a very unpleasant and unbelievable experience for anyone. Cancer disrupts the economic, social, occupational and family life of the patient and

affects various aspects of quality of life of patients, such as mental, psychological, social, economic and sexual functioning [6].

As this disease threatens the life of people and it is associated with high risk of death in these patients, it can be a major factor of psychological and physiological stress [7]. Most people with cancer experience a period of stress. Some patients experience more severe psychological problems, leading to reduced quality of life and disruption in daily functioning. Cancer treatment is also associated with many psychological pressures, which some of them reduce quality of life and lead to anxiety or depression, and even some patients leave chemotherapy due to its psychological problems [8]. Patients with various types of cancer experience high levels of psychological disorders, ranging from depression, anxiety, non-adaptation to disease, and reduced self-confidence to emotional disturbances and fear of recurrence of diseases and death [9]. Any change in a person's life, whether pleasant or unpleasant, requires a kind of adaptation [10]. Adjustment refers to the psychological processes, occurring over time and in the social context, the experience of personal learning, and adaptation to the changes caused by disease and its treatment [11].

Adjustment can have different aspects. One of the types of adjustment is mental adaptation. Watson and Greer define mental adjustment as cognitive and behavioral responses, which are in the diagnosis of cancer in a person [12]. In fact, mental adjustment might include emotional reactions of an individual to a life-threatening event [13]. Several interventions have been used to improve the adjustment of cancer patients to problems. In order to improve the coping strategies and increase the adaptability in cancer patients, researchers have used a different combination of psychological interventions, including increasing the knowledge of patients on the relationship between depression and cancer tumors, helping to develop strategies to cope with stress, including relaxation exercises, mental imagination, cognitive therapeutic behavior, cognitive-behavioral stress management, and group therapy. The effectiveness of each of these treatments has been confirmed [14-20].

One of the reasons for the effectiveness of group intervention is that patients are sitting in circles and in front of each other in this method and the effort to accept them is emphasized. In addition, the

concepts of group solidarity, secrecy, feedback, and mutual support are completely observed. Complex emotional interactions in the group provide the opportunity to model successful behaviors and also enable individuals to discover their worth, usefulness, and uniqueness and experience a better feeling by helping others [21]. Thus, this research was conducted to evaluate the effect of group therapy based on coping strategies in the mental adjustment of gynecologic cancer patients, admitted to Urmia educational- therapeutic centers in 2016.

MATERIALS AND METHODS

This research was conducted to evaluate the effect of group therapy based on coping strategies in the mental *adjustment* of gynecologic cancer patients, admitted to Urmia educational- therapeutic centers in 2016-2017.

For this purpose, after receiving the introduction letter and the required license the code of ethics and RCT code, and obtaining a written consent of authorities of the educational-therapeutic centers, the medical files of 150 women with gynecologic cancer, who admitted to the centers during 2016 and 2017, were taken. After reviewing the medical files, 100 of them who met the inclusion criteria of research were included in the research. After providing full explanation on research and obtaining the consent of patients, out of 100 patients, 70 patients with gynecologic cancer were selected by random sampling method using a random number table. Then, the subjects were randomly assigned to two groups of intervention (n=35) and control (n=35).

Each of the subgroups of the intervention group would play role (for example: asking questions from a physician and resolving uncertainties about the disease, in which case one of the patients would play the role of a physician and one another would play the role of the patient and others would play the role of viewer), brainstorming, modeling during 2-hour eight sessions under interventions of therapeutic group based on interventional strategies in accordance with interventional package (including interventional table-educational booklet, lecture of one of the cancer patients who were successful in the fight against cancer).

The intervention content included the use of coping strategies, implemented using the cognitive-behavioural method in the group, and the group

force was used in developing new methods, leaving positive effect on each other, and learning from each other. At the end of each session, some home tasks were provided for patients, which they were reviewed and scored at the next session. Finally, those who received higher scores were rewarded, while the control group received routine treatments. At the end of educational sessions, a three-month opportunity was given for group to implement the coping skills practiced in group in their daily life. It should be noted that mental adjustment assessment form was completed immediately one month later and three months after the intervention

RESULTS

Demographic variables were compared in two sets of qualitative and quantitative variables in both intervention and control groups. The absolute and

relative frequency of distribution of demographic characteristics in patients of both groups showed that 37.1% had cervix cancer and 60% had stage II disease in the intervention group. In the control group, 54.3% had cervix cancer and 45.7% had stage II disease. All patients were under treatment and without distant metastases. Chi-square test did not show significant differences between demographic variables in intervention and control groups ($p > 0.05$).

Comparison of characteristics of mental adaptation in two groups of intervention and control In these tables, the mean and standard deviation of scores of mental adjustment in two groups of intervention and control in five domains of mental adjustment (fightingspirit- helplessness/hopelessness -anxious Preoccupation, fatalism and cognitive avoidance) were investigated.

Table 1. Mean and standard deviation of the scores in the domain of fighting spirit in intervention and control groups

Fighting spirit Group	mean± SD			
	Before intervention	After intervention	One month later	Three months later
Intervention	8.97±2.34	15.42±0.77	15.62±0.49	15.91±0.284
Control	9.80±2.48	11.02±1.94	9.54±2.14	9.37±1.89

Table 2. Mean and standard deviation of adjustment score in domain of helplessness/hopelessness in intervention and control groups

helplessness/hopelessness group	mean± SD			
	Before intervention	After intervention	One month later	Three months later
Intervention	15.14±4.41	28.22±1.41	31.85±0.55	31.97±0.169
Control	18.88±4.89	18.08±3.25	16.97±4.06	15.51±2.74

Table 3. Mean and standard deviation of adjustment score in domain anxious Preoccupation in intervention and control groups

anxious Preoccupation group	mean± SD			
	Before intervention	After intervention	One month later	Three months later
Intervention	8.77±2.43	21.74±4.26	25.02±2.78	25.82±2.13
Control	12.6±2.98	13.94±4.0	13.48±2.29	14.94±2.30

Table 4. mean and standard deviation of adjustment score in the domain of fatalism in intervention and control groups

fatalism group	mean± SD			
	Before intervention	After intervention	One month later	Three months later
Intervention	13.02±2.89	18.94±1.08	19.48±0.701	19.77±0.59
Control	12.05±2.48	12.60±2.34	10.80±2.24	13.62±1.92

Table 5. Mean and standard deviation of adjustment score in the cognitive avoidance domain in intervention and control groups

cognitive avoidance group	mean± SD			
	Before intervention	After intervention	One month later	Three months later
Intervention	9.97±2.05	15.08±0.95	15.68±0.79	15.80±0.40
Control	10.60±1.92	11.48±1.01	10.60±1.68	12.20±0.79

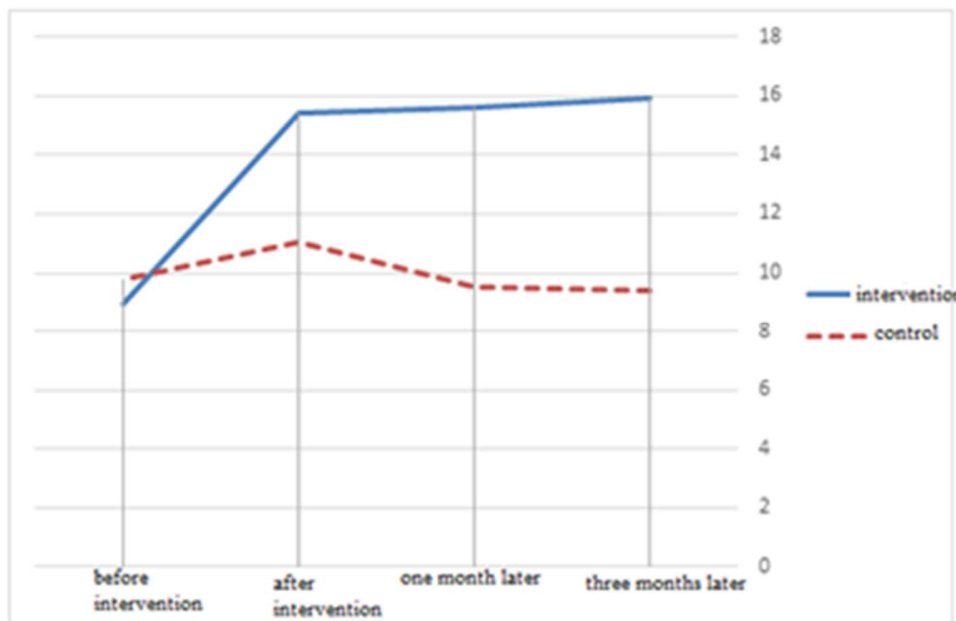


Diagram 1. The mean total score of mental adjustment in the intervention and control group.

The tables above show that the mean of total adjustment scores for all domains of adjustment before intervention, after intervention, one month after the intervention, and three months after the intervention, including cognitive avoidance, fatalism, anxious Preoccupation, helplessness/hopelessness and fighting spirit improved among the gynecologic cancer women ($p < 0.001$).

In the tables above, three effects are tested:

1-Interaction between time and intervention: Significant differences were seen in the mean score of mental adjustment in intervention groups in all domains including cognitive avoidance, fatalism, anxious Preoccupation, helplessness/hopelessness and fighting spirit of women with gynecologic cancer at different times ($P < 0.001$).

2. Main effect of time: significant difference was seen in the mean score of mental adjustment in intervention groups in all domains including cognitive avoidance, fatalism, and anxious Preoccupation, helplessness/hopelessness and

fighting spirit of women with gynecologic cancer at different times ($P < 0.001$).

3-Main effect of intervention: The main objective of this research is to investigate this effect. The results of variance analysis show significant difference in mean score of mental adjustment in intervention and control groups in all domains including cognitive avoidance, fatalism, and anxious Preoccupation, helplessness/hopelessness and fighting spirit of women with gynecologic cancer ($P < 0.001$).

DISCUSSION AND CONCLUSION

The main objective of this research was to evaluate the effect of group therapy based on coping strategies on mental adjustment in gynecologic cancer patients. In this regard, the research population of included all women with gynecologic cancer, admitted to Urmia educational centers.

The sample size was considered to be 70 patients (35 samples per group), which they were selected

by random sampling method. The data collection tool was a mental adaptation questionnaire for cancer patients. Its validity and reliability were confirmed in previous studies. In this research, all samples were female and patients were under treatment without distant metastasis. Chi-square test results showed no significant difference between demographic variables in intervention and control groups. In other words, the two groups were matched in terms of the variables ($p > 0.05$). The main hypothesis of the research: group therapy based on coping strategies is effective in the mental adjustment of women with gynecologic cancer.

To investigate the main hypothesis of the research, we examined the secondary hypotheses of research on the effect of group therapy based on coping strategies on different domains of mental adjustment including fighting spirit, helplessness/hopelessness, and anxious Preoccupation, fatalism and cognitive avoidance. The group therapy based on coping strategies is effective in mental adjustment in all domains of gynecologic cancer. The results of repeated measurement analysis showed significant differences in the mean score of mental adjustment domains including fighting spirit, helplessness/hopelessness, anxious reoccupation, fatalism and cognitive avoidance of people at different times ($p < 0.001$).

The results of this research are in line with previous studies. In the research conducted by Johnson *et al.* (2011) in correlation analysis, it was found that patients used helplessness/hopelessness and mental preoccupation reported anxiety and depression and had low quality of life. The size of the tumor and its progression stage do not affect the adaptation response. The analysis showed that the use of hopelessness response reduces the survival rate. In a study conducted to evaluate the effectiveness of cognitive-behavioral group therapy on the treatment of anxiety, depression and creating hope in women with breast cancer, Pedram *et al.* (2010) showed that the scores of anxiety and depression decreased in subjects undergoing cognitive-behavioral group therapy and the level of hope increased in these subjects in comparison to those who did not treated by cognitive-behavioral group therapy. This suggests the effectiveness of cognitive-behavioral group therapy in reducing the symptoms of anxiety and depression and increasing hope of women with breast cancer.

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