# Effectiveness of Emotion-focused therapy on Anxiety and Quality of Life in Women With breast cancer

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### Abstract

**Objective**: The aim of this study was to evaluate the effectiveness of emotion-focused therapy on anxiety and quality of life in women with breast cancer.

**Method**: A quasi-experimental design was used to collect pre-test, post-test and follow-up data (three months after) from treatment and control groups. The sample consisted of 30 women with breast cancer in Tehran who had a high score in anxiety after screening. They were selected based on purposive sampling and randomly placed in experimental and control groups of size 15. The experimental group received 12 sessions (50 minutes) of emotion-focused therapy (Greenberg, 2010). The control group did not receive an intervention. Data were collected using Beck Anxiety Inventory and Functional Assessment of Cancer Therapy - Breast Cancer (FACT-B) in three stages: pre-test, post-test, and follow up, and analyzed using mixed variance analysis.

**Results:** Results showed significant within and between subject differences (P<0.01) on measures of anxiety and quality of life. Emotion-focused therapy significantly reduced anxiety and increased quality of life in the treatment group relative to the control group. Moreover, post-test and follow-up levels of anxiety and quality of life differed significantly from pre-test levels, but not from each other.

**Conclusion:** Emotion-focused therapy targeting emotional processing and expression improved [d1] regulation of clients' emotions and can be used as an appropriate intervention method to reduce anxiety and increase quality of life in women with breast cancer.

Keywords: Emotion-Focused Therapy, Anxiety, Quality of Life, Breast Cancer, Malignancy.

### Introduction

Cancer threatens life and future of affected people and causes a lot of worry and concerns about losing one's relationships, independence, profession, and proper functions of the body. In this illness, adaptation with physical, mental, and social conditions of the disease is frustrating and may result in depression, anxiety and stress among patients (Falvo& Holland, 2017). Breast cancer is the most common type of cancer among world women and is the second most fatal after lung cancer (Youn& Han, 2020). Moreover, as a great challenge to body and mind, cancer can affect other biological and mental states due to perceived stress. Psychological factors affect emergence and activation of the disease. Besides,they can play crucial roles in intensification or recurrence of breast cancer after patients learn about the illness, during treatments and even after them (Emami et al., 2018). In a sample of 256 patients, at least 26% reported intense depression and at least 41% reported intense anxiety during chemotherapy which is twice as much as outbreak of the same symptoms before chemotherapy (Nakamora et al., 2021). A study on

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cancer patients showed that outbreak of depression and anxiety were 46 and 48 percent respectively (Nikbakhsh et al., 2019).

Anxiety is defined as severe stimulation accompanied by fear, doubt, and extreme worry; in other words, it is a pervasive, unpleasant and vague perturbation which is normally accompanied by most of the sympathetic system symptoms such as headache, perspiration, heartbeat, chest pain, and minor stomach annoyance (Sadock, & Ruiz, 2015). Previous studies consider anxiety alongside depression as symptoms and major complaints of cancer patients (Shim et al., 2020; Wang et al., 2020). Stress, depression and anxiety caused by disease and treatment processes are among the most prevalent mental disorders in cancer patients which decline the quality of their lives and negatively impact treatment processes and retention rates (Rouchmawati et al., 2020).

Today, quality of life is attended to as a significant consequence of treating illnesses and also, as a determining index of treatments (Barghi Irani, Pirhayati & Zare, 2018). The World Health organization (WHO) takes a broad concept of quality of life which encompasses physical health, psychological status, independence level, social relationships and personal beliefs and association of them with environmental characteristics. In cancer patients, similar to other chronic diseases, the primary objective is to take care and maximize the quality of life. Health care teams strive to maximize vocational skills and enhancement of patients' function in the quality of life (Hasanpour Dehkordi, 2006). Additionally, they found that quality of life among women with breast cancer is lower than normal people and that aromatase inhibitor treatment (performed in initial stages of breast cancer) can potentially improve their quality of life and psychological functioning (Martino et al., 2020). Lower educational level, younger age, having simultaneous diseases, being in the fourth stage of the disease, experience of surgery, dissatisfaction

with social support and ... are associated with lower quality of life (de Larrea-Baz et al., 2020). According to the aforementioned points, preventing the emergence of affective disorders including depression and anxiety in cancer patients seems undeniable because emotional problems lead to decline in their quality of life while intervening with the aim of reducing depression and anxiety can result in enhancement of their quality of life (Jouer, 2008). Research studies suggest that women with breast cancer show less emotional expressivity and more emotional prevention and rumination. Therefore, scholars believe that encounter, via emotional approach (e.g., active encounter with processing and expression of emotions) can bring about positive social responses and attract further social support that function like a shield against the illness and increase cancer patients' adaptive potential (Abrishamkesh et al., 2016). One of the therapies that deal with emotions and its effects on depression and anxiety have been scrutinized is emotion focused therapy, proposed by Greenberg et al. (1989). Emotion focused therapy is a humanist and empirical treatment (Greenberg Geller, 2012). Emotion focused therapy & strategies hinge on two concepts of self-making and personality growth. The key to this kind of therapy is self-regulation. In this system, psychologists or counselors are considered as mentors for control and regulation of feelings who help clients to get aware of their own affective experience, accept and understand it, thus strengthening their feelings and emotions (Greenberg, 2004). In emotion focused therapy, therapists' focus is not only on bringing people's distorted or disavowed mental content onto their conscious awareness, but they look for making new meaning derived from clients' bodily experience (Greenberg & Watson, 2006). Often, approaching bitter mental and affective experiences is hard and frustrating for patients. In this regard, therapists' role is to establish an efficient relationship and instruct patients to regulate their emotions. Emotion focused therapy consists of nine steps and three stages that can be completed within 8-10 sessions during which individuals are assisted to resolve their conflicts (Johnson & Greenman, 2006).

Studies suggest that emotion focused therapy is effective for anxious and depressed individuals (Greenberg, 2017). Researchers have confirmed the effectiveness of this therapy in reducing women breast cancer patients' depression and anxiety (Hissaet al., 2020; Connolly-Zubot et al., 2020). SanagooyMoharer et al.'s (2018) study, too, showed that emotion focused therapy decreases anxiety and depression of patients with multiple sclerosis. Using psychotherapeutic approaches boosts mental health of this group of patients and is helpful in improving patients' physical conditions. Gili et al. (2021) compared the effectiveness of emotion focused therapy and transcranial direct current stimulation on coronary artery patients' anxiety and depression. They found that both intervention types can significantly enhance cardiac patients' depression and anxiety; however, emotion focused therapy was shown to be more effective.

Fathi et al. (2020) compared the effectiveness of emotion focused therapy and acceptance and commitment based therapy to see their respective impact on quality of life among women with chronic headaches. Their findings demonstrated that both therapies bring about improved quality of life and their impacts retain in the long-run. Nevertheless, the impact of acceptance and commitment based therapy was more powerful than that of emotion focused therapy in both posttest and follow-up stages.

Numerous papers concerning efficacy and salient capabilities of emotion focused therapy have been published in Iran (SanagooyMoharer et al., 2018; Barghi Irani et al., 2013). A review of them suggests that the therapy is efficient and effective on the most important mental variables of breast cancer patients. Nonetheless, no study has considered the application of emotion focused therapy on anxiety and quality of life of breast cancer patients in Iran. According to the existing literature, emotional factors have crucial roles at the beginning, during development and severity of cancer (Yoo et al., 2010). Also, conducting emotion focused intervention scan potentially culminate in improvement of quality of life, acceleration of recuperation, reduction of hospitalization time and finally, cutting clinical expenses. According to what has been mentioned, doing further research to examine the efficiency of this type of therapy, especially among breast cancer patients, seems warranted. Therefore, the current study was accomplished with the purpose of investigating the effectiveness of emotion focused therapy on anxiety and quality of life of women with breast cancer.

# Method

This research was a semi-experimental study with a pretest-posttest and follow up design with a control group.

# Participant

The statistical population included women with breast cancer who visited a general surgeon or oncologist in Tehran in 2019-2020 and were diagnosed with breast cancer according to the results of mammography, sampling and oncologists' clinical judgment. From among such individuals, a total of 30 patients were purposively recruited and then, randomly assigned to two groups of 15 (experimental and control groups). Entry criteria included: having breast cancer with checked symptoms (in the first, second, or third stage of the disease), 35-55 years of age, being married, not being pregnant or breastfeeding, having at least a high school diploma, having no precedence of drug abuse, not having used psychological therapies with at least two months leading to the first session, no precedence of hospitalization in mental clinics, and not having consumed psychotherapeutic medicine within two months prior to the first session. Furthermore, exit criteria included not interested in continuing therapy, absence in more than 2 sessions, **Ethical Statements** 

In order to abide by research ethics, all participants'

consent to take part in the project was obtained. The significance of the study was clearly delineated to them. Also, they were told that they can withdraw from the study at their own will. In addition, they were reassured that the collected information would be kept totally confidential and that the questionnaires are anonymous and number-coded. Furthermore, integrity and honesty would be diligently maintained during analysis and presentation of the data.

### Measures

Beck anxiety inventory: This instrument was developed by Aaron T. Beck and his colleagues in 1988. It contains 21 items measuring the common anxiety symptoms i.e., mental symptoms, physical symptoms, and panic (Beck & Streer, 1998). For each item, respondents are supposed to choose one of the four given options which represent intensity of anxiety, ranging from 0-3. A mean score of 0-9 indicates minimal anxiety, 10-20 mild anxiety, 21-30 moderate, and 31 or higher severe anxiety levels. This inventory has excellent validity with an internal consistency alpha coefficient of 0.87. Correlations with fatigue, quality of life, and dyspnea were moderate (0.456-0.606) (Ke, et al. 2017). In a study by Kaviani and Mousavi (2008), validity, reliability and internal consistency of the questionnaire in a sample of 1513 men and women in Tehran were estimated as such: Cronbach's alpha (0.82), validity (0.72), and test-retest reliability index with a month interval (0.83). Moreover, in Farid et al.'s (2018) study, reliability index of the questionnaire using Cronbach's alpha was calculated to be 0.89. In the current research study, reliability coefficient was computed by using Cronbach's alpha to be 0.86 for the whole instrument.

The Functional Assessment of Cancer Therapy-Breast (FACT-B): This instrument was originally designed and developed by Brady et al. (1997) and contains a total number of 36 items covering four areas of (FACT-G) primary quality of life including physical, social/family, emotional and functional well-being, and a specific disease area (additional concerns for breast cancer) which is also called breast cancer sub-scale. To answer the items, respondents must choose a number from 0-4 (0= not at all, 4= very much). The instrument possesses acceptable validity, reliability, sensitivity to change and ease of application. Brady et al. (1997) reported the sub-scales Cronbach's alpha in a range of 0.63-0.86. In addition, Pato et al. (2016) investigated the psychometric characteristics of the Persian version of the questionnaire and estimated Cronbach's alpha for physical well-being (0.71), social/family (0.91), emotional (0.78), functional (0.93), sub-scale of breast (0.63), and the whole questionnaire (0.92). Significant correlations between this instrument and hospital depression and anxiety questionnaire and also, European Organization for Cancer Research and Treatment Quality of Life Questionnaire indicate that this questionnaire enjoys both concurrent and diagnostic validity (Pato et al., 2016). In the present study, Cronbach's alpha index was calculated 0.86.

Procedure: After obtaining cooperation of doctors at Rasool Akram Hospital and Khatam-ol-Anbia Cancer Clinic, the study was realized through the following procedure: After participants were sampled according to the entry criteria, they were grouped into an experimental and a control group and then, they took the pretest. Next, the experimental group participants received emotion focused therapy individually through 12 sessions of 50 minutes each. The control group members received no treatment and only took part in the pre- and posttest. After the treatment phase was over, the two groups were compared in order to find any probable difference in their results. Furthermore, to follow up the potential effects of the intervention and its retention, three months after the completion of the program, all the participants filled in the questionnaires again. A summary of the emotion focused therapy intervention is provided in Table 1.

Because of the nature of emotion focused therapy and considering the different needs of participants,

# Table 1. Summary of Emotion Focused Therapy (Greenberg, 2010)

Session	Description
1	Overall acquaintance with clients, introduction of the therapist and implementation of the pre-test, Initial examination with client's problems, concerns and expectations. Emotion evaluation (vocal quality, body arousal, experiencing). Formation of a therapeutic alliance. explain the treatment goals and how to achieve them. Identify the session markers.
2 3	Emotion coaching. Identify, experience and understanding of client's emotions. persuades clients to identify basic emotions, such as grief, anger, shame and fear of getting worsened and recurrence of the disease, fear of death. Exploration and expression Unmet needs. Identify self-related issues (Self-critical, Self-frightener, Self-interruption in life). Explain the role of words in expressing (verbalizing) or interrupting emotions. Facilitate to put the emotions into words and expression of unmet needs. Empathic exploration. perform two-chair dialogue technique for splitting in negative self-evaluation and self- interruption. Deepen the experience of painful core emotions and relieve self-related issues.
4	exploring issues related to others and important and influential person in life and implementing the empty chair technique Identify and distinguish primary and secondary emotions and describing the experience with more details was facilitated Emotion Regulation. Empathetic acknowledgment of emerging unmet needs. Support for forgiving, understanding, or holding others responsible.
5	The technique of unfolding the systematic recall through the representation of one of the stressful scenes of the person's life (for example, the experience of being informed about cancer) to indicate problematic reactions. Encouraging client to re-enter the situation and experience it again.
6	The technique of empathetic affirmation and reflection of experience for the vulnerability marker (fatigue due to illness and helplessness, self-related shame and feelings of hopelessness). Create empathic understanding. Explore and suppor a sense of comfort. Facilitating the expression of unmet needs and expectations and demands. Experience protective anger. Self-soothing with imagery of the inner child.
7	Creating meaning for the meaning protest marker. Describing and clarifying Cherished beliefs using empathic exploration evocating empathy, empathic speculation, metaphor, empathic understanding. Facilitating clients' exploration of possible consequences based on the revised Cherished beliefs. facilitate self-compassion, self-soothing, and self-regulation.
8	Reprocessing of problematic experiences and guiding the process to the active participation of clients. Expression and regulation of secondary emotions. Strengthening the processing of emotions of fear, shame, anger and sadness Emotional verbalization. Facilitating the expression of needs and expectations and demanding it. Experience protective anger. Emotional transformation.
9	Remembering and reviewing the way taken. Investigating painful maladaptive emotions (fear of death, loneliness rejection and shame of inadequacy and guilt) and understanding the meaning of internal emotions of clients. Reaching the experience of adaptive sadness and grief. Self-affirmation and needs. Creating a new look at one's sufferings and accepting vulnerability. Experience relief and grow with it. Validation of new emotional responses.
10	Review emotions, thoughts, and physical symptoms in times of pain and stress. Process the primary emotions identified in the previous steps more thoroughly. Clients learn to trust newly expressed emotions and experience new responses to their needs.
11	Increasing awareness and agency. empowering clients with the experience that emotions contain adaptive inner potentia and, if activated, can help change the problematic emotional state and, if impossible, can experience primary adaptive emotions (adaptive hopelessness and grief), Letting go of it and move on to other ways.
12	Comparing current and past emotional experience and talking about self-compassion, self-soothing and assertiveness Summarizing the experience of the sessions, the new meaning made of emotions and consolidating the treatment, re running the questionnaires, announcing the request to attend the sessions after 12 weeks from the end of the treatment to follow up the continuation of the effectiveness of the treatment.

treatment sessions were not necessarily held consecutively. Sometimes, the contents of the sessions were repeated.

In order to analyze the data descriptive statistics such as mean, standard deviation, and also, inferential statistics including two factor analysis of variance with repeated measurements of one factor (mixed) and Bonferroni post hoc test were utilized. To run the mixed analysis of variance, assumptions of independence of observations, normality of distribution (Shapiro-Wilk test), homogeneity of variances (Levene's test), sphericity assumption (Mauchly'sSphericity Test and The Greenhouse– Geisser correction), multiple correlation of dependent variables (Bartlett's test), and equality of (M= 45.60, SD= 8.11) and control (M= 43.40, SD= 6.94) groups were computed. An independent samples t-test indicated that there was no significant difference between the two groups in terms of age of participants (p> 0.05). A total of 26.7% of the experimental group members and 13.3% of the control group members had undergone complete breast removal. Also, 66.7% of the experimental group and 73.3% of the control group had done partial removal that kept the breast. Another 6.6% of the experimental and 13.4% of the control group had received prosthesis. Table 2 presents the distribution of participants' score regarding the research variables.

Normality of distribution of the data was confirmed

Table 2- Anxiety and Quality of Life Descriptive Indicators in Experimental Groups

	_	Pre test		Post test		Follow up	
	group	Mean	S D	Mean	S D	Mean	S D
Anxiety	Experimental	19.40	5.44	8.93	3.19	9.00	4.17
	Control	22.80	9.61	23.47	5.54	24.13	7.12
Quality	Experimental	82.47	18.22	109.07	13.99	103.60	18.44
of life	Control	74.87	17.13	73.93	10.99	75.33	13.78

variance-covariance matrices (Box's M Test) were checked. The data were analyzed by using SPSS version 21.

### **Results**

The means and standard deviation of experimental

by running the Shapiro-Wilk test. Similarly, Levene's test attested homogeneity of variances of anxiety (F= 0.941, p= 0.097) and quality of life (F= 0.019, p= 0.891). Results showed that equality of variance-covariance matrices was achieved for anxiety (Box's

Table 3 -Re	esults (	of ana	lysis of	variance	for intra	group and	intergroup	differences

variable	Sources of changes	Sum square	DF	mean squared error	F	significance level	Eta squared parabola
	Test	649.956	1.431	324.978	17.554	0.001	0.385
Anxiety	Between-Group	2260.011	1	2260.011	28.795	0.001	0.507
	Test*Grouping	541.956	1.431	378.858	14.637	0.001	0.343
Quality of life	Test	4545.622	1.518	3061.202	23.985	0.001	0.641
	Between-Group	9548.100	1	9548.100	17.607	0.001	0.386
	Test*Grouping	1921.667	1.518	1266.269	9.921	0.001	0.262

M= 9.173, F= 1.350, p= 0.231) and quality of life (Box's M= 4.442, F= 0.654, p= 0.687) (p> 0.05). Assumption of sphericity was not maintained for the variables; thus, The Greenhouse–Geisser correction was employed for reporting within-group effects. Analysis of mixed variances is summarized in Table 3.

As shown in table 3, anxiety scores in within-group section including the test (F= 17.55, p= 0.001) and interaction of test/grouping (F= 14.64, p= 0.001) were significant in three measurement stages in the groups. In within-group section, test (F= 23.99, p= 0.001) and interaction of test/grouping (F=9.92, p=0.001), quality of life scores were significant in three measurement stages in the study groups (p < 0.01). Moreover, in between-group section, the observed difference between anxiety (F=28.80, p=0.001) and quality of life (F=17.61, p=0.001) proved significant in the groups. Regarding the significant F values, post hoc comparisons were warranted. Therefore Bonferroni test was utilized to make the necessary comparisons. The findings are summarized in Table 4.

Table 4 suggests that mean scores significantly declined from the pre-test through the post-test and from the pre-test through the follow-up (p <0.01). The observed differences between the pre-test and the follow-up were not statistically significant (p >0.05), meaning that treatment effects were stable through time. Thus, it can be extrapolated that effectiveness of emotion focused therapy on anxiety and quality of life of women with breast cancer remains stable through passage of time.

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Results of the present study confirm the effectiveness of emotion focused therapy on anxiety and quality of life of women with breast cancer in comparison with the control group. These findings converge with those of some other studies (Giliet al., 2021; Connolly-Zubotet al., 2020; Shahar, 2020; Asmaribardezardet al., 2018; KhosraviAsl et al., 2018; Timulak, 2017; Lafrance Robinsonet al., 2014; Priest, 2013;). It is demonstrated that effects of the emotion focused therapy on reducing anxiety of women with breast cancer were still present in the three-month follow-up and the anxiety-reducing influence of the treatment was maintained.

Suffering from cancer along with the related bodily and physical changes (e.g., amputation, hair loss etc.) can cause loss of physical coherence, feeling of dissociation and changes in personal relationships (especially with one's espouse). As emotion oriented scholars believe, emotional suffering of depressed and anxious people center around three classes of unfulfilled needs: safety and security needs, love and relationship needs, and the need to be autonomy and recognition of values by others (Connolly-Zubotet al., 2020). The objective of emotion focused therapy is to change emotional schemes via adaptive emotional processing. New emotional experiences contribute to changing emotional memories. Apparently, activation of emotional memories during emotion focused therapy and obstruction of memory reconsolidation process can function as a mechanism of emotion focused therapy to reduce negative emotions like anxiety. Considering the fact

variable	Pairwise Comparison	Mean difference	SE	significance level
	pre-test -post test	10.467*	1.264	0.001
Anxiety	pre-test - follow up	10.400*	1.658	0.001
	Post-test - follow up	-0.067	0.859	1.00
	pre-test -post test	-26.600*	4.020	0.001
Quality of life	pre-test - follow up	-21.133*	4.702	0.002
me	post-test - follow up	5.467	2.232	0.084

Table 4- Pairwise Comparisons

that memories of maladaptive emotional schemes may cause emotions like grief, fear, shame etc., interrupting an already established emotional schema through obstructing reconsolidation can help solve individuals' emotional problems (Greenberg, 2015). Because anxious people face problems in identification, perception regulation and of emotions, emotion focused therapy was conducted with the aim of creating awareness of emotions, regulation of emotions and using or transforming emotions. In the treatment process, patients learned to increase their awareness of emotions, deepen their affective/emotional experiences, and understand maladaptive emotional responses to be able to apply them for producing more adaptive emotional choices and finally, employ adaptive emotions for directing action. Using a compassionate, impartial and reflective approach allowed the participants to reach a better understanding of their own feelings. Applying various therapeutic techniques enabled patients to learn and try novel ways of using adaptive emotions to direct their actions.

In the first stage, i.e., emotional identification and awareness, effort was made to explain the connection between emotions and neglected experiences to the patients. Identifying basic emotions and defective interactive cycle, recognition of contrasting and critical feelings about oneself and important others in life understanding underlying cognitive-affective processes, identifying needs and bringing them into conscious awareness, validating experiences and needs, focusing on secondary emotions and exploring them to attain underlying and unknown emotions, processing emotions and increasing awareness of primary emotions were among activates of this stage. These activities were done to persuade participants to verbalize their feelings about emotional experiences and provide the necessary mental space for externalizing emotions. Facilitation of retelling damages and their related stories and repeating them during therapy sessions contributes to deeper processing of emotional problems. Empathetic affirmation of vulnerability in working with patients who suffer from feelings of guilt, shame, and worthlessness can help decrease negative emotions and reduce anxiety. According to researchers, emotion regulation problems cause anxiety and redoubled anxiety disrupts normal processing of emotions (Baziliansky&Cohen, 2021; Pehet al., 2017). Therefore, in the second stage of the therapy i.e., calling, exploring and regulating emotions, some techniques like underscoring acceptance of experiences, imaginative exposure, and hot seat were performed to create feeling of control over negative emotions in patients. At this stage, patients learned to gain awareness of their emotions and process them instead of suppressing or avoiding them. Deep experience and acceptance of emotions paved the way for emotional selfawareness and regulation of emotions; emotion regulation, by itself, is efficient in reducing anxiety (Choi et al., 2021; O'Toole et al., 2020).

In the third level of integration and consolidation, patients learned to trust newly emerging emotions and experience novel reactions to their needs. At this point, the therapist started a procedure in which patients expressed their willingness to admit and accept the disease and the related treatment stages. Ultimately, experience of earlier adaptive emotions like self-compassion and adaptive anger led to change in initial maladaptive emotions. In addition to moderating emotional pain, these new experiences increased the probability that patients create adaptive emotional responses when experiencing maladaptive painful emotions. Thus, changing problematic schemata and rewriting them can result in new emotional processing patterns. Emotional processing would never get entangled in earlier painful maladaptive emotions and avoidance of such experiences. This fact explains and clarifies the stability of therapy effects long after the sessions were finished. Change in emotional experiences, emotional schemes and self-organization paves the way for enhanced emotional flexibility and resilience in patients and decreases their anxiety.

Findings of the current study highlight the effectiveness of emotion focused therapy in boosting women breast cancer patients' quality of life, compared to the control group, which corroborate findings of some other studies (Barghi Irani et al., 2013; Fathi et al., 2020: Haghayegh et al., 2015). Results demonstrated that effects of the therapy endured during the three-month follow-up. Also, according to the findings, effectiveness of emotion focused therapy on reducing social/family well-being of women with breast cancer was not significant.

According to opinions of emotion focused therapists, emotional pain contains physiological aspects as well. These aspects affect experience of physically tangible pain. In other words, emotional pain has negative impact on respiration, muscular spasm, sleep, fatigue, appetite and other bodily pains. In interaction with cancer-related experiences such as chemotherapy side effects, surgery etc. and mental/ social consequences thereof, these factors can lead to lower quality of life among women with breast cancer. Therefore, it seems that, via regulation of adaptive emotions, emotional changes derived from emotion focused therapy is effective in decreasing physical, functional, and emotional symptoms and women cancer patients' specific concerns, Increasing their general satisfaction and health, and improving the quality of their lives. As suggested by Halamováet al.'s (2019) findings, emotion focused therapy, apart from improving self-compassion and diminishing self-criticism, entail physical consequences such as reduction in heartbeat rate.

Offering an empathetic therapeutic stance, encouraging participants to discover problematic emotional experiences, introducing therapeutic tasks (like empty chair technique for unfinished business) etc. are examples of the strategies of emotion focused therapy for enhancing functional and emotional well-being and reducing worries of cancer patients. The client-centered collaborative relationship with its constant emphasis on participants' emotional experiences and needs, together with empathetic stance of therapists are effective in diminishing emotional problems and betterment of patients' emotional well-being.

At a higher level, therapeutic strategies which are based on this concept should change problematic self-organization that is rooted in certain emotional schemes. This goal was achieved through access to painful core emotions (panic/fear, shame, and loneliness), unfulfilled needs and emotional responses were provided so that compassionate and protective self-organization might engender. Meaning creation for the individuals who were in highly stimulated emotional mood or demonstrated severe reactions to the trauma (cancer diagnosis, mastectomy, chemotherapy etc.), brought about improvement in emotional and functional wellbeing and reduction in certain worries. By changing emotional experiences and maladaptive emotional schemata and by adopting adaptive emotional experiences and emotion regulation skills, lessons and experiences learned from emotion focused therapy can not only refine quality of life in various emotional, functional well-being, specific concerns of breast cancer etc., but also, they can have a protective aspect too (via attaining self-compassion and protective anger). That is why carrying such experiences over to everyday situations results in continuation of therapy effects even after the treatment is finished.

The statistical population of the present study was limited to women cancer patients in Tehran who were recruited through purposive sampling. Thus, generalization of the results to other people must be done cautiously. Using self-report questionnaires can pose another potential threat to the obtained responses and interpretations. Therefore, it is highly recommended that random sampling techniques and non-self-report instruments should be employed to broaden the possibility of gaining definite answers about stability of changes through therapy and also, generalization of therapy skills to longer followup periods (e.g., six months or a year) or multiple periods become feasible. It is suggested that this intervention program should be applied to diminish anxiety of women with breast cancer and improve their quality of life. Because the effects of treatment may diminish after months, it is recommended that support sessions be held every few months after treatment to maintain the effects of treatment for a long time.

# Refrences

- Abrishamkesh, S., KafiMasoleh, S. M., & Fallahi Khesht Masjedi, M. (2016). Styles of Expressing Emotion in Women Suffering from Breast Cancer Compared to Healthy Women. *Journal of Guilan University of Medical Sciences*, 25(99), 34-42.
  - Asmaribardezard, Y., Mohamadaminzade, D., & Hosiesabet, F. (2018). Effectiveness of Emotionfocused Therapy on Depression and Anxiety in Women with Binge Eating Disorder referring to Sina Hospital in 1396. *Navid No*, 21(65), 11-22.
- Barghi Irani, z., Javadbagiyankolemarz, M., Foladvand, S.H. (2014). The Study of the Efficacy of "Focused On Emotion Therapy" Group Training on Quality of Life Improvement and Marital Satisfaction of Mothers of Children with Cancer. *Health Psychology*. 6 (2):79-94.
- Barghi Irani, Z., Pirhayati, Z., & Zare, H. (2018). Effectiveness of Acceptance & Commitment Therapy on Quality of Life in Elderly People with Age-Related Macular Degeneration Disease. *Iranian Journal of Health Psychology*, 1(1), 79-91.
- Baziliansky, S., & Cohen, M. (2021). Emotion regulation and psychological distress in cancer survivors: A systematic review and meta-analysis. *Stress and Health*, 37(1), 3-18.
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). Beck depression inventory-II. *San Antonio*, 78(2), 490-498.
- Brady, M. J., Cella, D. F., Mo, F., Bonomi, A. E., Tulsky,D. S., Lloyd, S. R., ... & Shiomoto, G. (1997).Reliability and validity of the Functional Assessment of Cancer Therapy-Breast quality-of-life instrument.

Journal of clinical oncology, 15(3), 974-986.

- Choi, H. S., Lee, K. E., & Shin, Y. (2021). Effects of an emotional regulation program on maladaptive cognitive emotion regulation, stress, anxiety, and postpartum depression among South Korean mothers of premature infants in the neonatal intensive care unit. *Child Health Nursing Research*, 27(1), 24-33.
- Connolly-Zubot, A., Timulak, L., Hession, N., & Coleman, N. (2020). Emotion-focused therapy for anxiety and depression in women with breast cancer. *Journal of Contemporary Psychotherapy*, 50(2), 113-122.
- Emami, M., Askarizade, G., & Faziltpour, M. (2018). Effectiveness of cognitive–behavioral stress management group therapy on resilience and hope in women with breast cancer. *Positive Psychology Research*, 3(4), 1-14.
- Falvo, D., & Holland, B. E. (2017). Medical and psychosocial aspects of chronic illness and disability. Jones & Bartlett Learning.
- Rahimi, C. (2018). Prediction of Pain based on Personality Features, Anxiety and Depression in Patients suffering from Chronic Pain. *Yafteh*, 20(2): 76-85
- Fathi, S., Poyamanesh, J., Ghamari, M., & FathiAgdam, G. (2020). Comparison of the effectiveness of an emotion-based therapy and a treatment based on acceptance and commitment on the quality of life of women with chronic headache. *KAUMS Journal* (*FEYZ*), 24(3), 302-311.
- Gili, S., Sadeghi Zavareh, V., Haghayegh, S. A., Alizadeh Ghavidel, A., & Rezayi Jamalloi, H. (2021). The Comparison of Effectiveness of Emotion-Focused Therapy and Transcranial Direct Current Stmulation on Anxiety and Depression of Patients with Coronary Artery Disease. *Quarterly Journal of Health Psych*, 9(36), 45-62.
- Greenberg, L. S. (2010). Emotion-focused therapy: A clinical synthesis. *Focus*, *8*(1), 32-42.
- Greenberg, L. S. (2015). *Emotion-focused therapy: Coaching clients to work through their feelings.* American Psychological Association.
- Greenberg, L. S. (2017). Emotion-focused therapy of depression. *Person-Centered & Experiential Psychotherapies*, 16(2), 106-117.
- Greenberg, L. S., & Geller, S. M. (2012). Therapeutic presence: A mindful approach to effective therapy.

Washington: American Psychological Association.

- Greenberg, L., & Watson, J. (2006). Emotion focused therapy for depression. Washington: American Psychological Association.
- Haghayegh, S. A., Adibi, P., & Davazdahemami, M. H. (2015). Efficacy of emotion focused therapy on quality of life and sleep in irritable bowel syndrome. *Govaresh*, 20(3), 185-192.
- Halamová, J., Kanovský, M., Varšová, K., & Kupeli, N. (2018). Randomised controlled trial of the new short-term online emotion focused training for selfcompassion and self-protection in a nonclinical sample. *Current psychology*, 1-11.
- Hasanpour Dehkordi, A. (2006). Factors affecting quality of life in cancer patients under chemotherapy in Tehran (2004). *Journal of Kermanshah University of Medical Sciences*, *10*(2).:e81718.
- Hissa, J., Connolly, A., Timulak, L., & Hession, N. (2020). Emotion-focused perspective on breast cancer patients' experiences of comorbid anxiety and depression: a qualitative case analysis of three clients' in-session presentations. *Person-Centered & Experiential Psychotherapies*, 19(2), 134-153.
- Johnson, S. M., & Greenman, P. S. (2006). The path to a secure bond: Emotionally focused couple therapy. *Journal of Clinical Psychology*, *62*(5), 597-609.
- Juver, J. P., & Verçosa, N. (2008). Depression in patients with advanced cancer and pain. *Revista brasileira de anestesiologia*, 58(3), 287-298.
- Kaviani, H., & Mousavi, A. S. (2008). Psychometric properties of the Persian version of Beck Anxiety Inventory (BAI). *Tehran University Medical Journal*. (2):136-140
- Ke, Y., Ng, T., Yeo, H. L., Shwe, M., Gan, Y. X., & Chan, A. (2017). Psychometric properties and measurement equivalence of the English and Chinese versions of the Beck Anxiety Inventory in patients with breast cancer. *Supportive Care in Cancer*, 25(2), 633-643.
- Khosravi Asl, M., Nasirian, M., & Bakhshayesh, A. (2018). The Impact of Emotion-focused Therapy on Anxiety and Depression among Female-Headed Households in Imam Khomeini Relief Committee. *Journal of Community Health Research*, 7(3), 173-182.
- Lafrance Robinson, A., McCague, E. A., Whissell, C.

(2014). That chair work thing was great: a pilot study of group based emotion-focused therapy for anxiety and depression. *Person Center Expe Psychother*, *13*(4), 263-77.

- Martino, G., Catalano, A., Agostino, R. M., Bellone, F., Morabito, N., & Lasco, C. G. (2020). Quality of life and psychological functioning in postmenopausal women undergoing aromatase inhibitor treatment for early breast cancer. *PLoS ONE*, 15(3), e0230681.
- Nakamura, Z. M., Deal, A. M., Nyrop, K. A., Chen, Y. T., Quillen, L. J., Brenizer, T., & Muss, H.
  B. (2021). Serial assessment of depression and anxiety by patients and providers in women receiving chemotherapy for early breast cancer. *The Oncologist*, 26(2), 147-156.
- Nikbakhsh, N., Moudi, S., Mohammadian Amiri, F., Niazifar, M., & Bijani, A. (2019). Depression, Anxiety, and Quality of Life in Breast Cancer Patients with Depression Receiving Citalopram and Supportive Group Psychotherapy: A Sixmonth Longitudinal Study. *Journal of Mazandaran University of Medical Sciences*, 29(173), 64-74.
- O'Toole, M. S., Mennin, D. S., Applebaum, A., Weber, B., Rose, H., Fresco, D. M., & Zachariae, R. (2020). A randomized controlled trial of emotion regulation therapy for psychologically distressed caregivers of cancer patients. *JNCI cancer spectrum*, 4(1), pkz074.
- Peh, C. X., Liu, J., Bishop, G. D., Chan, H. Y., Chua, S. M., Kua, E. H., & Mahendran, R. (2017). Emotion regulation and emotional distress: the mediating role of hope on reappraisal and anxiety/depression in newly diagnosed cancer patients. *Psycho-oncology*, 26(8), 1191-1197.
- Priest, J. B. (2013). Emotionally focused therapy as treatment for couple with generalized anxiety disorder and relationship distress. *Journal of Couple* & *Relationship Therapy*, *12*(1), 22-37.
- Rochmawati, E., Wiksuarini, E., & Rahmah, R. (2020). Depression and quality of life among cancer patients undergoing chemotherapy. *Palliative Medicine in Practice*, 1(1), 1-6.
- Sadock, B., & Ruiz, P. (2015). Kaplan & Sadock's synopsis of psychiatry: behavioral sciences: Walters Kluwer.
- Sanagavi Moharrar, G., Shirazi, M., Mohammadi, R., &

Maghsoodloo, F. (2019). Effectiveness of Emotional Therapy on Reducing Anxiety and Depression in Patients with Multiple Sclerosis. *medical journal of mashhad university of medical sciences*, *61*(supplment1), 190-200.

- Shahar, B. (2014). Emotion-focused therapy for the treatment of social anxiety: An overview of the model and a case description. *Clinical Psychology & Psychotherapy*, 21(6), 536-547.
- Shahar, B. (2020). New Developments in Emotion-Focused Therapy for Social Anxiety Disorder. *Journal of Clinical Medicine*, 9(9), 2918.
- Shim, E. J., Lee, J. W., Cho, J., Jung, H. K., Kim, N. H., Lee, J. E., ... & Kim, Y. S. (2020). Association of depression and anxiety disorder with the risk of mortality in breast cancer: a National Health Insurance Service study in Korea. *Breast cancer research and treatment*, 179(2), 491-498.

- Timulak, L., McElvaney, J., Keogh, D., Martin, E., Clare, P., Chepukova, E., & Greenberg, L. S. (2017). Emotionfocused therapy for generalized anxiety disorder: An exploratory study. *Psychotherapy*, 54(4), 361.
- Wang, X., Wang, N., Zhong, L., Wang, S., Zheng, Y., Yang, B., ... & Wang, Z. (2020). Prognostic value of depression and anxiety on breast cancer recurrence and mortality: a systematic review and meta-analysis of 282,203 patients. *Molecular psychiatry*, 1-12.
- Yoo, G. J., Aviv, C., Levine, E. G., Ewing, C., & Au, A. (2010). Emotion work: disclosing cancer. *Supportive Care in Cancer*, 18(2), 205-215.
- Youn, H. J., & Han, W. (2020). A review of the epidemiology of breast cancer in Asia: Focus on risk factors. *Asian Pacific journal of cancer prevention: APJCP*, 21(4), 867.



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