

Comparison of the Effectiveness of Positive Psychotherapy and Compassion-Focused Therapy in Promoting Self-Worth and Psychological Well-Being in Breast Cancer Patients

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Received 2021 April 26; Accepted 2022 March 1

Abstract

Background: Breast cancer is one of the most common types of chronic disease in women. The mental health and stability of the women are highly significant due to their family roles and employment responsibility in society.

Objectives: The present study aimed to compare the effectiveness of positive psychotherapy and compassion-focused therapy in promoting self-worth and psychological well-being in breast cancer patients.

Method: The present study was quasi-experimental conducted on a control group with pretest-posttest designs. The statistical population was selected by convenience sampling which included 45 women with breast cancer who were referred to Shohadaye Tajrish Hospital in Tehran in the second half of 2018. Psychological Wellbeing Questionnaire (1980), and self-worth questionnaire Cracker et al. (2003) for collecting data. Data were analyzed using multivariate and univariate analysis of variance by spss.22.

Results: There is a significant difference between the effectiveness of positive psychotherapy and compassion-focused therapy on psychological well-being ($P < 0.01$), and self-worth ($P < 0.01$). Positive psychotherapy was more effective than compassion-focused therapy on psychological well-being and self-worth.

Conclusion: Positive psychotherapy is more effective than compassion-focused therapy due to providing more appropriate conditions for women's health. Strengthening and developing positive psychotherapy in chronic patients such as cancer is a positive step towards success that needs to be given more attention by the health authorities.

Keywords: Breast Neoplasms, Psychological well-being, Psychotherapy

Introduction

Breast cancer is one of the most common types of cancer in women (1) and one of the leading causes of their mortality (2). More than 10 million people are diagnosed with cancer per year which reached 15 million in 2020 according to the world health organization. The statistical share of developing countries is 60%. One of the most common and influential types of cancer among the diagnosed cancers is breast cancer, which has the second-highest cancer death among women after lung cancer. However, breast cancer increased by 63 out of every 100,000 women in 2020 (3). This type of cancer has also been overtaken in Iran. Breast cancer is on the rise in women 50 years and older, according to existing reports. Losing breasts as the symbol of maternity, physical attractiveness, and sexuality is very difficult and incomprehensible for women (4). Therefore, concerns about a vague future, stress pressure, high cost of treatment, concerns about impairment, ambiguity in survival have been able to

impose a lot of stress on patients with this type of cancer, so that their mental health is at risk of severe deterioration and this leads to a decrease in proper life and deterioration of mental health in a person with cancer (5). Psychiatric disorder is one of the most essential problems for 50 to 80% of cancer patients (6). Therefore, self-worth is an important psychological feature in breast cancer patients (7). Self-worth is recognizing the personal value and living a satisfying life (8).

People with low self-worth tend to feel less sure of their ability to succeed and focus greatly on their failures. The evidence suggests that patients also use these methods. Therefore, most negative reactions are due to a lack of self-worth. Women's reaction to any real or suspicious disease may be associated with fear of losing attractiveness, decreasing well-being, and death. The concept of well-being refers to a variety of positive and negative assessments of life. Cognitive and intellectual assessments such as life and job satisfaction, interests and commitments, as

well as emotional feedback including pleasures, joys, sadness, and nostalgia, psychological well-being, perception, self-worth, self-confidence, optimism play a fundamental role in life satisfaction (9).

Current research indicates that the well-being and self-worth of patients with chronic diseases are greatly impacted by the psychological and emotional effects of that disease (10). Therefore, performing the holistic intervention seems necessary to improve the well-being and self-worth of patients during the disease period (11). Creating mental security, understanding illness, trying to live a better life, caring for oneself is a reliable movement for the stability of the body and soul. Psychologists and clinical counselors had many achievements in the field of behavioral therapy and interventions based on positivity (12). Researches have proved that using positive psychotherapies can positively affect depression, problem-solving, happiness, mental health, and resilience (13). Positive psychology is welcomed by therapists in recent decades encouraging people to promote happiness, hope, and positive thinking by focusing on good aspects in the most unsuitable situation (14).

Positive psychotherapy effectively improves well-being and psychological well-being scores based on existing researches (15). Positive psychotherapy affects women's happiness and responsibility (16). Positive interventions promote happiness, psychological well-being, and self-care (17). Alighanavati et al. believe that the health and wellbeing of cancer patients depend on therapeutic interventions which require a lot of identification, thinking, and study of health and medical education. Thus, accurate use of positive psychotherapy, self-worth, and well-being as well as recognition of the effectiveness of the therapeutic intervention are required in breast cancer patients besides providing practical suggestions (18). Also, limited research, to the best of our knowledge, has been conducted on the effect of the therapeutic approach on psychological well-being, and self-worth in women with breast cancer. However, mental and physical health are very considerable in women due to their constructive family role.

Objectives

Therefore, this study aimed to compare the effectiveness of positive psychotherapy and compassion-focused therapy on the self-worth and psychological well-being of breast cancer patients.

Methods

This quasi-experimental study is conducted on a control group by pretest-posttest designs. The statistical population was selected by convenience sampling consisted of 45 women with breast cancer who were referred to Shohadaye Tajrish Hospital in Tehran in the second half of 2018. Inclusion criteria

included women aged 40 to 55 years (common age of disease) with high school diploma (to understand the concepts of intervention) who fail to receive psychotherapy or other programs, simultaneously. Also, the exclusion criteria include those aged under 40 and over 55 who received psychiatric medications. Ryff Psychological Well-Being Questionnaire (1980), Crocker et al. Self-worth Questionnaire (2003) were used for data collection. The sample size for each group of 32 people is determined by G-power software and effect size= 0.25, alpha=0.05, and power= 0.80.

The ethical considerations of the present study were as follows: 1- information provided to the research subjects in writing and participated in the research if they wished. 2- People were assured that any information or documents uploaded will be treated with the utmost confidentiality. 3- The names and surnames of the participants were not registered for privacy.

Psychological Well-Being Questionnaire (Short Form)

This questionnaire was designed by Ryff in 1980 for assessing psychological well-being. This questionnaire measured self-acceptance, self-determination, purposeful positive relationship with others in life, the dominance of environment, personal growth, with 18 questions of opposite to completely agreeable answers (19). Questions no. 1, 3, 4, 5, 9, 10, 13, 17 among 18 questions will be scored inversely in this questionnaire. The content and validity of this questionnaire were confirmed and the reliability of this questionnaire was 0.71 in Iran (20).

Self-worth Questionnaire

A self-worth questionnaire was prepared by Crocker et al. (2003), in 35 items with 7 components of family support, competition, physical appearance, love of God, piety, educational scientific competencies, agreement with others, and 7 options of strongly agree to strongly opposed (1-7) (21). The lowest score was 1 and the highest score was 7 in the questionnaire. Content validity and internal consistency of the questionnaire were confirmed and the reliability of the questionnaire was 0.799 using Cronbach's alpha coefficient (22).

After determining the number of sample sizes and dividing them into experimental and control groups, psychological well-being and self-worth questionnaires were collected in the first and second experimental groups and then distributed to the control group. Then, the first experimental group underwent compassion-focused therapy for 8 sessions, during 4 weeks of 2 sessions and each session for 60 minutes. The second experimental group received 10 sessions during five weeks of 2 sessions and each session for 60 minutes and

generally in 35 sessions of positive psychotherapy intervention. In the meantime, the control group did not receive any intervention. Psychological well-being and self-worth questionnaires were distributed, implemented, and collected again in two groups after the training period, and the data obtained in pretest-posttest designs were statistically analyzed. All stages of this study were conducted with the consent of the subjects.

group were 49.53 (12.72), 48.25 (13.11), and 50.13 (13.55), respectively. No difference was observed between the three groups in terms of mean age.

Statistical analysis was performed using multivariate covariance analysis and Bonferroni follow-up test using SPSS. 25 after obtaining the pre-test and post-test data.

Results

The mean (SD) age in the positive psychotherapy group, compassion-focused therapy, and the co

Descriptive statistics (mean and standard deviation) components of the research variables are presented in Table 1 and Table 2.

Table 1. Descriptive statistics of psychological well-being

Components	Positive psychotherapy		Compassion-focused therapy		Control	
	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Independence	9.07±0.88	12.47±1.12	9.13±1.40	10.73±1.16	8.80±1.32	8.27. ±1.33
Environmental mastery	8.73±0.96	11.47±1.64	8.07±1.22	9.73±1.22	8.20±1.37	7.87±1.06
Personal growth	8.80±0.94	11±1.85	8.60±1.05	9.64±1.04	8.20±1.32	8.40±1.29
Positive relationship	8.60±1.24	10.93±1.87	8.33±1.29	9.33±1.24	8.07±1.28	8.20±1.01
Purpose in life	8.47±0.74	10.87±1.92	8.80±1.32	9.60±1.35	8.33±1.34	8.07±1.10
Self-acceptance	8.67±1.34	10.60±1.29	8.27±1.62	9.27±1.43	8.47±1.50	8±1.92
Psychological well-being	52.33±2.26	67.33±6.04	51.20±2.90	58.33±2.69	50.07±1.86	48.80±3.87

Table 2. Descriptive statistics values of the components of self-worth questionnaire

Components	Positive psychotherapy		Compassion-focused therapy		Control	
	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Family Support	17.07±2.86	21.07±2.84	15.40±1.84	19.33±1.75	16.80±1.74	17±1.92
Competition	15.87±2.64	21.67±1.58	15.47±1.26	18.67±2.82	16.13±1.84	16.47±1.50
Physical appearance	15.80±0.94	22.20±1.61	15.80±1.74	20.47±1.50	15.73±1.62	15.80±2.17
Love of God	16.13±1.45	20.87±2.41	16.40±1.18	18.53±1.84	15.53±1.99	15.93±1.90
Piety	15.53±1.64	21.53±1.95	16.33±1.23	19.33±1.29	15.93±2.01	17.20±2.88
Educational Competencies	16.53±1.76	20.87±2.66	16.73±1.87	18.40±1.72	15.93±1.98	16.60±2.38
Agreement with others	17.20±2.85	22.07±3.45	18.20±2.17	19.47±1.76	16.53±1.64	15.33±1.95
Self-worth	114.13±6.77	150.27±7.00	114.33±5.42	134.20±5.73	112.60±6.20	114.33±5.96

The findings of multivariate covariance analysis indicate that the multivariate F value was statistically significant at the level of $P<0.001$ in all tests. Therefore, it can be said that there is a significant difference between the three groups in at least one of

the components of psychological well-being. A single variable covariance analysis test has been used for finding this difference. The default use of one-way analysis of covariance is the assumption of homogeneity of variance for dependent variables in the groups. Leven's test is used, and the assumption of homogeneity of variances is accordingly accepted

to investigate the assumption of homogeneity of variances. The results of covariance analysis are given in Table 3.

Table 3. The results of covariance analysis for the well-being

Dependent variable	SS	df	MS	F	P	η^2
Independence	118.40	2	59.20	37.90	0.001	0.67
Environmental mastery	77.50	2	38.75	20.03	0.001	0.52
Personal growth	42.04	2	21.02	10.78	0.001	0.37
Positive relationship	41.20	2	20.60	13.97	0.001	0.47
Purpose in life	53.00	2	26.50	14.93	0.001	0.45
Self-acceptance	47.48	2	23.74	10.79	0.001	0.37

The two components of independence and dominance of the environment have significant effects in both interventions according to the results of the Bonferroni test which have the highest score in the positive psychotherapy group and greatly different from the other two groups. Also, these two components are effectiveness of positive psychotherapy is significant and there is a significant difference with other groups. However, there is no significant difference between compassion-focused therapy and the control group. Concerning the self-acceptance component,

secondary in the compassion-focused treatment group. No significant difference was observed between the component of personal growth, the effectiveness of positive psychotherapy, and compassion-focused therapy. Regarding the components of positive relationships with others and purposefulness in life, the both interventions have effectiveness and no significant difference was noticed between the effectiveness of positive psychotherapy and compassion-focused therapy. The results of a one-way analysis of covariance are given in Table 4.

Table 4. Results of one-way analysis of covariance for self-worth

Dependent variable	SS	df	MS	F	P	η^2
Family Support	109.72	2	54.86	11.36	0.001	0.39
Competition	167.99	2	83.99	18.64	0.001	0.51
Physical appearance	290.07	2	145.03	52.35	0.001	0.74
Love of God	133.13	2	66.56	19.70	0.001	0.53
Piety	104.70	2	52.35	13.53	0.001	0.43
Educational competencies	116.35	2	57.18	10.47	0.001	0.37
Agreement with others	259.57	2	129.78	24.10	0.001	0.57
Self-worth	4133.83	2	2066.91	21.29	0.001	0.51

According to the results of the Bonferroni test, it can be said that for the components of competition, physical appearance, and agreement by others, both interventions have significant effects and in the positive psychotherapy group, they have the highest score and have a significant difference with the other two groups. There is no significant difference between the component of scientific and educational competencies, the effectiveness of positive psychotherapy, and compassion-focused therapy. Regarding the components of family support, God's love, and piety, the effectiveness of positive psychotherapy is significant and there is a significant difference with other groups. However, there is no significant difference between compassion-focused therapy and the control group.

Discussion

This study aimed to compare the effectiveness of positive psychotherapy and compassion-focused therapy on the self-worth and psychological well-being of breast cancer patients. Positive psychotherapy was effective on self-worth, and well-being in patients with breast cancer according to one of the findings. Smeets et al. (26), Kelly et al. (27), Schiavone (17), Lyubomirsky & Layous (28) found that positive intervention increased happiness and psychological well-being. Psychological well-being as a positive intervention that is rooted in happiness and positivity significantly affects the mental and physical health of women with cancer according to

the results of the test. Concepts in psychological well-being have also been well explained to the patients.

Women with breast cancer showed no high self-worth in the pre-test. Self-worth is positively strengthened after the test by performing the mentioned interventions. Also, self-worth in women with breast cancer is greatly affected by the dimensions of consent

from others, piety, love of God, physical appearance, competition, and family support as well as happiness and vitality, hope (this reveals that positive intervention has a significant relationship with these indicators), and scientific and educational competencies (7). Schiavone found that positive intervention leads to self-worth. Therefore, self-worth can be formed effectively according to positive intervention in women with breast cancer based on the post-test (17).

Establishing intimate relationships is essential for women in controlling their feeling of failure in treatment and personal life according to the obtained results. Strengthening self-esteem and self-confidence in social and family, checking their health status based on a timely visit to the doctor, avoiding unhealthy foods, and taking drugs are suggested. Also, the number of questions in each questionnaire, the probability of bias in the obtained data due to inaccuracy of some respondents, and a spatial limitation were among the significant limitations in implementing this research.

Conclusion

Positive psychotherapy was more effective than compassion-focused treatment by providing more appropriate and favorable conditions for women's health. So strengthening and developing positive psychotherapy in chronic patients such as cancer is a positive step towards success that needs to be given more attention by the health authorities.

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