RESEARCH ARTICLE

The Relationship between Resilience with Self- Compassion, Social Support and Sense of Belonging in Women with Breast Cancer

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Abstract

   Background: The purpose of this study was to investigate the associations among Resilience, self- compassion, social support and Sense of belonging in Iranian women with breast cancer. **Materials and methods:** This study was a descriptive-analytical cross-sectional study .The data of 150 patients with breast cancer were collected by convenience sampling using Demographic characteristics questionnaire, Connor-Davidson resilience scale, self-compassion scale and the multidimensional scale of perceived social support in Urmia, Iran in 2016. **Results:** The most age of the patients were in the range of 41-49 years, and most of them were married. The self- compassion, social support and Sense of belonging (r = all correlated significantly with resilience). Significant positive correlation was identified among self-compassion, social support, sense of belonging and resilience (P < 0.01). **Conclusions:** The results of this study clarified the self-compassion, social support and Sense of belonging are effective on the resilience among Iranian women with breast cancer. It is recommended to design some interventional programs to increase the aspect of resilience in these patients.

Keywords: Breast cancer- resilience- self- compassion- social support- sense of belonging

Introduction

   Nowadays cancer is one of the most important health problems in the world (Siegel and Jemal, 2015). Among all types of cancers, breast cancer is the most commonly diagnosed among women (DeSantis and Jemal, 2014). Exposure to cancer can affect a person's different aspects of life as a tangible event (Sarenmalm et al., 2013) and the diagnosis of breast cancer and its treatment for everybody is very unpleasant and experience (Morel et al., 2015; Tamagawa et al., 2013). Women with breast cancer, especially in developing countries, are at greater risk for physical and mental health problems, in fact, detection of cancer may be associated with more emotional and physical disorders (Al-Azri and Al-Moundhri, 2009; Hack and Degner, 2004).

   Resilience means positive adjustment in the disasters and psychological injuries that are associated with response to stressful and problematic situations such as cancer. Some consider resilience as a sustainable coping style (West, 2000; Yoo and Pasick, 2014). Resilience in simple definition is the ability of persons to have biological, mental and spiritual balance in front of hazardous conditions (Underwood and Teresi, 2002). Self-compassion in women with breast cancer is considered as the ability to be kind with themselves and happiness while suffering from illness, it is an internal source that affects women's coping processes (Raes, 2011). Evidence suggests that self-compassion is related to psychological health, and as an internal source, it can help a woman to undergo a lot of physical changes when she is rapidly and suddenly exposed to cancer detection (Leary and Hoyle, 2009). Probably such a rapid change in the image of the body would greatly aggravate the ability of a woman to cope with severe physical changes and multiple suffering (Raes, 2011).

   At this time, women encounter with suicide attitude, depression, anxiety and exploratory views of others, and it seems that self-compassion is related to the capacity for acceptance and resilience in such a situation (Verplanken and Tangelder, 2011). Self-compassion is defined by Neff: self-compassion involves a strategy of adjusting emotions in which a person accepts himself with weaknesses and does not deny

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or repress other negative experiences. Neff considers self-compassion to have three main components: kindness with himself (against self-judgment), mindfulness of emotions (against overmatching), and the perceiving of the universal suffering of man (against seclusion) (Neff, 2003). Social support is an important aspect of modern care of cancer (Ozkan and Ogce, 2008).

Social support is to establish a social interaction that begins with communication and, with its continuation, creates an empathic relationship and ultimately leads to a safety net for the patient. Increasing self-confidence, sense of belonging to a group, enhancing people's ability or competence to perform essential tasks are considered as forms of social support (Taghavi et al., 2011). Possibly, communication helps people to cope with the situation and make themselves nice feeling (Taghavi et al., 2011). The sense of belonging is a human need, such as the need for food and the shelter of sentiment that is up to themselves, an emotion that sees the values of life and coping with painful events (Bonnie et al, 1992; Bonnie and Patusky, 1995; Bonnie and Williams, 1999). The aim of this study was to determine the relationship of resiliency with self-compassion and social support in women with breast cancer referred to educational and therapeutic centers of Urmia in 2016.

Methods and Materials

This is a descriptive-analytic cross-sectional study conducted on women with breast cancer referred to educational and therapeutic centers of Urmia, Iran in 2016. According to the study of Luszczynska et al. (Luszczynska et al., 2005), and the correlation coefficient of 0.22, the power of 80%, the one domain test and the error level of 5%, the sample size was considered to be 130, which, c 20% attrition, a total sample of 150 was obtained.

Inclusion criteria were 18-60 age, acquaintance with Persian language, diagnosis of breast cancer, having chemotherapy experience, stage 1, 2 and 3 cancers and having no other cancer. Exclusion criteria included mental illness, the occurrence of any stressful event for patient or first-degree family members during the past 6 months, having radiotherapy experience and opium abuse.

Data collecting tool in this study was a questionnaire containing several parts: Individual information questionnaire including age, type of surgery, stage of cancer, marital status, educational level, economic status and lifestyle, which was designed by the researcher.

Connor-Davidson Resilience Scale

This questionnaire was developed by Davidson and Connor by studying the general population, patients referred to primary care, outpatient and psychiatric ward, patients with generalized anxiety disorder, and two groups of patients with post-traumatic stress disorder. This scale has 25 statement and is scored on a Likert scale between zero (completely false) and five (always true). The reliability coefficient of this scale has been reported 89% by Cronbach's alpha coefficient in Iran (Connor and Davidson, 2003).

Self-compassion Scale

Self-Compassion Scale is developed as 5-point Likert Scale (from almost never to almost always). This scale has six subscales (self-kindness, self-judgement, common humanity, seclusion, mindfulness and overmatching). The test-retest reliability coefficient of the self-compassion scale is 0.93. In the study of Neff et al., the Cronbach's Alpha coefficient of this scale was reported 0.86 in Thailand and Taiwan as well as 0.95 in the United States (Neff, 2003) Cronbach's alpha coefficient is 0.92 in the present study.

The Multidimensional Scale of Perceived Social Support (MSPSS)

The perceived social support questionnaire will be used to assess the level of family support. The questionnaire was developed by Zimet et al., in 1988 to measure social support perceived by the family, friends, and important persons in the life. This scale has 12 dimensions and has 3 subscales, including the social support received by the family (items 3, 4, 8, 11), social support received by friends (items 6, 7, 9, 12) and social support received by others (items 1, 2, 5, 10), and all responses are categorized in 5-point Likert from completely agree to completely disagree (Zimet et al., 1988).

Bruwer et al. in 2008 (Bruwer, 2008), reported the internal consistency of the perceived social support instrument in a sample of 788 high school students using Cronbach's alpha that was 86 to 90 % for the subscales of this tool and 86 % for the total score. In Iran, Salimi et al. (Salimi et al., 2009), Cronbach's alpha coefficient reported the three dimensions of social support received by the family, friends and important people of life 89%, 86% and 82%, respectively.

Sense of Belonging Instrument

The sense of belonging instrument evaluates the perceived level of the person's need and acceptability in the social environment as a valuable person in the community, it is consisted of 18 items and categorized as 4-point Likert Scale (I completely agree to completely disagree) as self-report method. Its score ranges from 18 to 72, with higher scores indicate a higher sense of belonging in individuals. This questionnaire has been revised by Hagerty et al. This questionnaire has a desirable internal consistency and its Cronbach's alpha coefficient is 0.93 (Bonnie Hagerty and Williams, 1999). In this study, the relative content validity (CVR) coefficient was 80% and Content Validity Index (CVI) was 97.4%, and the reliability of the questionnaire using Cronbach's alpha coefficient for the total score was 0.89, which was acceptable.

Finally, the data were analyzed using SPSS software version 20. The qualitative and quantitative characteristics were presented as the number, percentage, mean and standard deviation as well as Pearson correlation coefficient was used to measure the relationship among these variables.

Results

According to Table 1, 42% of patients were in the range of 49-40 years old, and the most of patients had under diploma education (26.7%), married (86.7%), economically income equal to outcome (67.3%), lived with their spouse or children (89.3%), in stage II (47.3%) with complete mastectomy surgery undergoing treatment for 5-6 months (42.7%). Total score of resilience, self-compassion, social support and sense of belonging in patients with breast cancer were reported in Table 2, in such a way that the mentioned score were 67.54±17.42, 86.88±25.81, 42.26±10.03 and 54.30±11.80, respectively. Table 3 shows a positive and significant correlation among resilience, self-compassion, perceived social support and sense of belonging. In other words, increasing self-compassion, social support and sense of belonging to others, will increases resilience in women with breast cancer.

Discussion

Breast cancer is the most common type of cancer in women, so emotionally and psychologically is the most effective cancer among Iranian women (Jazayeri et al., 2015). This disease is a major concern among health policy-makers because of the high mortality rate in the fertility of women who are at the peak of

Table 1. Demographic Characteristics of Patients with Breast Cancer

Demographic Characteristics		No	Percent
Age (year)	Less Than 40	40	26.7
	40-49	63	42
	More Than 49	47	31.3
Educational Status	Illiterate	18	12
	Under Diploma	71	47.3
	Diploma	40	26.7
	Collegiate	21	14
Economic Status	Income Less Than Outcome	40	26.7
	Income Equal To Outcome	101	67.3
	Income More Than Outcome	9	6
Marital Status	Single	5	3.3
	Married	130	86.7
	Divorced	9	9
	Widow	6	6
Life Status	Husband And Children	134	89.3
	Parents	12	8
	Alone	4	2.7
Disease Duration (month)	1-4	48	32
	5-6	64	42.7
	7-8	38	25.3
Type Of Surgery	Total Mastectomy	116	77.3
	Partial Mastectomy	34	22.7
Disease Duration	Stage I	31	20.7
	Stage II	71	47.3
	Stage III	48	32

Table 2. The Mean Score of Resilience, Self-compassion, Social Support and Sense of Belonging in Patients with Breast Cancer

Variable	Subscale	Mean ± SD
Resilience	Individual competence imagination	12.89±5.15
	Trust in the individual instincts and Tolerance of negative affect	71.99±5.09
	Positive acceptance of change and safe relationships	8.61±2.86
	Control	4.23±2.29
	Spiritual affects	67.54±17.42
	Total	
Self-compassion	Self-Kindness	71.84±5.08
	Self-judgement	61.00±4.77
	common humanity	31.39±4.43
	Seclusion	21.49±4.26
	Mindfulness	41.57±4.14
	Overmatching	67.11±4.08
	Total	86.88±25.81
Perceived social support	Family	17.11±3.43
	Friends	15.04±3.51
	Others who are important	10.11±3.29
	Total	42.26±10.03
Sense of belonging		54.30±11.80

Table 3. Correlation Coefficient of Resilience, Self-compassion, Perceived Social Support and Sense of Belonging in Patients with Breast Cancer

	variable	1	2	3	4
1	Resilience	1			
2	Self-compassion	0.36**	1		
3	Perceived social support	0.33**	0.94**	1	
4	Sense of belonging	0.35**	0.91**	0.97**	1

**Level of significance (P<0.01)

responsibility in family (Daroudi et al., 2015). Therefore, this study examined the relationship of resilience with self-compassion, perceived social support and sense of belonging. According to the results of this study, the highest number of patients were in the age range of 40-49 years, which was consistent with the study of Rohani et al., (2015), Taghavi et al., (2011), but inconsistent with Morel et al., (2015).

In this study, there was a positive and significant correlation between resilience and self-compassion, so that women who are more kind with themselves, prevent self-judgement and are more self-compassion, have a higher level of resilience to breast cancer. Other findings from studies also indicated that women with breast cancer who had high self-compassion, showed fewer symptoms of anxiety and depression, and have a higher mental health and quality of life (Raque-Bogdan et al., 2011). In other words, self-compassion can help people to maintain their health more effectively. Because this approach helps

them to be kind with themselves, have a common sense with others, be alert to their living conditions, and face problems without bad judgement (Terry and Leary, 2011).

According to a study conducted by Rizalar et al., (2014) there was a positive and significant relationship between the level of family support and adaptation to cancer. Based on the results of the study of Faghani et al., (2014) social support was one of the determinants of cancer control in women with breast cancer in Iran. The results of other interventions also indicated that supportive actions were effective in improving the general health status and quality of life of patients with cancer (Hale et al., 2005; Helgeson et al., 2001; Johannsen et al., 2013).

Hosseini et al., (2016) on social capital as a way of accepting treatment in people with breast cancer concluded that patients with breast cancer can be contributed by increasing communication, in other words, social belonging through increasing mood, hope and increasing information about the disease to improve the quality of life. In fact, it seems that participation in social groups, participation in collective work, spending more time with family members, friends and others improve morale and resilience in the underlying conditions by increasing the social support and sense of belonging, as well as learn more about the problem, so all of the mentioned help to improve the resilience and acceptance behaviors of the condition and treatment.

Indeed, it should not be forgotten that there was no the same study consistent with our study, then the authors would like to discuss with the available article which were slightly related to this study.

In a study conducted by Hakimzadeh et al., (2014) the relationship among school belonging, academic motivation and academic achievement in high school students of Isfahan were evaluated. Student's academic achievement was measured by their average scores. Based on obtained results, they found that there was positive and high correlation between school belonging and academic motivation of high school students. Also regression analysis showed that participation in school affairs and teacher support are main factors to predict the academic achievement.

In the study of Parsafar and Yazdkhasti in Isfahan on the causal relationship among gender roles, resilience, psychological hardiness, learned helplessness and codependency of addicts' wives, 120 of them were completed demographic questionnaire and also Bem Sex Role Inventory (BSRI), Connor-Davidson Resilience Scale (CD-RISC), Hardiness Inventory (HI) and coping with a disease (CODI) scales. The results indicated the reverse effects of masculine gender roles and direct effect of feminine gender role on codependency. And Men had suitable resilience compared to women (Parsafar and Yazdkhasti, 2015). As well as in terms of prediction value of belonging and social support, in the study of Hagerty and Williams, (1999) social support had only an indirect effect on depression, and this finding supported the buffer theory of social support. Sense of belonging was a better predictor of depression. So that in their other study, the same results had been observed

in patients with mental retardation (Hagerty et al., 1992).

Choenarom et al., (2005) reported that increased perceived stress and lack of sense of belonging was significantly related to the severity of depression over the period of 9 months. Social support had only indirect effects that fluctuated over time, so that in this regard was inconsistent with the resent study .

The results of the study on older adults showed that a higher sense of belonging may predict more reasons to live overall, child-related concerns, responsibility to family, survival and coping beliefs with stress (Kissane and McLaren, 2006).

There was a pain× positive affect interaction effect on negative affect as a factor of resilience in the pain indicating a weaker relationship between pain and negative affect in weeks with more positive affect. Pain, interpersonal stress, depression, perceived stress as well as week positive affect had a main effect upon negative affect. These results indicated that high resilience can tolerate the high level of pain fluctuation (Strand et al., 2006).

In the study of Schumacher et al., (2014) resilience factor was correlated with quality of life and social performance and had reverse correlation with anxiety and depression. High-resilience patients reported lower anxiety and depression, higher physical, emotional and social performance and a higher quality of life in comparison with low-resilience patients. There was no relationship between resilience and age, gender, and primary disease entity. These results were consistent with the present study.

In conclusion, based on the results of this study and the relationship of resilience among self-compassion, perceived social support and sense of belonging, it is recommended to provide interventional programs and counseling programs for the family members of the patient can reduce the psychological stress of breast cancer. Therefore, designing and implementation of interventional studies in this area are recommended.

Limitation of this study

The small sample size of include studies are potential limitation of this study. There is still need to further studies to access additional information about the resilience issue. The method of sampling (convenience) was other limitation influencing the generality of all studies.

Conflict of interest

There is no conflict of interest in this study.

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