ARTICLE INFO

ABSTRACT

Background: When a couple confronts cancer, there is a major impact on their psychosocial life. Marital life and satisfaction are important factors of life of breast cancer patients. The aim of this research was to predict marital satisfaction based on hardiness in women with breast cancer.

Methods: A total of 100 women with breast cancer participated in this study and completed the Kobasa Personal View Survey and ENRICH (evaluation and nurturing relationship issues, communication, and happiness) Marital Satisfaction Scale. The study was conducted in Rasol Akrm Hospital, Tehran, Iran. Descriptive statistics, correlation, and linear regression were used for data analysis.

Results: The results showed a relationship between hardiness and marital satisfaction. Moreover, hardiness determined 13% of the variance of marital satisfaction.

Conclusions: Hardiness as an efficient coping style in breast cancer is an important factor to improve perceived marital satisfaction in breast cancer. Therefore, healthcare professionals such as psycho-oncologists can promote resiliency in breast cancer patients by improving cognitive hardiness in their patients.

Introduction

Breast cancer is one of the most common types of cancer among women worldwide and causes a high rate of morbidity annually. Breast cancer treatment methods (surgical treatment, chemotherapy, radiotherapy, and hormonal therapy) are associated with adverse effects on the patient's lifestyle and quality of life. When a couple confronts cancer, they experience psychosocial issues such as intimacy dissatisfaction, marital distress, and fear of separation. Studies have shown that women with breast cancer have maladjustment in the relationship with their spouse as a result of the long treatment course, risk of organ loss, and even death. A woman who has lost a breast, which is related with femininity, has a distorted body image and may therefore ignore sexual intercourse with their spouse. They are concerned about how cancer and its treatment affect their daily routine, their family, and work. It has been reported that women who have undergone mastectomy experience depression, anxiety, and aggression and problems in sexual relationship which consequently affect their quality of life. Finally, studies have shown that 10-40% of the breast cancer patients have a negative partnered relationship.

Marital satisfaction is an individual's consent from marital relationship. Marital relationship is a source of emotional and social support for both the patients and their partners during cancer, so it is crucial to protect the quality of the relationship.
Marital dissatisfaction has a major effect on the physical health of breast cancer patients. Studies show that some of the factors impacting marital satisfaction include problem-solving, dealing with conflict, stress, and crisis in a positive manner.

Hardiness is a personality characteristic that functions as a resilience resource when facing stressful life events. Kobasa believed that hardiness is one of the variables that influence mental stress. It is a coping style that protects the individual against stress. Hardiness is an adaptive behavior in response to stressful events. Kobasa states that cognitively hardy individuals believe that they can control life events, have a commitment to the values and goals of life, and engage in their interpersonal relationship. So three specific dimensions of hardiness are control, commitment, and challenge that influence cognitive appraisal and behavior while confronting a traumatic experience. Hardiness has a positive correlation with physical and mental health.

Hardy people use cognitive strategies for solving problems, and usually use positive coping for this purpose. Therefore, an efficient coping style increases the people’s self-esteem and psychological satisfaction. Studies show that a fighting spirit is a part of the coping style of breast cancer survival.

Few studies have addressed the relationship between hardiness and marital satisfaction. Avci et al. showed that the level of marital adjustment in breast cancer patients was about average. A study among Turkish women with breast cancer who underwent mastectomy revealed that the treatment strategy did not have a major impact on the marital relationship, but had an adverse effect on the sexual relationship. Hinnen et al. showed that breast cancer itself might not be a negative factor for the relationship between couples. However, personal character and coping strategies play more important roles in maintaining marital satisfaction. Few studies have explored the role of hardiness in prediction of marital satisfaction; therefore, the aim of the present study was to describe the relationship between hardiness and marital satisfaction.

**Methods**

Women with breast cancer treated in Rasool Akram Hospital, Tehran, Iran participated in this study. The convenience sampling method was employed to recruit the study participants. After obtaining necessary approvals from hospital authorities, the researchers gave necessary explanations about the project and the study questionnaire to breast cancer patients and included them after obtaining their informed consent.

**Hardiness scale**

The Personal Views Questionnaire was used to assess hardiness. Kobasa developed this scale in 1986 which consists of 50 items including three subscales: commitment (13 items), control (14 items), and challenge (17 items). Besharat estimated alpha coefficients from 0.88 to 0.93 for commitment, 0.85 to 0.94 for control, 0.89 to 0.95 for quarrel, and 0.78 to 0.94 for hardiness, indicating its good internal correlation. When repeated in an interval of two to four weeks, the correlation coefficient of all factors ranged from 0.82 to 0.90 for commitment, 0.80 to 0.88 for control, 0.79 to 0.87 for quarrel, and 0.80 to 0.88 for total hardiness.

**ENRICH Marital Satisfaction Scale**

This shortened scale which consists of 115 questions was developed by Fowres and Elson. This scale is a self-report tool for estimation of the validity of marital satisfaction with marital life. The revised scale consists of 4 subscales, including marital satisfaction, communications, solving conflicts, and ideal distortion containing 35 items. The items of the questionnaire are scored from 1 to 5 (strongly agree to strongly disagree). The alpha coefficient of the sub-scales of marital satisfaction, communication, solving conflicts, and ideal distortion containing 35 items. The items of the questionnaire are scored from 1 to 5 (strongly agree to strongly disagree). The alpha coefficient of the sub-scales of marital satisfaction, communication, solving conflicts, and ideal distortion containing 35 items. The items of the questionnaire are scored from 1 to 5 (strongly agree to strongly disagree). The alpha coefficient of the sub-scales of marital satisfaction, communication, solving conflicts, and ideal distortion containing 35 items. The items of the questionnaire are scored from 1 to 5 (strongly agree to strongly disagree).

**Statistical analysis**

SPSS software version 18 was used to analyze the data. Descriptive statistics, correlation, and linear regression were used for data analysis.

**Results**

A significant association was observed between hardiness and marital satisfaction ($P = 0.001$). The matrix of the correlation coefficients between hardiness and marital satisfaction is demonstrated in Table 1.

**Table 1. Matrix of correlation coefficients between hardiness and marital satisfactions**

<table>
<thead>
<tr>
<th></th>
<th>Marital Satisfaction</th>
<th>Marital Communication</th>
<th>Solve conflict</th>
<th>Ideal distortion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardiness</td>
<td>0.521**</td>
<td>0.298**</td>
<td>0.506**</td>
<td>0.506**</td>
</tr>
<tr>
<td>Commitment</td>
<td>0.452**</td>
<td>0.304**</td>
<td>0.296**</td>
<td>0.457**</td>
</tr>
<tr>
<td>Control</td>
<td>0.574*</td>
<td>0.462*</td>
<td>0.424*</td>
<td>0.561*</td>
</tr>
<tr>
<td>Challenge</td>
<td>0.067**</td>
<td>0.01**</td>
<td>0.041**</td>
<td>0.085**</td>
</tr>
</tbody>
</table>

Notes: * $p < 0.05$

**p < 0.001**
The result of linear regression for prediction of marital satisfaction based on hardiness components are presented in Table 2. According to the results, only 13% of the variance of marital satisfaction could be explained by commitment and challenge.

### Table 2: Linear regression for prediction of marital satisfaction

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>B</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>0.11</td>
<td>0.57</td>
<td>NS</td>
</tr>
<tr>
<td>Commitment</td>
<td>0.27</td>
<td>4.15</td>
<td>0.01</td>
</tr>
<tr>
<td>Challenge</td>
<td>0.28</td>
<td>3.75</td>
<td>0.02</td>
</tr>
</tbody>
</table>

### Discussion

Breast cancer is one of the most prevalent diseases in the world. It is caused due to uncommon and uncontrollable reproduction of cells under the effect of different factors such as genetic, glandular, and environmental factors. It is well established that the struggle to cope with breast cancer can lead to negative outcomes such as anxiety, but it can also lead to positive outcomes including the perception of benefits or positive changes in the woman’s perception of herself, her relationships, and her life priorities. One of the most significant parts of the cancer patients’ life quality is related to sexual function. Women who undergo mastectomy experience mood disorders (depression, anxiety, aggression), sexual relationship problems, and family and social problems, which may affect their life quality and sexual relationship with their spouses. Desires and tendencies, as well as the quality of the sexual life are as complex, diverse and rich as the principles of life. Sex and sexuality are important parts of marriage.

Breast cancer challenges the women’s hardiness. Studies have shown that strong people use optimistic cognitive appraisal when dealing with difficulties, and they have positive coping styles (seeking support, accepting responsibility, and involve problem-solving task). Breast cancer patient’s positive coping leads to a fighting spirit in patients and makes them eager to fight for recovery from breast cancer and to overcome the disease experience. On the other hand, they see the problem as an opportunity for growth. One of the processes that improve the marital relationship is post-traumatic growth (PTG). PTG in women with breast cancer leads to reassessment of their values and makes them try to live each day in meaningful ways. They have a close relationship and convenient communication with their spouses, so they have perceived intimacy with their partners. Several studies have shown that most patients experience positive changes after a diagnosis of cancer that leads to strengthening of interpersonal relationships and increased satisfaction with marital relationship.

The results of the current study showed a significant relation between hardiness and marital satisfaction (P < 0.001), and hardiness determined 13% of the variance of marital satisfaction. This finding emphasizes that marital satisfaction is higher in families who have higher hardiness. Also, these results show a positive relationship between commitment and marital satisfaction in a way that marital satisfaction increases with increasing commitment. Our findings are consistent with the results of a study conducted by Kan et al. who discussed commitment and marital compatibility between couples. Also, findings showed that challenge had a significant positive relationship with marital satisfaction. In other words, with an increase in challenge and flexibility against problems and changes due to development, marital satisfaction increased. The significant relationship between challenge and marital compatibility is determined which can be regarded as shared chapter between them. In fact, if we want to point is shared concept between them, it is better point to hardiness and compatibility, because persons who have cognitive compatibility have high flexibility.

Our study confirmed that husbands assisted their wives emotionally after cancer. Family concepts in Iran introduce a core family model, thus family members are intimate with each other. When encountering emotionally traumatic life events like breast cancer, they support each other psychologically. It may be one of the reasons which demonstrate insignificant differences between breast cancer patients and the general population.

### Acknowledgement

The researcher would like to thank all the personnel of Rasool Akram Hospital and cancer patients who participated in this study.

### References

5. Avci IA, Okanli A, Karabulutlu E, Bilgili N. Women’s marital adjustment and hopelessness