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Original Article

Comparison of Spiritual Experiences and Hope between Breast Cancer Survivors and Healthy Counterparts

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ABSTRACT

Background and objectives: Breast cancer is the most common type of cancer and the second leading cause of cancer death in women aged 35-54 years. Belief in God and spiritual experiences can help the patients endure physical pain and enhance their physical and mental well-being. The purpose of this study was to compare spiritual experiences and hope between survivors of breast cancer and healthy counterparts.

Methods: This descriptive case-control study was performed in 2018, on 85 breast cancer survivors and 85 healthy women from the city of Yazd (Iran) who were selected via availability sampling. The subjects completed the hope scale (developed by Snyder) and the Daily Spiritual Experience Scale (developed by Underwood and Teresi). Data were analyzed using independent t-test at significance level of 0.05.

Results: The mean score of spiritual experiences was significantly higher in breast cancer survivors (81.2±10.47) than in healthy counterparts (71.03±13.18) (P<0.001). However, there was no significant difference in the mean score of hope between breast cancer survivors (30.47±5.29) and women without breast cancer (31.3±5.67) (P=0.28).

Conclusion: Given our results, it is suggested to design and offer workshops and trainings on hope and hope-based therapies for highlighting the role of hope in improving disease status and patients' mental well-being.

Keywords: Hope, Spiritual experiences, Breast cancer, Women

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INTRODUCTION

Breast cancer is the most common type of cancer and the second leading cause of cancer death in women aged 35-54 years (1). Each year, more than one million new cases are diagnosed and 600,000 people die from breast cancer worldwide (2). In Iran, about 7,778 women are diagnosed with breast cancer every year. The disease affects women of all ages, but women aged 45 to 55 years are at a higher risk. The 5-year survival rate of these patients varies between 48% and 84% (3). Breast cancer is associated with sexual dysfunction, self-negative image, communication problems, hair loss, weight gain, fatigue, restriction of shoulder movement, pain, wound infection, surgical site sensory disturbance and dry skin (4, 5). Breast cancer surgeries can result in breast deformity or removal of one or both breasts. Surgical methods affect various aspects of a woman's psychosocial functioning such as identity, confidence, mood, sexual desire, self-satisfaction and quality of life. In addition, body image issues are associated with stress, depression, social withdrawal and anxiety of being rejected by the partner. Fear of rejection and being unattractive from the point of view of spouse/partner and other important people in the patient's life are a major concern for women with body image problems (6-8).

Since cancer patients usually experience negative thoughts after being diagnosed, the remembrance of God as part of a spiritual healing process could help them feel more relaxed. This process is based on strengthening the relationship with God, which is the source of absolute power (9, 10). According to Gesselman and colleagues, religious/spiritual experiences are religious attitude, practical aspects, mental health, supernatural beliefs and religious practices, while considering religion as a human being's connection to a greater being (11). A study by Bekelman et al. showed that application of spiritual concepts in the treatment of cancer patients could improve the psychological, spiritual and overall well-being of the patients while reducing the level of depression (12). Cancer patients with a desirable level of spiritual well-being enjoy life and feel more at peace even when dealing with cancer-related problems, such as fatigue or pain (13, 14).

A large number of cancer patients feel hopeless. Hope is a characteristic that involves goal setting, power of planning, the will to achieve goals, attention to barriers and the ability to remove them, and enhancing individual performance (15). Hopeful people are generally more positive and have effective social relationships. These people can effectively deal with psychosocial stress by utilizing coping strategies, such as reassessment and problem solving. Therefore, psychiatrists and psychologists have considered hope as a general positive expectation for achieving a goal (15, 16).

Studies have shown that the average age of developing breast cancer in Iran is lower than in western countries. Thus, screening, diagnosis and control of this disease and associated psychological problems are crucial (3). On the other hand, cancer patients use religion and spirituality to reduce psychological and physiological stress during the disease process (13, 14). In this study, we aimed to compare spiritual experiences and hope between survivors of breast cancer and women without cancer.

MATERIALS AND METHODS

The purpose of this descriptive case-control study was to evaluate religious experiences and hope in 85 breast cancer survivors and 85 women without cancer who were referred to hospitals and medical centers of Yazd (Iran) in 2018. Subjects were selected via availability sampling. The list of breast cancer survivors were retrieved from the Shahid Sadooghi, Shohadaye Kargar and Mortaz hospitals in Yazd. Written informed consent was obtained after explaining the research objectives. The subjects were 30-60 years old, married, with at least a high school diploma and without concurrent physical or mental disorder at the time of diagnosis. Exclusion

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criteria were exacerbation of disease and failure to complete the questionnaires.

The Snyder's adult hope scale (1991) was used to measure hope. This self-administered questionnaire has 12 questions that are scored based on an eight-point Likert-type scale ranging from completely disagree (1 point) to completely agree (8 points). The questionnaire consists of a thinking subscale (4 questions), a paths subscale (4 questions) and miscellaneous questions (17). In a previous study, the validity coefficient was estimated as 0.76 for the thinking subscale and 0.75 for the paths subscale (18). In another study, the reliability of the questionnaire was confirmed with Cronbach's alpha coefficient of 0.86 for the hope scale, 0.77 for the thinking subscale and 0.79 for the paths subscale (19). In the present study, the Cronbach's alpha for this questionnaire was 0.82. Spiritual experiences were measured using the Daily Spiritual Experience Scale (developed by Underwood), which has 16 items on three dimensions of God presence, connection with God and responsibility towards others. The items are scored using a modified six-point Likert scale, and higher scores reflect more spiritual experiences (20). Taghavi and Amiri reported a Cronbach's alpha coefficient of 0.96 for this questionnaire (21). In the present study, the Cronbach's alpha coefficient of this questionnaire was 0.89.

Finally, data were analyzed in SPSS software (version 21) using the Levene's test and independent t-test.

RESULTS

Table 1 presents the frequency of subjects based on age and marital status.

Table 1. Frequency of subjects based on age and marital status

Variable		Survivors of breast cancer	Women without breast cancer
Age group	Under 35	14 (16.5%)	31 (36.5%)
	35-42	16 (18.8%)	26 (30.6%)
	43-52	22 (25.9%)	19 (22.4%)
	53 or over	33 (38.8%)	9 (10.6%)
Marital status	Single	6 (7.1%)	8 (9.4%)
	Married	79 (92.9%)	77 (90.6%)

As shown in table 2, mean score of spiritual experiences was significantly higher in survivors of breast cancer than in women without breast cancer (P<0.001). However, the mean score of hope did not differ significantly between the two groups (P<0. 28).

Table 2. Comparison of mean score of spiritual experiences and hope between the two groups using independent t-test

Variable	Groups	Mean Score	Standard deviation	Equality of variance	Levene's test		T	Degree of freedom	P-value
					P	F			
Spiritual experiences	Breast cancer survivors	10.46	81.20	Equality of variance	0.014	6.065	71.528	84	0.0001

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	Women without breast cancer	13.19	71.03				49.66		
Hope	Breast cancer survivors	30.27	5.29	Equality of variance	0.004	28.08	53.05	84	0.28
	Women without breast cancer	31.20	5.67				50.89		

DISCUSSION

Our results showed that spiritual experiences and hope differ between survivors of breast cancer and women without breast cancer. This finding was in line with findings of Salsman et al. (13) and Visser et al. (14) that also demonstrated that cancer patients benefit from spiritual experiences and hope for coping with life's problems and difficulties.

Bekelman et al. reported that using spiritual concepts in the treatment of cancer patients could improve patients' psychological well-being, spirituality and lifestyle while reducing the rate of depression. Having a strong sense of spirituality helps patients cope with the illness (12). It is thought that breast cancer survivors are better at spiritual experiences compared to healthy counterparts. In addition, they often experience the presence of God and some degree of continuity in all aspects of life (11).

In the present study, the mean score of hope did not differ significantly between breast cancer survivors and women without breast cancer. Encountering cancer itself can be an extremely stressful event that could negatively affect different aspects of an individual's mental and physical health (22-23). The mental stress caused by the disease is so high that often leaves no hope for the patients (8). Fearing illness and death is not the only concern of cancer patients, but sometimes side effects of therapy, such as hair loss, cumulative fatigue, lethargy and especially changes in breast appearance and sexual dysfunction lead to depression and various mental health problems (8, 9). In general, spiritual experiences and hope can help patients cope with the physical and psychological pressures of chronic diseases (9).

The limitations of this study include implementing the available sampling method and not assessing other factors affecting hope and life expectancy.

CONCLUSION

Our results indicate that breast cancer survivors benefit from more spiritual experiences compared to healthy counterparts. However, there is no significant difference between the two groups in terms of hope. Since loss of hope in life could weaken problem-solving skills and lead to devastating outcomes, health centers and the patients' relatives should help improve their hope and pave the way for treatment.

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DECLARATIONS

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Ethics approvals and consent to participate

The study has been approved by the ethics committee of the Islamic Azad University, North Tehran Branch, Tehran, Iran (code: 157216029611019**).**

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Conflict of interest

The authors declare that there is no conflict of interest regarding the publication of this article.

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