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A Study of Spirituality, Self-forgiveness and Self-blame in the Quality of Life of Patients with Breast Cancer

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Abstract

Introduction: The aim of this study is to determine whether the quality of life of patients with breast cancer could be predicted by spirituality, self-forgiveness and self-blame.

Methods: This is a descriptive correlational study in which 120 cancer patients admitted to two university hospitals were selected using cluster-sampling method. The research instruments were the Paloutzian and Ellison's Spiritual Well-Being Scale (1), self-forgiveness and self-blame scales and World Health Organization Quality of Life questionnaire. According to the level of data and statistical assumptions, multiple linear regression was used to test the hypotheses

Results: The results of statistical analysis showed that the components of spiritual wellness, existential wellness, anxiety control and realistic perception were related to the quality of life at a significantly level of 5%. The positive value of these coefficients actually indicates that by improving these components, the quality of life could be enhanced. Also, it was found that negative attitude and self-blame were in a negative relationship with the quality of life.

Conclusion: The present study investigated the relationship between spirituality, self-forgiveness and self-blame with quality of life, with the results indicating that personal-level variables, i.e. spirituality, self-forgiveness and self-blame affect the quality of life.

Keywords: Spirituality, Self-forgiveness, Self-blame, Quality of life, Breast cancer

1. Introduction

Cancer is definitely one of the major health problems of the century, and its increasing growth over the past two decades and its deleterious effects on the physical, psychological, social, and economic aspects of human life have raised the concern of experts (1). Despite the fact that the advancement of technology and medical sciences has enabled humans to treat many types of cancers, including breast cancer, it is still seen as a horrible disease due to its prognoses. From diagnosis to treatment, it gives rise to various physical and psychological problems for the patients and their family (2) Given that breast cancer often develops at an age where women are burdened with great family, professional, and social responsibilities, and also due to the nature of the treatment, which sometimes entails the removal of the breast and leads to changes in the body of women, their sexual roles and their feminine and maternal feelings, it can be said that this disease poses serious challenges to patients and their families (3). Breast cancer diagnosis can exert extremely adverse psychological effects on the spouses and families of affected women. One of the most important of these impacts is the quality of life in patients with cancer (4)

Quality of life is a concept that has attracted growing

attention in recent years, especially in the field of lifethreatening disease. Key aspects of this concept in cancer patients cover physical, social, family, emotional and functional dimensions (5). Quality of life describes the living conditions of a person, his subjective assessments, and the ability to maintain or improve aspects of personality and at the time of crisis diminishing wellness and satisfaction of people with life (6).

Patients' quality of life not only affects their treatment and its side effects, but also the patient's perception of himself as a complete person who possesses soul and thinking power. Cancer is associated with cognition impairment. The rapid decline in physical and physical conditions affects the cognitive functions of the patient. Some studies have suggested that in the absence of spiritual wellness, biological, psychological, and social aspects of the individuals do not function properly or flourish as they expect. Therefore, they are unable to reach higher level of life quality (7). The results of a study by Taghadosi and Fahimifar (8) showed that the spiritual approach improved the quality of life in patients with cancer.

Today, many therapists see faith and spirituality as a crucial aspect of physical health and quality of life,

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so that they often contend that the spiritual issues of patients should be considered in the treatment process (9). It seems that the spiritual needs have an internal and external value and meaning (10). In the experience of a life with cancer, spirituality appears as an important and prominent dimension of a healthy life, and it seems that the cancer-threatening nature of cancer raises the spiritual needs of patients.

Many cancer patients resort to religion in order to cope with illness and raise their quality of life. Cancer patients often find their spiritual and religious beliefs as a way of gaining meaning in the course of illness and recovery, using it as a way of coping with the concept of death. In this way, spirituality gains prominence as an effective way for dealing with physical and psychological responses (11). Spirituality can contribute to higher psychological compatibility by providing supportive resources for the individual and by influencing hope in an indirect manner. According to studies, religion and spirituality are important sources that improve adaptability with stressful events of life. In this context, spiritual health is one of the key aspects of health that can affect the quality of life (12)

Cognitive assessment or an individual's stance on a situation can play a key role in adapting to stressful or dangerous life events. (13). In this regard, the role of self-blame is associated with poor psychological adaptability in patients with breast cancer (14). Since diet and exercise are associated with an increased risk of breast cancer, some women may blame themselves for the development of his disease, which can lead to mood disorders and decreased quality of life. (15). There are controversial views on self-blame and psychological modification. Most recent studies attempt to investigate the relationship between self-blame characteristics and attributes or adaptation to cancer. (16)

Friedman et al. (13) argue that self-blame behavior emerges when individuals hold themselves himself responsible for past behavior, believing that they could amend their way and change these behaviors.

Since blaming oneself about the development of breast cancer may lead to a sense of shame, guilt and reduced quality of life, a self-forgiveness attitude or the ability to accept and respond without a sense of blame and guilt may be operationally critical for women with breast cancer.

People with self-forgiveness can admit their mistakes and refrain from grieving and criticizing (17) It has been shown that the relationship between self-forgiveness and adaptation to medical illness is higher among African and low-income women. In a study on Caucasian women, the same relationship was observed (18). There is the probability that women with greater self-forgiveness are less likely to blame themselves for development of their cancer and thus experience a lower degree of mood disorders and higher quality of life. On the other hand, spirituality can help patients adapt to their conditions. Several studies have shown the link between spirituality and health. (19). In a study on African-American women and a sample of low-income women with breast cancer, psychological compatibility was found to be associated with spirituality (17). Another study revealed that two aspects of spirituality, peace/faith and religion are related to mental health (20)

Considering that the health and illness of women can directly affect the general health of the family and society, and the problems originated from this disease not only affect the patients, but also exert a deleterious effect on the members of the family and undermine the foundation of the family. Thus, research on factors associated with the psychological issues of these patients can urge policy makers and healthcare professionals to pay greater attention to this issue. According to the above, the main question of the present research is that whether the quality of life in patients with breast cancer can be predicted by spirituality, self-forgiveness and self-blame.

2. Methods

This is a descriptive and correlational study. The statistical population consisted of breast cancer patients admitted to hospitals in Tehran. The subjects were selected using cluster sampling method. To do so, in hospitals throughout the city of Tehran, patients referring to university hospitals and some other specialized clinics constituted the study population. Given that Pearson correlation and regression analysis were used for data analysis, to estimate the sample size, conventional methods of finding the optimal sample size were used a sample size of n=120 was selected.

3. Research instrument

Quality of Life Scale: World Health Organization Quality of Life Scale (WHOQOL-BREF) is a 26-item questionnaire that measures the overall quality of life. This scale was designed by a group of experts from the World Health Organization in 1996 by modifying the 100-item scale. This scale consists of four subscales and a total score. The sub-scales are physical health, mental health, social relationships and environmental health along with an overall score. Initially, a raw score for each subscale is obtained, which needs to be converted to a standard score in the range of 0 to 100 by a specific formula. A higher score indicates higher quality of life. As for the psychometric properties, the short form indicates the differential and content validity as well as internal reliability (a Cronbach's alpha of 0.80% for physical health, 76% for psychological health, 66% for social relationships, and 0.80 for test- pretest) (21).

Spirituality scale: The 20-item spiritual wellness developed (22) contains 10 items about spiritual wellness and 10 items about existential wellness of an individual. The spiritual wellness score, which is the sum of these two subscales, is in the range of 20 to 120. The answers are measured on a 6-point Likert scale ranging from "strongly agree" to "strongly disagree".

In Iran, this scale was implemented on 382 nursing students in Tehran, and Shahid Beheshti Universities by Mojgan Abbasi in 2005 and a reliability coefficient of R = 0.82 was reported (23).

Self-Forgiveness Scale: This 25-items scale measures the extent of interpersonal forgiveness and its dimensions (change in relationship and control of retaliation, control of hurt, realistic perception. Ehteshamzadeh et al. (24) carried out interpersonal forgiveness scale together with the FFS family forgiveness subscale to assess its validity and reported a significant correlation between these two scales. This relationship indicates that the scale is valid. Moreover, the reliability of the questionnaire was measured using the Cronbach's alpha. The value of alpha coefficient ranges from zero (0) (lack of reliability) to one (+1) (absolute reliability) with values closer to one indicating greater reliability of the scale. The Cronbach's alphas for the reliability for the interpersonal forgiveness

scale have been presented in the table below: Cronbach's alpha of the interpersonal relief scale

Dimension	Alpha
Reunification and control of revenge	0.77
Hurt control	0.66
realistic perception	0.57
Total	0.0

Self-blame scale: This 23-item scale evaluates three main factors, negative mood (9 items), effort (7 items) and justification (7 items). Heydari et al. reported a significant correlation for the factor of effort (0.47 to 0.86) in the overall score.

4. Results

In this research, based on the review of literature, two dimensions were defined for spirituality and their relationship with quality of life was assessed along with self-forgiveness and self-blame. The descriptive findings of the research scales are presented in Table 1.

To be able to apply statistical methods, first the normal distribution of data must be analyzed using the Kolmogorov-Smirnov test.

The variance tolerance and variance factors in the present study showed the absence of a strong collinear relationship between predictor variables. Another assumption was the independence regression of errors,

which required rejecting the assumption of correlation between errors. To test this assumption Durbin–Watson statistic can be used. To confirm this assumption, the value of this statistic should be in the range of 1.5 to 2.5. In this study, this value was 691, which confirms the assumption.

As shown in the table, the sig value is less than 0.05, which reveals the significance of the regression model. That is, at least one of the predictor variables has a significant effect on the criterion variable.

In this research R²=34, meaning that factors of spirituality, self-forgiveness and self-blame can predict 34% of variance in the quality of life, and the remaining 66% can be explained by other factors.

In this study, R2adj=0.31, meaning that spirituality, self-forgiveness and self-blame predicted 31% of variance in the quality of life.

Considering the significance of the model, it is necessary to examine which of the coefficients is not zero and which variable(s) have a significant effect on the model. For this purpose, t test was used.

As the results of the table show, the factors of spiritual wellness, existential wellness, hurt control and realistic perception are related to the quality of life at a significance level of 5%, with the positive value of these coefficients actually indicating that by increasing these factors, the quality of life could be improved. Also, negative mood and justification are negatively related to the quality of life.

Table 1. Descriptive Findings of Research S	Subscales		
Statistical indices scales			
Spiritual wellness	120	36.0	5.35
Existential wellness	120	34.66	4.36
Hurt control	120	26.44	5.1
Realistic perception	120	2.3	4.24
Effort	120	2.51	4.7
Negative mood	120	32.77	6.55
Justification	120	34.52	6.36

Table 2. The regression results of spirituality, self-forgiveness and self-blame factors on the quality of life

Model	Sum of	Df	Squares	F	R	\mathbb{R}^2	R²adj	Sig
	squares							
-	100.56	111	135.07	7.10	0.5	0.34	031	0.001
	2133.31	11	1.21					
	3213.7							

Table 3. Standard and non-standard coefficients and t-statistics of variables included in the regression equation Surface regression coefficients

Regressio	on coefficient	S			
Predictor variable			t statistic	Sig	Meaningfulness
Constant value	46.0			0.001	0.05
Spiritual wellness	0.50	0.44	5.46	0.001	0.05
Existential wellness	0.2	0.25	2.41	0.00	0.05
Hurt control	0.03	0.03	0.40	0.6	0.05
Negative mood	0.31	0.26	3.10	0.002	0.05
Attempt	0.35	0.2	3.20	0.002	0.05
Justification	-0.30	-0.24	-2.22	0.01	0.05

5. Discussion and Conclusion

The results of the data analysis revealed that spiritual wellness, existential wellness, hurt control and realistic perceptron are correlated with the quality of life at a significance level of 5%. Also, negative mood and justification are negatively related to the quality of life.

In explaining the findings of the research, it should be noted that patients, in the face of their illness, feel a gap in their life, which makes them skeptical of the meaning of work, love, death and life. This is where spirituality and self-forgiveness can help them deal with existential failure or failure to find a "purpose for life". People with high spiritual wellness and low self-blame always perceive the meaning and purposes in life and all other phenomena. Hence, this belief is linked to the quality of life.

In addition, another function of spirituality is that it prevents a sense of loneliness due to the connection with the origin of existence.

A major factor that helps cope with illness is self-forgiveness. Effective coping strategies to deal with different conditions depend on an individual's assessment of adequacy and quality of life. The mere possession of the relevant skills is not enough and one must believe that he has the skills and ability to utilize them upon necessity.

A person's belief in his competence determines whether he attempts to cope or to avoid a situation that is beyond his ability. High self-blame leads to a miscalculation of one's coping abilities that results in anxiety and malfunction. Previous research has revealed that since self-blame for the progression of breast cancer may engender a sense of shame, guilt and quality of life, the attitude toward self-forgiveness, acceptances and ability to respond without a sense of self-blame and guilt could be operationally important for women with breast cancer.

The self-forgiveness helps people deal with their mistakes and refrain from grieving and self-critique (17)

Based on research findings, some suggestions can be made to psychologists working in the field of medical health and diseases. At the start of each treatment program, a cancer patient is subject to psychological assessments. Given that spirituality is effective in the process of improvement and quality of life of patients, it is suggested that therapeutic programs draw on the results of this research.

The present study investigated the relationship of spirituality, self- forgiveness and self-blame with the quality of life, indicating that individual variables, i.e. spirituality, self forgiveness and self-blame, affect the quality of life. However, these variables only explained 34% of variance. This suggests that other factors such as social and cultural status also affect this variable, and it is therefore necessary to identify and explore them in future research.

Also, given the complexity of the concept of spirituality, it is suggested to examine the effect of spirituality on the quality of life of women with breast cancer using qualitative research. Besides, the study sample was selected from patients with breast cancer in Tehran. Therefore, caution should be practiced in generalizing findings to other cities and it calls for further studies to explore the generalizability of the findings.

6. References

1. Robinson, L., Kocum, L., Loughlin, C., Bryson, L., & Dimoff, J. K. I wanted you to know: Breast cancer survivors' control of workplace communication about

- cancer. Journal of Occupational Health Psychology, 2015; 20(4):446-456.
- 2. Brunet, J., O'Loughlin, J. L., Gunnell, K. E., & Sabiston, C. M. Physical activity and depressive symptoms after breast cancer: Cross-sectional and longitudinal relationships. *Health Psychology* 2018;37(1):14-23.
- 3. Shirvani, H., Alhani, F. and Montazeri, A. Effect of family-centered empowerment model on the scales of quality of life in women with breast cancer under chemotherapy, Journal of Breast Diseases 2017;1 (10):61-72.
- 4. Hossein Zadeh., Z, Kakavand, A. and Ahmadi, A.J. Mediating role of mother's consciousness and family resilience in relation to the behavioral problems of children with autism spectrum disorders and mother's psychological well-being. Psychology of the exceptional Quarterly 2016; 23: 151-178.
- 5. Hoerger, M., Chapman, B. P., Mohile, S. G., & Duberstein, P. R.Development and psychometric evaluation of the Decisional Engagement Scale (DES-10(: A patient-reported psychosocial survey for qualitycancer care. *Psychological Assessment 2016; 28*(9):1087-1100.
- 6. Lu, Q., Wong, C. C. Y., Gallagher, M. W., Tou, R. Y. W., Young, L., & Loh, A. Expressive writing among Chinese American breast cancer survivors: A randomized controlled trial. *Health Psychology 2017*; 36(4):370-379.
- 7. Omidvari S. Spiritual health; concepts and challenges. Specialty Quran Interdisciplinary Res 2008; 1:6–17. (Persian)
- 8. Taghadosi M, Fahimifar A. The effect of life review therapy with a spiritual approach on quality of life among cancer patients 2014;18(2): 136-44. (Persian(
- 9. Litwinczuk KM, Groh CJ. The relationship between spirituality, purpose in life, and well-being in HIVpositive persons. J Assoc Nurses AIDS Care 2007;18(3):13-22.
- 10. Cook, C. C. H. Religion and spirituality in clinical practice. The British *Journal of psychiatry Advances* 2015;21(1): 42-50.
- 11. Richards PS, Bergin AE.A spiritual strategy for counseling and psychotherapy. 2nd ed. Washington: American Psychological Association. 2005.
- 12. Cheadle, A.C.D.,& Schetter, C.H. Untangling the mechanisms underlying the links between religiousness, spirituality, and better health. Educational psychology 2017; 11(2).
- 13. Friedman L, Barber C, Chang J, Tham Y, Kalidas M, Rimawi M, et al. Self-blame, Self-forgiveness, and Spirituality in Breast Cancer Survivors in a Public Sector Setting. J Canc Educ 2010; 25:343–348.
- 14. Costanzo ES, Lutgendorf SK, Bradley SL et al. Cancer attributions, distress, and health practices among gynecologic cancer survivors. Psychosom Med 2007; 7:972–980.
- 15. Block KI, Dafter R, Greenwald HP. Cancer, the mind, and the problem of self-blame. Int Cancer Ther 2006; 5:123–130.
- 16. Janoff-Bulman R, Wortman CB. Attributions of blame and coping in the "real world": severe accident victims react to their lot. J Person Soc Psychol 1977; 35:351–363. 17. Enright RD. The Human Development Study Group .Counseling within the forgiveness triad: on forgiving, receiving orgiveness, and self-forgiveness. Couns Values 1996; 40:107–126.
- 18. Romero C, Friedman LC, Kalidas M et al. Self-forgiveness, spirituality, and psychological adjustment in women with breast cancer. J Behav Med 2006; 29:29–36.

- 19. Friedman LC, Romero C, Elledge R et al. Attribution of blame, self-forgiving attitude and psychological adjustment in women with breast cancer. J Behav Med 2007; 30:351–357.
- 20. Yanez B, Edmondson D, Stanton AL et al. Facets of spirituality as predictors of adjustment to cancer: relative contributions of having faith and finding meaning. J Consult Clin Psychol 2009; 77:730–741.
- 21. Skevington SM, Lotfy M, O'Connell KA. WHOQOL
- Group. The World Health Organization's WHOQOL-BREF quality of life assessment: psychometric properties and results of the international field trial. A report from the WHOQOL Group. Qual Life Res. Mar 2004;13(2):299-310.
- 22. Malcarne VL, Compas BE, Epping-Jordan JE et al. Cognitive factors in adjustment to cancer: attributions of selfblame and perceptions of control. J Behav Med 1995; 18:401–41

Razavi Int J Med. 2021; 9(2): e535