



Spiritual Well-Being in Women with Breast Cancer Receiving Palliative Care

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Abstract

Introduction: Breast cancer is the most common cancer in women with significant undesirable complications. Due to its life-threatening nature, the diagnosis of this disease increases spiritual needs and the need for palliative care. Palliative care has emerged as care that addresses explicitly gaps inherent in disease-centered approaches to enhance care quality in serious illness, both for patients and families and health care systems.

Methods: This descriptive-comparative study was conducted on 200 women with breast cancer selected by convenience sampling from those visiting chosen hospitals of Tehran in 2018. Data were collected using a demographic-histopathologic form and Paloutzian-Ellison's Spiritual Well-Being Scale, which was filled out in palliative care (n = 100) and routine care (n = 100) groups four weeks after the completion of therapy through interviews. The data obtained were analyzed in SPSS-21 using descriptive and inferential statistics.

Results: Compared to those receiving routine care, the women with breast cancer who were receiving palliative care had higher scores in religious well-being (P < 0.509) and total spiritual well-being (P < 0.167), although not in a statistically significant way. Meanwhile, the palliative care group obtained significantly higher scores in existential well-being compared to the routine care group (P < 0.007).

Conclusions: Developing programs to improve spiritual well-being in patients with breast cancer by incorporating palliative care into medical interventions can be beneficial.

INTRODUCTION

Breast cancer is the most common invasive cancer with a high mortality rate in women worldwide and more undesirable psychological complications than other cancers. Planning preventive and treatment measures for improving these women's psychological health seems imperative [1].

Despite the remarkable advances in the prevention of cancer, cancer is currently one of the main challenges of health systems throughout the world. According to 2019 statistics, the prevalence of breast cancer among different types of cancer is 11.6%, accounting for 6.5% of deaths in the world. The prevalence of breast cancer is expected to increase from two million in 2018 to over three million in 2046, suggesting an ascending trend of about 46% [2]. Over 130 thousand new cancer cases are

expected in Iran by 2025, which is at least 35% more than at present [3]. Due to its complicated nature and long treatment process, breast cancer imposes a considerable burden on the patients and medical teams. Also, breast cancer imposes high costs on the healthcare system, of which psychiatric care services claim a large share [4]. Given the various albeit long-term treatments for breast cancer, patients suffer psychological damages that can negatively affect their quality of life [5]. These patients often experience severe psychological despair when learning of their disease and during their treatment. The likelihood of psychiatric disorders in patients with breast cancer has been estimated at 30-40%. Studies have shown that psychological despair and the damages caused by this disease to psychological

well-being are correlated with the severity of chemotherapy and radiotherapy complications [6]. Researchers and therapists should pay serious attention to these problems from the beginning of cancer diagnosis and treatment since they can reduce the quality of life and cause various health consequences. Along with their treatment process, these patients also need psychological support and care from physicians and nurses [7].

Due to the life-threatening nature of breast cancer, diagnosis with this disease leads to a significant increase in the patients' spiritual needs. Several concepts, including spiritual well-being, arise in dealing with the problems and stresses caused by breast cancer [7]. Spiritual well-being is the sense of connection and coordination between oneself, others, nature, and the Supreme Being, which leads to the recognition of the ultimate goal and meaning in life through dynamic and consistent growth [8]. Well-being is a dynamic process encompassing four dimensions of human existence, and emphasizing the physical, psychological, and social dimensions with no attention to the spiritual dimension does not lead to a complete definition of well-being [9]. Studies over the last two decades have explained the importance of religion and spirituality in clinical care and quality of life in cancer patients. According to their results, spirituality is part of well-being and supportive care in cancer patients, and spiritual well-being is at the core of human well-being [10].

The WHO has proposed palliative care as a strategy to improve the quality of life in patients with incurable diseases and their families [11]. Palliative care seeks to meet the patients' physical, psychological, social, and spiritual needs, and spiritual well-being is a highly important part of these care measures [12]. Palliative care can be an effective, easy, and inexpensive method to improve the quality of life in patients with breast cancer [13].

The health of women as the central pillar of the family is of interest to health planners. The primary role of the health system policy-makers is to develop care guidelines to maintain and promote different dimensions of women's health. The high prevalence of breast cancer and its destructive effects on women has put their spiritual well-being at risk, and greater attention should be paid to this domain of health. Given that women's spiritual well-being affects their adaptation to cancer and effective coping with the disease. Also, given the cultural, social, religious, and spiritual belief differences among Iranians and the increasing number of women with breast cancer, this study was conducted to investigate spiritual well-being in women with breast cancer receiving palliative care in select hospitals in Tehran, Iran.

METHODS

This descriptive-comparative study examined 200 women with breast cancer visiting Firoozgar, Taleghani,

Shariati, and Rasool-e Akram hospitals in Tehran from February to August 2018, selected by convenience sampling. The sample size was determined based on

$$n \geq \frac{(z_{\alpha/2} + z_{\beta})^2 \sigma^2}{(\mu_1 - \mu_2)^2}$$

A hundred women were assigned to the palliative care and 100 to the routine care groups. The study inclusion criteria were: Iranian nationality, no known medical diseases, and no known psychiatric disorders (cognitive problems, intellectual disability, major depression, and use of antidepressants). The exclusion criterion consisted of the inability to answer the questions due to poor physical conditions. The data collection tools included a demographic-histopathologic questionnaire and Paloutzian-Ellison's Spiritual Well-Being Scale (SWBS). The demographic form inquired about participants' age, education, marital status, occupation, ethnicity, economic status, financial support and insurance, smoking, duration of cancer, stage of cancer, and type of treatment.

SWBS has been used in many studies to measure spiritual well-being and was developed in 1982 with 20 items. Items 1 to 10 deal with religious well-being and 11 to 20 existential well-being and the total spiritual well-being score is the sum of the scores of these two subscales. The religious dimension addresses the relationship between the Supreme Being and the individual's perception of health in the spiritual life. The existential dimension addresses the individual's adaptation to the society, environment, and oneself. The items are scored based on a six-point Likert scale (1: Disagree, 2: Disagree, 3: Fairly disagree, 4: Fairly agree, 5: Agree, and 6: Agree). Spiritual well-being is ultimately classified into three levels: Low (20-40 points), moderate (41-99), and high (100-120). Ellison reported Cronbach's alpha coefficients of 0.91 for religious well-being, 0.91 for existential well-being, and 0.93 for the whole scale, and internal consistency of 0.89 [14]. In Iran, Dehshiri et al. investigated the reliability of this scale using the test-retest method. They reported a coefficient of 0.85 for the full scale, 0.78 for religious well-being, and 0.81 for existential well-being. Moreover, Cronbach's alpha was reported as 0.90 for the full scale, 0.82 for religious well-being, and 0.87 for existential well-being [15]. Asgari et al. reported the reliability of this scale with a Cronbach's alpha of 0.89 and confirmed its content validity, too [16].

After obtaining permission from the Ethics Committee of Shahid Beheshti University of Medical Sciences (IR.SBMU.PHNM.1396.7.81), eligible women with breast cancer were matched in terms of grade of cancer and age were identified. After explaining the study objectives and obtaining their written consent, and ensuring them of the confidentiality of the data, women with four weeks since the end of the different stages of their therapy who had received routine care at Taleghani, Shariati, and Rasool-e Akram hospitals or palliative care at Firoozgar Hospital entered the study.

The questionnaires were completed through in-person interviews.

Data were analyzed in SPSS at a significance level of 0.05. Descriptive statistics, including the mean and standard deviation of the spiritual well-being score, were obtained in both groups and then compared using the independent T-test (or Mann-Whitney's test if the scores were not normally distributed).

RESULTS

According to participants' demographic details, the mean age was 47.4 in the palliative care group and 46 in the routine care group, and the age range was 42-53 years in both groups. The demographic characteristics of breast cancer patients in the palliative care group and the ordinary care group is presented in Table 1.

According to clinical details, most women of the palliative care group were in stage three at diagnosis (61%) and zeroed after therapy (58%), and most women in the routine care group were in stage three at diagnosis (59%) and one after therapy (52%).

Compared to the routine care group, the women in the palliative care group had higher scores in religious well-being ($P < 0.509$) and total spiritual well-being ($P <$

0.167), although not in a statistically significant way, but had significantly higher scores in existential well-being ($P < 0.007$). Table 2 presents the distribution of the patients' spiritual well-being scores by domain.

Table 3 shows the level of the spiritual well-being of the group.

The patients in both groups obtained the highest mean scores in the items "dissatisfaction with praying to God and silent prayers" and "believing that God loves me and looks after me" of the religious well-being domain, and the item "I do not know who I am, where I've come from, and where I will go" in the existential well-being domain, with no difference between them.

In the religious well-being domain, the palliative care group obtained the lowest mean scores in the item "the lack of satisfactory personal relationship with God" and the routine care group in "establishing a meaningful relationship with God." In the existential well-being domain, the palliative care group received the lowest mean scores in "not enjoying life" and the routine care group in "transcendence in and satisfaction with life." Tables 4 and 5 present the descriptive indices (mean and standard deviation) of religious and existential well-being scores in the participants by the group.

Table 1. Demographic Characteristics of Breast Cancer Patients in Two Groups

Demographic Details	Palliative Care Group Frequency (%)	Routine Care Group Frequency (%)	P-Value
Education			
Primary school	40 (36.4%)	36 (32.7%)	$P = 0.842$
Marital status			
Married	77 (70%)	83 (75.5%)	
Employment status			
housewife	76 (69.1%)	77 (70%)	
Ethnicity			
Fars	60 (54.5%)	65 (59.1%)	$P = 0.320$
Housing situation			
homeowners	75 (68.2%)	65 (59.1%)	$P = 0.320$
Residence			
City	98 (89.1%)	98 (89.1%)	$P = 1.000$
Family income			
Enough	56 (50.9%)	57 (51.8%)	
Financial support			
Yes	83 (75.5%)	98 (89.1%)	$P = 0.008$
Medical insurance			
Yes	95 (95%)	95 (95%)	$P = 1.000$
Supplementary insurance			
No	80 (72.7%)	79 (71.8%)	$P = 0.880$

Table 2. Distribution of Spiritual Well-being Scores in Two Groups by Domain

Spiritual Well-Being	Palliative Care Group, Mean \pm SD	Routine Care Group, Mean \pm SD	Independent T-Test, P-Value
Religious well-being	45.01 \pm 5.65	45.51 \pm 5.59	$P < 0.509$
Existential well-being	40.20 \pm 5.56	34.70 \pm 7.82	$P < 0.007$
Total spiritual well-being	85.21 \pm 9.33	83.22 \pm 11.82	$P < 0.167$

Data are presented as Mean \pm SD

Table 3. Spiritual Well-Being Level in Breast Cancer Women by Groups

Spiritual Well-Being level	Religious Well-Being		Existential Well-being		Total Score (Spiritual Well-Being)	
	Palliative Care	Routine Care	Palliative Care	Routine Care	Palliative Care	Routine Care
Low (20-40)	19 (48.7%)	20 (51.3%)	52 (45.2%)	63 (54.8%)	0	0
Moderate (41-99)	91 (50.3%)	90 (49.7%)	58 (55.2%)	47 (44.8%)	100 (49.5%)	102 (50.2%)
High (100-120)	0	0	0	0	10 (6.55%)	8 (4.44%)

Data is presented as Frequency (%)

Table 4. Descriptive Indices of Religious Well-being Scores in Breast Cancer Women by Group

Religious Well-Being Items	Palliative Care, Mean \pm SD	Routine Care, Mean \pm SD
Dissatisfaction with praying to God and silence prayers	5.0 \pm 1.11	4.8 \pm 1.24
Believing that God loves me and looks after me	4.8 \pm 1.02	4.8 \pm 1.02
Believing that God is inconceivable and attends to my daily life	4.8 \pm 0.8	4.7 \pm 1.08
Establishing a meaningful relationship with God	4.4 \pm 0.85	3.9 \pm 1.23
Not receiving enough power and support from God	4.2 \pm 0.94	4.7 \pm 0.99
Believing that God thinks about my problems	4.3 \pm 0.90	4.4 \pm 1.09
Lack of a satisfactory personal relationship with God	4.1 \pm 0.79	4.1 \pm 0.85
Believing that connecting to God helps me not feel lonely	4.5 \pm 0.97	4.5 \pm 1.00
Finding transcendence in the establishment of a close relationship with God	4.3 \pm 0.77	4.4 \pm 0.84
The role of establishing a relationship with God in feeling well and healthy	4.3 \pm 0.77	4.5 \pm 0.85

Table 5. Descriptive Indices of Existential Well-being Scores in Breast Cancer Women by Groups

Existential Well-being Items	Palliative Care, Mean \pm SD	Routine Care, Mean \pm SD
I do not know who I am, where I have come from, and where I will go	4.6 \pm 1.17	4.5 \pm 1.36
Believing that life is a positive experience	4.2 \pm 0.97	3.9 \pm 1.32
I feel my future is unclear	3.4 \pm 1.16	3.5 \pm 1.42
Transcendence in and satisfaction with life	4.0 \pm 1.15	3.5 \pm 1.39
Feeling good about the path ahead in my life	4.2 \pm 0.96	3.6 \pm 1.38
Not enjoying life	3.4 \pm 1.11	3.3 \pm 1.25
Feeling good about the future	4.2 \pm 0.80	3.7 \pm 1.34
I feel that life is full of adversities and hardships	3.5 \pm 1.20	3.6 \pm 1.25
Meaninglessness of life	3.9 \pm 1.03	4.0 \pm 0.99
Believing in a particular purpose for living	4.3 \pm 0.90	3.7 \pm 1.44

DISCUSSION

Investigating spiritual well-being in women receiving palliative care and those receiving routine care showed that all the participants had low to moderate levels of religious and existential well-being, and none had high levels. However, the level of spiritual well-being was higher than existential well-being. Both groups had a moderate total spiritual well-being, and none of the participants had low spiritual well-being. Existential well-being was higher in the palliative care group compared to the routine care group.

The total spiritual well-being was the same in both groups, with no significant difference between them, which agrees with the results obtained by Samiee Rad and Kalhor (2019) [17]. This result can be explained by noting that learning of one's malignant disease changes the perception of and attitude toward life as the patient tries to adapt to this situation. Moreover, since cancer is life-threatening, it can increase the patients' spiritual needs significantly, and facing the disease can lead to acute and severe crises in the person's well-being, making them more vulnerable. The diagnosis of cancer creates significant meaning crises in the person and can cause a spiritual crisis [18]. Nevertheless, because of the shock caused by the diagnosis and treatment of cancer, the patient may resort to religious beliefs less frequently. At this time, their faith is at risk, and their spiritual well-being diminishes.

The total spiritual well-being was moderate in most participants and never low in any of the groups, which agrees with the results reported by Habibi & Savadpour (2011) and Yusefi & Mobaraki (2019) [19, 20]. Spiritual well-being is an extraordinary force for

coordinating the physical, psychological, and social dimensions and coping with the disease. Spirituality and religious beliefs have an essential role in adaptation to cancer and help find meaning and purpose during illness. Religious resources are necessary for coping resources in cancer patients that are used during illness. These resources facilitate adaptation to the adverse effects of diagnostic and treatment procedures, especially chemotherapy.

Consequently, none of the participants scored poorly [21]. This result disagrees with the results obtained by Rezaei et al. (2008), who reported high spiritual well-being in more than half of the patients and no low levels [22]. The difference in results can be due to the different religious capacity and motivation of the participants, influenced by cultural, social, and personal factors. Moreover, the participants in the two cited studies did not match in terms of type of therapy, stage of therapy, type of cancer, duration since diagnosis, and the study setting, and these factors probably had an important role in making the results different and sometimes contradictory.

The assessment of the spiritual well-being domains revealed that the mean score of religious well-being was higher than the mean score of existential well-being, which concurs with the results obtained by Malaei et al. (2019), Khezri et al. (2015), and Rezaei et al. (2015), perhaps because religious beliefs are an essential factor in the psychological support of cancer patients, and feeling more comfortable and better able to adapt to the disease depends on the reliance on God's power [23-25]. Iranians have deeply-rooted religious beliefs that make them turn to prayers to cope with crises [26]. The present findings disagree with those obtained by Habibi

& Savadpour (2011), who reported almost similar religious and existential well-being in cancer patients receiving chemotherapy [19]. The disparity in findings can be due to the study of patients during chemotherapy when they have much higher levels of fear and anxiety for a variety of reasons, such as facing chemotherapy complications, severe pain, IV lines taken for drug injection, a sense of isolation, and loss of independence in life. Also, chemotherapy complications deny the patient the ability to enjoy life and damage spiritual well-being [27]. The present findings also disagree with those obtained by Nsamenang et al. (2016), Wilson et al. (2015), Lee et al. (2014) [28-30]. This disparity may be due to the differences in participants' culture, religious beliefs, and religion. The present study was conducted on Muslim women with breast cancer in Tehran, and given Iranians' strong religious beliefs and their crucial role in guiding their life; their lifestyle is naturally affected by cultural and religious factors. The studies with disparate results, however, were conducted in other countries with different religious contexts.

Although the mean score of existential well-being was lower than religious well-being, the palliative care group had a higher mean score of existential well-being than the routine care group, which concurs with the results reported by Gijsberts et al. (2019) in Europe [31]. The interventions given to the palliative care group included considering the patient's religious and cultural beliefs, communication with the patient, support and empathy, facilitating participation in religious rituals, and improving the sense of well-being. Existential well-being is an insight into the individual's psychosocial concerns and deals with how people adapt to their conditions, society, and the environment. Palliative care thus gives patients meaning and purpose in life and thereby motivation and strength and helps them assess their ability and energy to carry out appropriate activities despite their illness [32].

In a study by Seyedfatemi et al. (2006), the concepts "I believe that God loves me and looks after me" and "communication with God helps me not feel lonely" in the religious well-being domain. The concept "I believe I live for a particular purpose" in the existential well-being domain had the highest mean scores [33]. Their results disagree with the present findings. Their comparison shows that this disparity is probably due to the different types of cancer, patients' conditions, and type of care in the two studies. The time interval in the cited study and cultural differences may also play a role.

1. Jafari A, Goudarzian AH, Nesami MB. Depression in women with breast cancer: A systematic review of cross-sectional studies in Iran. *Asian Pacific J Cancer Preven, APJCP*. 2018;19(1):1.
2. Siegel RL, Miller KD, Jemal A. Cancer statistics, 2019. *CA Cancer J Clin*. 2019;69(1):7-34. doi: 10.3322/caac.21551 pmid: 30620402
3. Ferlay J, Soerjomataram I, Dikshit R, Eser S, Mathers C, Rebelo M, et al. Cancer incidence and mortality worldwide: sources, methods and major patterns in GLOBOCAN 2012. *Int J*

The strengths of this study include the comparison of palliative care and routine care groups and the use of a standard international questionnaire with high accuracy and validity, greater generalizability, and full specificity compared to other tools. The present study was conducted on Muslim women with breast cancer only, and the results cannot be generalized to other cancers, diseases, or religions. Moreover, it was impossible to identify and control all the factors affecting the patients' psychological and spiritual state. More extensive qualitative studies are thus recommended to be conducted to better understanding the concept of spiritual well-being in cancer patients.

CONCLUSIONS

The spiritual well-being of women with breast cancer was the same in palliative care and routine care groups. Most participants had moderate spiritual well-being, and palliative care had no significant effect on their spiritual well-being. Nonetheless, existential well-being was higher in palliative care than the other group. The mean score of religious well-being was higher than the mean score of existential well-being. Developing programs to improve spiritual health in patients with breast cancer and incorporating palliative care alongside medical interventions can be beneficial.

Ethical Consideration

The current article was published on IR.SBMU.PHNM.1396.7.8 by the Ethics committee of the Shahid Beheshti University of Medical Sciences.

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Conflict of Interest

There is no conflict of interest in the present study, according to the authors.

REFERENCES

1. Jafari A, Goudarzian AH, Nesami MB. Depression in women with breast cancer: A systematic review of cross-sectional studies in Iran. *Asian Pacific J Cancer Preven, APJCP*. 2018;19(1):1.
2. Siegel RL, Miller KD, Jemal A. Cancer statistics, 2019. *CA Cancer J Clin*. 2019;69(1):7-34. doi: 10.3322/caac.21551 pmid: 30620402
3. Ferlay J, Soerjomataram I, Dikshit R, Eser S, Mathers C, Rebelo M, et al. Cancer incidence and mortality worldwide: sources, methods and major patterns in GLOBOCAN 2012. *Int J*
4. Askarzade E, Adel A, Ebrahimipour H, Badiie Aval S, Pourahmadi E, Javan Biparva A. Epidemiology and Cost of Patients with Cancer in Iran: 2018. *Middle East J Cancer*. 2019;10(4):362-71.
5. Ecclestone C, Chow R, Pulezas N, Zhang L, Leahey A, Hamer J, et al. Quality of life and symptom burden in patients with metastatic breast cancer. *Support Care Cancer*.

- 2016;24(9):4035-43. doi: 10.1007/s00520-016-3217-z pmid: 27129843
6. Shields CG, Rousseau SJ. A pilot study of an intervention for breast cancer survivors and their spouses. *Fam Process*. 2004;43(1):95-107. doi: 10.1111/j.1545-5300.2004.04301008.x pmid: 15359717
 7. Ghaempanah Z, Rafieinia P, Sabahi P, Makvand Hosseini S, Memaryan N. Spiritual Problems of Women with Breast Cancer in Iran: A Qualitative Study. *Health Spiritual Med Ethic*. 2020;7(1):9-15. doi: 10.29252/jhsm.7.1.9
 8. Ross L, McSherry W, Giske T, van Leeuwen R, Schep-Akkerman A, Koslander T, et al. Nursing and midwifery students' perceptions of spirituality, spiritual care, and spiritual care competency: A prospective, longitudinal, correlational European study. *Nurse Educ Today*. 2018;67:64-71. doi: 10.1016/j.nedt.2018.05.002 pmid: 29763841
 9. Akbari M, Hossaini SM. The relationship of spiritual health with quality of life, mental health, and burnout: The mediating role of emotional regulation. *Iran J Psychiatr*. 2018;13(1):22.
 10. Zare A, Bahia NJ, Eidy F, Adib N, Sedighe F. The relationship between spiritual well-being, mental health, and quality of life in cancer patients receiving chemotherapy. *J Family Med Prim Care*. 2019;8(5):1701-5. doi: 10.4103/jfmpc.jfmpc_131_19 pmid: 31198740
 11. Heydari H. Home-based palliative care: A missing link to patients' care in Iran. *J Hayat*. 2018;24(2):97-101.
 12. Ozveren H, Kirca K. Influence of Palliative Care Training on Last-Year Nursing Department Students' Perception on Regarding Spirituality and Spiritual Care: A Single-Group Pretest-Posttest Intervention Study. *J Relig Health*. 2019;58(3):860-9. doi: 10.1007/s10943-018-0701-4 pmid: 30229412
 13. Khalili SM, Aataei PJ, Hazini A, Nasiri M, Kariman N, Doulabi MA. Comparing the quality of life of women suffering from breast cancer receiving palliative care and ordinary care. *Immunopathol Persa*. 2020;6(2):22e. doi: 10.34172/ipp.2020.22
 14. Ellison CW. Spiritual well-being: Conceptualization and measurement. *J Psychol Theology*. 1983;11(4):330-8. doi: 10.1177/009164718301100406
 15. Dehshiri GR, Sohrabi F, Jafari I, Najafi M. A survey of psychometric properties of spiritual well-being scale among university students. 2008.
 16. Asgari P, Roushani K, Mohri AM. The Relationship between religious belief, optimism and spiritual well being among college students of Islamic Azad University. 2009.
 17. Samiee Rad F, Kalhor M. An overview of Spiritual health in cancer patients. *Iran J Psychiatr Nurs*. 2019;6(6):82-8. doi: 10.21859/ijpn-060610
 18. Seyedrasooli A, Rahmani A, Howard F, Zamanzadeh V, Mohammadpoorasl A, Aliashrafi R, et al. Iranian cancer patient perceptions of prognosis and the relationship to hope. *Asian Pac J Cancer Prev*. 2014;15(15):6205-10. doi: 10.7314/apjcp.2014.15.15.6205 pmid: 25124599
 19. Habibi A, Savadpour MT. Spiritual well-being in cancer patients under chemotherapy. *J Health Care*. 2011;13(3):0.
 20. Yusefi F, Mobaraki R. The Comparison of Spiritual Health in Cancer and Non-Cancer Patients in Sanandaj, Tohid Hospital in 2018. *Tabib Sci Cultur J*. 2019;1(1):0.
 21. Chuengsatiansup K. Spirituality and health: an initial proposal to incorporate spiritual health in health impact assessment. *Environ Impact Assess Rev*. 2003;23(1):3-15. doi: 10.1016/S0195-9255(02)00037-9
 22. Rezaei M, Adib-Hajbaghery M, Seyedfatemi N, Hoseini F. Prayer in Iranian cancer patients undergoing chemotherapy. *Complement Ther Clin Pract*. 2008;14(2):90-7. doi: 10.1016/j.ctcp.2008.01.001 pmid: 18396252
 23. Malay FBF, Abbaszadeh A, Khabazkhob M. Correlation between spiritual health and care burden in family caregivers Cancer patients. *HAYAT*. 2019;24(4):296-309.
 24. Khezri L, Bahreyni M, Ravanipour M, Mirzaee K. The Relationship between spiritual well-being and depression or death anxiety in cancer patients in Bushehr 2015. *Nurs Vulnerabl*. 2015;2(2):15-28.
 25. Rezaie Shahsavarloo Z, Lotfi M, Taghadosi M, Mousavi M, Yousefi Z, Amirkhosravi N. Relationship between components of Spiritual well-being with hope and life satisfaction in elderly cancer patients in Kashan, 2013. *J Geriatric Nurs*. 2015;1(2):43-54.
 26. Allahbakhshian M, Jaffarpour M, Parvizy S, Haghani H. A survey on relationship between spiritual well-being and quality of life in multiple sclerosis patients. *Zahedan J Res Med Sci*. 2010;12(3).
 27. Galizia D, Milani A, Geuna E, Martinello R, Cagnazzo C, Foresto M, et al. Self-evaluation of duration of adjuvant chemotherapy side effects in breast cancer patients: A prospective study. *Cancer Med*. 2018;7(9):4339-44. doi: 10.1002/cam4.1687 pmid: 30030895
 28. Nsamenang SA, Hirsch JK, Topciu R, Goodman AD, Duberstein PR. The interrelations between spiritual well-being, pain interference and depressive symptoms in patients with multiple sclerosis. *J Behav Med*. 2016;39(2):355-63. doi: 10.1007/s10865-016-9712-3 pmid: 26801338
 29. Mills PJ, Wilson K, Iqbal N, Iqbal F, Alvarez M, Pung MA, et al. Depressive symptoms and spiritual well-being in asymptomatic heart failure patients. *J Behav Med*. 2015;38(3):407-15. doi: 10.1007/s10865-014-9615-0 pmid: 25533643
 30. Lee Y. The relationship of spiritual well-being and involvement with depression and perceived stress in Korean nursing students. *Glob J Health Sci*. 2014;6(4):169-76. doi: 10.5539/gjhs.v6n4p169 pmid: 24999141
 31. Gijsberts MHE, Liefbroer AI, Otten R, Olzman E. Spiritual Care in Palliative Care: A Systematic Review of the Recent European Literature. *Med Sci (Basel)*. 2019;7(2). doi: 10.3390/medsci7020025 pmid: 30736416
 32. Chavoshian SA, Moeini B, Bashirian S, Feradmal J. The role of spiritual health and social support in predicting nurses' quality of life. *J Educ Community Health*. 2015;2(1):19-28.
 33. Seyed Fatemi NRM, Glivari A, Hosseini F. Prayer and spiritual well-being in cancer patients. *PAYESH*. 2006;5(4):295-303.