Exploring the Impact of Religious Practices on the Psychological Well-being of Cancer Patients

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Abstract
The association between religious practices, faith-related coping and psychological well-being has been widely explored for many years. Some studies have specifically focused on the positive effects of certain religious belief and practices among people having serious medical conditions. This study was planned to know the relationship between the selected religious rituals and certain psychological aspects among Muslim cancer patients in INOR Abbottabad, Khyber Pakhtunkhwa of Pakistan. Psychological well-being scale was adapted to measure anxiety and depression mood while religious practices such as frequencies of pray and recitation of the Holy scripts were measured through "Likert scale" 1 (1 time) to 5 (5 times). A total 76 cancer patients were randomly selected and interviewed through a structured questionnaire based on the "Likert scale" where 1=very low to 5=very high was selected as the limits of responses. Demographic information of the respondents was documented in percentages and frequencies. Furthermore, mean and standard deviation were applied to know the average values of items while simple regression was used to obtain the nature of association among variables. The psychological aspects such as anxiety and depression mood got a minimum score while religious practices including prayer and recitation obtained a higher score. Moreover, religious practices were found in significant relationships with anxiety and depression. It is concluded from the study that patients were regularly performing their pray and reciting the Holy Quran thereby having no anxiety and depression mood problem.
Keywords: Cancer, Belief, Patients, Quran, Pray

Introduction

Being diagnosed with cancer is a critical life experience which further affects the mental and psychological well-being of patients[1]. In order to cope with this deadly disease, patients need to be medically intervened for rehabilitation and health recovery. But the psychological impact of cancer is overwhelming enough to induce patients to seek out alternative avenues to overcome their anxiety, fear, and depression. Many researchers have reported about the strength and capacity of religion and rituals for health recovery among

patients[2]. Most often reported religious practices among patients are prayers and recitation of the holy scripts with a wide range of health-related positive outcomes including psychological well-being[3].

Religion and rituals have a powerful complementary effect in mainstream medical treatment. It contributes to providing a holistic care to patients and plays a prominent role in the modern healthcare system[4].[5].Medical professionals are augmenting religious practices and believe that these are highly significant in treating long-term illness[6]. Different kinds of prayers, such as transaction, petition, submission and intercessory prayers have shown high positive influence on patient's illness[7]. However, does prayer truly have a positive impact on the healing outcome in cancer patients is still remained as an elusive phenomenon because of social, cultural and religious diversification among people?

It is generally believed that Pakistani Muslims are comparatively more religious in their outlook and thereby often supplement their medical treatment by offering pray and recitation of various Quranic Surah. It is hypothesized for this study that cancer patients will have comparatively a higher level of religiositywhich will have some significant and positive relations with their mental health and psychological well-being. More specifically, religious practices of cancer patients reduce anxiety and mitigate depression.In order to test this assumption, this study was planned to assess the outcomes of some selected religious practices including pray and recitation of the Holy Quran and its impacts on the psychological well-being among Muslims cancer patients in Khyber Pakhtunkhwa province of Pakistan.

Literature Review

In the past two decades, the favorable and positive impacts of religious practices on the psychological and mental well-being have been highlighted in various psychological, sociological and socio-epidemiological researches[8].[9].[10].Prior research studies[11].[12].[13]had provided evidence which depicts the positive interplay between patient's level of religiosity and their "psychological well-being"[14].[15]."Psychological well-being" refers to the higher level of attained mental health and the absence of anxiety and depression in the life of a particular individual [[16]]. Researchers have found that religious practices tune the patient's health and also helpful in mitigating the harmful and negative effects of illness[17].[18].

Religious therapies are considered as very significant and cost-effective means especially in the prevention and treatment of chronic illness[19].A qualitative study conducted on religious practices in Japan has stated that religious therapies reduce hypertension, symptoms of depression and overall psychological distress[20].Besides, religious activities such as prayer, attendance of religious services, script reading and meditation are also valuable for

helping the patient to cope with their illness and enhance psychological well-being[21].[22].[23].[24].

A patient diagnosed with cancer had proclaimed that the best medicine for me is prayer and Jesus[25]. Another patient diagnosed with breast cancer at stage four had reported that her health was recovered incredibly not only because of the medical treatment but with the regular practice of prayers[26].

Organized religious activity such as group prayer is more related to better physical functioning like a decrease in pain and disappearance of the tumor[27]. Moreover, it was reported that group prayer produces better health outcomes by reducing anxiety and risk of suicide and also pacify mental stresses[28].[29]. In a cross-sectional study conducted among 179 cancer patients in the US had reported that various types of prayers impact differently. For this purpose, electronic medical charts and a 20 items prayer list were used to assess prayer frequency, duration, and type of prayer. The study concluded that prayer related to regards, compliments, blessings, and comfort for others were considered related to the lower level of depressive symptoms in cancer patients[30]. Similarly, "colloquial prayers" have also been found closely associated with a better mental health condition and overall life satisfaction[31].

During a qualitative study among patients with chemotherapy treatment in "Mayo Clinic Rochester", a prayer session of nine weeks were planned among women suffering from ovarian cancer in which 80% were noted as having psychological benefits such as peace of mind, spiritual presence, and feeling of letting go[32]. Likewise, spiritual practices also help to overcome the negative daily routine behavior including "alcoholic intake" and enhances the quality of life and improve the mental status[33]. Attending religious activities on regular basis increases the level of happiness and lower psychological stress among patients[34]. It has also a useful effect on mental health, higher self-esteem and a way out from depressive conditions and emotional disturbances[35].Besides, recitation of holy scripts also provides mental, spiritual and physical relaxation by shedding stresses, anxiety, and tensions in patients[36].[37].One of the well-known rosaries (*Ziker*) in the religion Islam is the "utterance of word Allah*"*. Recitation of the name of any supernatural entity plays a significant role in healing pain, reducing anxiety and stress. Furthermore, different religious practices such as prayer, "meditation" and "yoga" have been reported as positive predictors of patient's mental and physical well-being[38].

Materials and Method

In order to assess the perceived psychological well-being of the study participants, two aspects such as anxiety and depression mood were selected as dependent variables and assessed through the "Psychological General Well-Being" (PGWB) scale which is developed by Dupty[39] in 1984. The selected aspects were explored through 12 items, six each for anxiety and depression mood based on 5 points Likert scale i.e. 1(very low) to 5 (very high). Anxiety

aspect was examined through the items such as (i) get rid of my life (ii) not want to face people (iii) feel loneliness, (iv) not satisfied with my life (v) feel very inferior (vi) cannot overcome the disease. Depression mood was analyzed through (i) not firm in my dealings (ii) mood swinging condition (iii) emotionally balanced (iv) nervous from death (v) discomfort in illness (vi) worried about my life.Higher values of depression and anxiety on the scale show lower psychological well-being and vice versa.Besides, religious practices were measured through two variables: participation and performing prayer and recitation of Holy Quran and other scripts (1) Frequency of prayer attendance and recitation of Holy Quran was measured through the question: How often do you attending prayer in a day? 2) Recitation of holy scripts was judged through the question. How often do you a recitation of holy scripts in a day? " Responses ranged from 1 (1 time) to 5 (5 times).

Population and Sampling Criteria

This study was conducted in the Institute of "Nuclear Medicine Oncology and Radiotherapy" (INOR), Abbottabad, Khyber Pakhtunkhwa of Pakistan. The study population included all patients who were (a) cancer diagnosed before 3 months (b) at least 18 years legal age (c) admitted since 3 days. A total of 76 respondents out of (N= 94) based on 95% confidence level with 0.5 margin error were selected by using Sekaran table 2011. A "self-administered questionnaire" was used to collect data from our study participants. All the participants were directly accessed to conduct personal interviews for filling the designed questionnaire protocol. The collected data was properly coded and put in the "SPSS" sheet version 20 for analysis and drawing the result. At univariate level of analysis, "frequencies", "percentages", "mean" and "standard deviation" was used to treat demographic data. Furthermore, simple linear regression test was conducted to determine the nature and direction of relationships among variables.

Data Analysis and Results

Table-01: Frequency and Percentage of the Respondent's Personal Information (N=76)

Gender	**Male**		**Female**		
Frequency / %	42/55.3		34/44.7		
Respondent Age	20-30	31-40	41-50	51-60	61-70
Frequency / %	20/ 26.3	29/ 38.2	17/ 22.4	6/ 7.9	4/ 5.3
Marital Status	**Single**	**Married**	**Divorced**	**Separate**	**Widow**
Frequency / %	28/ 36.8	41/ 53.9	1/ 1.3	0	6/ 7.9
Cancer Type	**Lung**	**Breast**	**Prostate**	**Hematology**	**Others**

Frequency / %	21/ 27.6	30/ 39.5	8/ 10.5	10/ 13.2	7/ 9.2
Respondents Cancer Stage	Stage 0	Stage 1	Stage 2	Stage 3	Stage 4
Frequency / %	18/23.7	22/28.9	11/14.5	14/18.4	11/14.5
Religious practices	**Attending Prayer**		**Recitation of holy scripts/Rosary**		
Frequency / %	46/60.5		30/39.5		
Recitation of Holy scripts in a day	**1 time**	**2 time**	**3 times**	**4 times**	**5 times**
Frequency / %	10/13.2	10/13.2	20/26.3	31/40.8	5/6.6
Attending of prayer Frequency /%	6/7.9	5/6.6	9/11.8	11/14.5	45/59.2

Table-01 shows personal information of the respondents in frequencies and percentages. Majority 42 (55.30%) of respondents were male. 29 (38.20%) respondents were from the age group 31-40, while 20 (26.30%) were reported their age group as 20-30. 41(54%) respondents were married while 28 (36.8%) respondents were unmarried. Breast cancer was reported 30 (39.50%) respondents followed by 21 (27.60%) lung cancer patients. 22 (29%) respondents were in stage 1 while 18 (23.7%) were having a 2nd stage of cancer. In religious practices, a majority of 30 (39.50%) respondents were used to recite the Holy Quran including other scripts reading, whereas 46 (60.50%) patients were observing prayer for their illness. 31(40.8%) patients were found to recite Holy Quran four times while 45 (59.20%) attending maximum prayers in a day.

Table-02: Statistical Values of Psychological Well-being and Religious Practices

Psychological Well-Being					
Anxiety	**Mean**	**Std. D**	**Depression Mood**	**Mean**	**Std. D**
Get rid of life	1.53	0.887	Not firm in my dealings	2.28	1.353
Not want to face people	1.89	1.250	Mood swinging condition	2.30	1.641
Feel loneliness	1.95	1.487	Emotionally balanced	2.30	1.166
Not satisfied with my life	1.97	1.356	Nervous from death	2.49	1.637

Feel very inferior	2.04	1.399	Discomfort in illness	2.53	1.629
Cannot overcome disease	2.20	1.386	Worried about my life	2.63	1.607
Total Score	1.93	1.294	Total Score	2.42	1.50
Religious practices have a positive influence				4.32	0.996
Attending prayer on a day				4.11	1.302
Recitation of the Holy scripts (Quran and other) in a day				3.14	1.151

Table-02 shows the cumulative values of anxiety and depression mood adopted from psychological well-being scale. Firstly, the average score (Mean=1.93, S. D= 1.294) of anxiety items were calculated pointing out that patients were having a low anxiety condition. Secondly, the cumulative values of depression mood items (Mean= 2.42, S. D= 1.50) were obtained which depicts that patients were having lowdepression mood on the scale. Furthermore, frequencies of daily prayers performing (Mean=4.11, S. D= 1.302) were assessed showing that cancer patients normally attending an average of 4 times prayers daily, while recitation of the Holy Quran scored (Mean= 3.14, S. D= 1.151) confirming that patients performing recitation3 times in a day. High score of the religious practices such as prayer and recitation and a lower score of the anxiety and depression mood in the table showed that patients were found in their higher level of religious performances and low level of anxiety and depression mood.

Table-03: Correlation between Psychological Well-being and Religious Practices

Psychological Well-being	**Daily Recitation of Holy Quran**		**Attending Prayer for a Day**	
	Pearson Value-1	Sig. Value	Pearson Value-2	Sig. Value
Anxiety	0.628	0.000	0.495	0.000
Depression Mood	0.656	0.000	0.645	0.000

Table-03 shows association between religious practices and the selected psychological dimensions i.e. anxiety and depression mood. The correlation between religious practices such as recitation of Holy Quran and performing prayer have a significant relationships ($p1= 0.628$, $p2= 0.495$/ $r= .000$, $p< .05$) with anxiety. Moreover, the selected religious items have also strong significant correlations ($p1= 0.656$, $p2= 0.645$, $r= .000$, $p<.05$) with depression mood items. Current study testified that religious practices, anxiety,

anddepressed mood were found in correlations with one another and thereby supporting the first research hypothesis.

Table-04: Summary of the Regression Model

Mode	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	0.793	0.628	0.558	0.663

ANOVA Table Analysis between Independent and Dependent Variables					
Model	**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
Regression	46.76	12	3.897	8.877	0.000
1 Residual	27.658	63	0.439		
Total	74.421	75			

Table-04 reveals the summary of the regression model and presents values of R, R^2 and adjusted R^2 which symbolizes the value of multiple coefficients between outcome and predictor variables. R-value is 0.793, which establish a simple correlation between psychological well-being items and religious practices. The R^2value in the model is 0.628, or 62% which explains the selected variables and a well-fitted model for selected variables. R^2 also shows that the selected independent variables can account for 62% variation from dependent variable. This elucidates that 38% variation in outcome variable can't be explained by the selected predictor variables. The ANOVA calculates the level of significance of the regression model and proportion of variance. A larger F-value which represents our predictor variables indicates that the changing ratio in the Y which is the outcome variable is explained in the regression model and thus it is valid for this study. While the smaller F value denotes that major variation in the variable Y will remain unexplained. The calculated P-value is (0.000) which is (<0.005), so regression model shows the significant relationship between variables.

Table-05: Regression Analysis: Strength and Direction of Association between Variables

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**T**	**Sig.**
		B	**Std. Error**	**Beta**		
(Constant)		2.838	0.198		14.36	0.000
Anxiety	Nervous from death	-	0.370	-0.152	-0.251	0.803

		0.093				
	Discomfort in illness	-0.404	0.386	-0.660	-1.046	0.300
	Worried about my life	0.434	0.507	0.700	0.856	0.395
	Mood swinging	-0.204	0.502	-0.336	-0.407	0.686
	Feel loneliness	-0.324	0.359	-0.483	-0.902	0.371
	Satisfied with my life	0.116	0.341	0.157	0.340	0.735
Depression Mood	Feel very inferior	-0.243	0.395	-0.342	-0.616	0.540
	Get rid of this life now	-0.258	0.216	-0.230	-1.191	0.238
	Not want to meet other	-0.235	0.388	-0.295	-0.606	0.547
	Overcome this disease	0.313	0.429	0.435	0.729	0.469
	Not firm in my dealings	-0.226	0.475	-0.306	-0.475	0.636
	Emotionally balanced	0.687	0.225	0.804	3.049	0.003

The β- values of regression in table-05 presents relationship between the selected variables. Positive values show that there is a direct relationship between the predictor and outcome variables, whereas negative coefficient represents negative and inverse relationships. The anxiety scale comprised of 6 items, in which the positive item such as satisfaction with life (β= 0.116, P=0.735) was positively associated with religious practices and recitation of the Holy Quran while residual 5 items including nervous from death (β= 0-.093, P=0.803), discomfort in illness (β= -0.404, P=0.300), mood-swinging condition (β= -0.204, P= 0.686) and feel loneliness (β= -0.324, P=0.371) have inverse and negative relationships. It is deduced from the data that increase in religious practices decreases anxiety. Depression mood scale comprised of 6 items, in which two items have a positiverelationship with the dependent side as; overcome this disease (β=0.313, P=0.469) and emotionally balanced (β= 0.687, P=0.003). While the remaining items have inverse relationship such as; feeling inferior (β= -0.243, P=0.540), get rid of this life (β= -0.258, P=0.238), not want to face people (β= -0.235, P= 0.547) and not firm in my dealing (β= -0.226, P=0.636) show that religious practices reduce the negative depression mood aspects and enhances the positive mood aspects. The regression model also shows that religious practices have an inverse relationship with anxiety and depression mood which support the second hypothesis.

Discussion

Cancer is a chronic disease which seriously affects both physical and mental health of a patient. Owing to its overwhelming negative impact of the disease, patients adopt various coping mechanism in order to supplement their healing process and improve their mental health. The present study examines the impacts of "religious practices" on the general "psychological well-being" of cancer patients. In this study, the majority (55.3 %) of the study participants was male and (38.2%) were having 31-40 age group. The result indicates that cancer patients were religious and perform religious practices for their illness as; 59.2 % patients offering prayer 5 times and 40.8% were reading the Holy Quran 4 times in a day. This data shows that cancer patients highly rely on religious practices (Mean= 4.32) for their psychological well-being because prayer and recitation may help them to give hope and reduce their anxiety and depression. Previous studies have found out that religious practices have beneficial [12] and positive effects on study population [19]. In psychological well-being, aspects anxiety score is obtained as (M= 1.92) and depression mood having (M= 2.42). This means that low score of anxiety and depression is because of a high score of religiosity. It shows that performing high ratio of religious practices cause a lower level of anxiety and depression and enhances the general well-being and mental health of patients. Research studies George [20] and Choumanova[23], religious actions including prayer and script recitation are especially valuable and enhance psychological well-being and life quality of the chronically ill patients. Religious practices have a strong positive association with overall psychological well-being (r=0.000). The result shows that prayer was significantly related to "psychological well-being" in the patients.

Religious practices include many rituals which are performed by different religious followers. Previous researchers had outlined that people tend towards religion when they feel some physical and biological discomfort. Similarly, it happens with cancer patients during the different phases of their health conditions. Many negative feelings override the patients which include fears of death, discomfort in illness, mood swinging and feeling loneliness. Moreover, feelings of inferiority, getting rid of life, avoiding people and "mercurial temperament" are the most reported psychological impacts of cancer. Medical intervention is considered as a necessary step for cancer patients to help them recover from the disease. In order to combat and cope with the above mentioned negative emotions, patients start practicing certain faith healing exercises such as prayers and recitation of the Holy scripts to rehabilitate their lost faith and confidence. Prayers are performed regularly by the patients in order to harmonize their patience and tune will-power to equip themselves to defeat their illness. Besides, recitation of the Holy Quran restores the mental health, help them to remain calm and protect them from becoming panic and uneasy. Increasing religious practices enhances the positive emotions such as

hope for recovery from their illness and emotional balance while eliminating the negative emotions such as fearof death, cynical tendencies, discomforts, inferiorities, and loneliness.

Conclusion

It is concluded from the study that our study participants were highly engaged in performing certain religious practices for their health recovery and rehabilitation. It has pointed out that the religious activities such as prayers and recitation of the Holy scripts assist the patient to peacefully manage the period of their illness because it invigorates their level of hope and mitigates their painful experiences. Further, it also improves their general well-being, decreases anxiety and depression. The study further suggests that religious practices are exceptionally important for the patient to improve their mental health and overall "quality of life". Moreover, religious practices supplements positives aspects of "psychological well-being" and reduce negative emotions in the patients. It is concluded that besides medical intervention, religious practices and spiritual beliefs are also playing a crucial role in positive health outcomes in cancer patients.

Notes & References

[1] Gall, T. L., & Cornblat, M. W. (2002). Breast cancer survivors give voice: A qualitative analysis of spiritual factors in long-term adjustment. *Psycho-Oncology, 11*(6), 524-535.

[2] McNichol, T. (1996). *The new faith in medicine*. USA.

[3] Chattopadhyay, S. (2007). Religion, spirituality, health and medicine: why should Indian physicians care? *Journal of Postgraduate Medicine, 53*(4), 262-266.

[4] Meador, K. G. (2004). Spiritual care at the end of life: What is it and who does it? *North Carolina Medical Journal, 65*(4), 226-228.

[5] Kalkhoran, M. A. & Karimollahi, M. (2007). Religiousness and preoperative anxiety: a co-relational study. *Annals of General Psychiatry, 6*(17), 1-5.

[6] Narayanasamy. A, & Narayanasamy, M. (2006). Spirituality and health. In: Narayanasamy A, ed. *Spiritual Care and Transcultural Care Research.* Quay, London: 15–41.

[7] Johnson, M. E., Ann, M., Dose, B. P., Wesley, O., Petersen, M. H., Mary, M., … Marlene, H. F. (2009). Centering prayer for women receiving chemotherapy for recurrent ovarian cancer: a pilot study. *Oncology Nursing Forum, 36*(4), 421-428.

[8] Foskett, J., Roberts, R., Mathews, L., Macmin, P., C., & Nicholls, V. (2004). From research to practice: The first tentative steps: *Mental Health, Religion & Culture,*

7(1), 41-58.

[9] Seybold, K. S., & Hill, P.C. (2001). The Role of Religion and Spirituality in Mental and Physical Health: *Current Directions in Psychological Science, 10*(1), 21-24.

[10] Weaver, A. J., Flannelly, J., Garbarino, C.R., Figley, K., & Flannelly, J. (2003). A systematic review of research on religion and spirituality in the Journal of Traumatic Stress: 1990-1999: *Mental Health, Religion & Culture, 6*(3), 215-228.

[11] Dyson, J., Cobb, M., & Foreman, D. (1997). The meaning of spirituality: A literature review. *Journal of Advanced Nursing, 26*(1), 1183–1188.

[12] George, L. K., Larson, D. B., Koenig, H. G., & McCullough, M. E. (2000). Spirituality and health: What we know, what we need to know. *Journal of Social and Clinical Psychology, 19*, 102–116.

[13] Mickley, J. R., Carson, V., & Soecken, K. L. (1995). Religion and adult mental health: The state of the science in nursing. *Issues in Mental Health Nursing, 16,* 345–360.

[14] Ellison, C. G., & Levin, J. S. (1998). The religion-health connection: Evidence, theory, and future directions. *Health Education and Behaviors, 25*, 700 – 720.

[15] Swinton, J. (2001). *Spirituality and mental health care: Rediscovering a forgotten dimension*. London: Jessica Kingsley.

[16] Edwards, S. D. (2005). A Psychology of breathing methods. *International Journal of Mental Health Promotion, 7*(4), 28-34.

[17] Siegel, K., & Schrimshaw, E.W. (2002). The perceived benefits of religious and spiritual coping among lder adults living with HIV/AIDS. *Journal of the Scientific Study of Religion, 41*(1), 91-102.

[18] Feudtner, C., Haney, J., & Dimmers, M. A. (2003). Spiritual care needs of hospitalized children and their families: A national survey of pastoral care providers' perceptions. *Paediatrics, 111*(1), 67-72.

[19] Ai-AL, W., Tice, P., Bolling, S.F., Shearer, M. (2009). Prayer and reverence in naturalistic, aesthetic, and socio-moral contexts predicted fewer complications following coronary artery bypass. *Journal of Behavior and Medicine, 32*(6), 570–81.

[20] Krause, N. (2004). Assessing the relationships among prayer expectancies, race, and self-esteem in late life. *Journal for the Scientific Study of Religion, 43* (3), 395-408.

[21] Bloom, J. R., Stewart, S. L., Subo-Chang, S. L., & Banks, P. J. (2004). Then and now: Quality of life of young breast cancer survivors. *Psycho-Oncology, 13*(3), 147-160.

[22] Carver, C. S., Pozo, C., Harris, S. D., Noriega, V., Scheier, M. F., Robinson, D. S. (1993). How coping mediates the effect of optimism on

distress: A study of women with early stage breast cancer. *Journal of Personality and Social Psychology, 65*(2), 375-390.

[23] Choumanova, I., Wanat, S., Barrett, R., & Koopman, C. (2006). Religion and spirituality in coping with breast cancer*: Perspectives of Chilean women. Breast Journal, 12*(4), 349-352.

[24] Meraviglia, M. (2006). Effects of spirituality in breast cancer survivors. *Oncology Nursing Forum, 33*(1), 1-7.

[25] Hefti, R., Koenig, H. G. (2007). Prayers for patients with internal and cardiological diseases--an applicable therapeutic method. *MMW Fortschr Med, 149*(52),31–2.

[26] Moeini, M., Taleghani, F., Mehrabi, T., Musarezaie, A. (2004). Effect of a spiritual care program onlevels of anxiety in patients with leukemia. *Journal for the Health, 3*(3), 12.22.

[27] Karekla, M., Constantinou, M. (2010). Religious coping and cancer: Proposing an acceptance and commitment therapy approach. *Cognitive Behavior Practices, 17*(4), 371–81.

[28] Widerquist, J. G. (1992). The spirituality of Florence Nightingale. *Nursing Research, 41*(1), 49–55.

[29] Larson, D. B. And Larson, S. B. (2003). Spirituality's potential relevance to physical and emotional health: A brief review of quantitative research. *Journal of Psychology and Theology. 31*(1), 37-51.

[30] Margaret, M., & George, H., Gallup, J. (1991). *Varieties of Prayer*: A survey repor (Harrisburg: Trinity Press International.

[31] Paloma, M. M., & Pendleton, B. F. (1991). The effects of prayer and prayer experiences on measures of general well-being. *Journal of Psychology and Theology, 19,* 71-83.

[32] Visser, A., Garssen, B., & Vingerhoets, A. (2010). Spirituality and well-being in cancer patients: a review. *Psycho-oncology, 19*(6), 565–572.

[33] Underwood, C. G., & Teresi, J. (2002). The daily spiritual experience scale: Development, theoretical description, reliability exploratory factor analysis and preliminary construct. *Society of behavioral Medicine, 24*(1): 22-33.

[34] Moberg, D. O. (1979). The development of social indicators of spiritual well-being for quality of life research. In David O. Moberg (Ed.) *Spiritual well-being: Sociological perspectives,* Washington DC: University Press of America.

[35] Ellis, A. (1980). Psychotherapy and atheistic values: A response to A. E. Bergin'spsychotherapy and religious values. *Journal of Consulting and Clinical Psychotherapy, 48*, 635-639

[36] Khan, M. A. (2014). Validity and reliability of the Assessment of Quality of Life (AQoL)-8D multi-attribute utility instrument. *Patient,7*,85–96. http://dx.doi.org/10.1007/s40271-013-0036-x

[37] Nikbakht, N., Nasr-Abadi, A.R., Taghavi, L. T. Mahmoudi, M., & Taghlili, F. (2004). A comparative study of the effect of Benson's relaxation technique and Zekr (rosary) on the anxiety level of patients awaiting abdominal surgery. *Hayat, 10*(23), 29–37.

[38] Avazeh, A., Ghorbani, F., Vahedian, A. A., Rabi'I, S. S., Taghi, K. M., Mahdizadeh, S. (2011). Evaluation of the effect of reciting the word Allah on the pain and anxiety of dressing change in burn patients. *Quran and Medicine, 2*(1), 43–47.