

The Relationship between Religion, Spiritual Well-being, Hope and Quality of Life in Patients with Cancer

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A B S T R A C T

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Background: Religion, spiritual well-being and hope are concepts that are frequently used as a source of coping in patients with cancer. However, few studies have examined these factors with independent measurement devices. To determine the relationship between religion, spiritual wellbeing, hope and quality of life in cancer patients admitted to Omid's Hospital in Urmia city from August to January 2010.

Methods: In this cross sectional descriptive-analytical research, 164 patients with cancer were selected using sequential convenience sampling. Data were collected using demographic characteristics form, quality of life questionnaire EORTC QOL-C30, Ellison and Paloutzain spiritual well-being questionnaire, Duke University Religion Index, and the Herth Hope Index. Data was analyzed using SPSS Software (v.11.5), statistical test Pearson correlation coefficient and multiple regressions were done and $P_{value} < 0.05$ considered statistically significant.

Results: Spiritual well-being ($r = 0.23$, $P_{value} < 0.01$) and hope ($r = 0.23$, $P_{value} < 0.01$) had a significant positive relationship with the functional quality of life scale. Spiritual well-being ($r = 0.34$, $P_{value} < 0.01$) and hope ($r = 0.46$, $P_{value} < 0.01$) had a significant positive correlation with the overall quality of life. Between religious practices and the overall quality of life was significant correlation ($r = 0.18$, $P_{value} < 0.05$). Also hope and religious beliefs explained 25.8 percent of changes in overall quality of life.

Conclusion: There was a significant relationship between spiritual health, religious practices, hope and quality of life. Considering some factors such as being purposeful in the life, believing in God, doing religious practices and being optimistic about the future, while providing the health cares for patients with cancer might increase their quality of life.

Key words: Quality of life, hope, spiritual wellbeing, religion, patients with cancer

BCCR

2014;6(4):28-36

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Introduction

Knowing about having cancer is a shocking¹ and worrying² experience for anyone and indeed the awareness of having a malignant life-threatening illness changes people's understanding of life and they try to adjust to this condition³. Psychological effects of cancer diagnosis and physical effects related to treatment and its side effects negatively impact quality of life in patients with cancer⁴. Quality of life is multi-dimensional and complex and includes objective and subjective factors, is often regarded as individual's perception of life expectancy, physical health, social and family health, hope, manners and mental health of the patient⁵. Investigations on quality of life in cancer related studies is an important variable associated with clinical care⁶ and is used to determine the differences between patients, predictions on the consequences of the disease and to evaluate therapeutic interventions⁷. Many studies have shown that hope⁸⁻¹⁰ and spiritual wellbeing¹¹⁻¹² are significant factors in life which are associated with mental health and quality of life. Moreover, studies have shown that a sense of comfort and strength resulting from religious beliefs may contribute to the health and wellbeing sense¹³. Nurses can play an effective role on the investigation and improving of quality of life in patients with cancer due to their direct and prolonged contacts with patients¹⁴. Investigations on quality of life in people with cancer can be an important point in the evaluation of efficacy of treatment and disease trend in these patients¹⁵. Concepts such as hope, spiritual wellbeing and quality of life are meaningful and related fields for patients and nurses. However, few studies have shown the relationships between these concepts in hospitalized patients¹⁶.

Hope is an important coping mechanism in chronic diseases such as cancer and is defined as a complicated

multidimensional and potentially powerful factor in improvement and effective adjustment¹⁰.

Benzein and Berg believe hope helps patients physiologically and emotionally to cope with the crisis of the disease¹⁷. In other references, hope is a factor to predict the process of a malignant disease¹⁸. In contrast, despair is defined as tolerating of an unbeatable condition in which no goals are achievable and is associated with depression and the desire for death and suicide¹⁹. It can be concluded from definitions that hope encompasses the individual's imagination and attention to future and causes trying with a perception that it is probable that positive results be achieved. Any kind of conceptualization of hope reflects its multi-dimensional dynamic, future-oriented, and process-oriented attribute²⁰.

Spirituality and religion that people sometimes interpret them as spiritual wellbeing and religion practices²¹ overlap and both might mean seeking meaning and purpose, connections and values²².

Spirituality is derived from the word spirituous meaning the role of life or the way of being and experiencing that occurs by awareness of a non materialistic dimension and recognizable values like love, compassion and justice are its components. Spiritual wellbeing has been considered as the core philosophy of life and a result of satisfying the need for goals, meaning, love and forgiveness²³. Religion tends to encourage daily rituals such as prayer and fasting but spirituality seeks new levels of meaning beyond all practices. Most spiritual people are religious but the opposite is not true²⁴. Many people find spirituality through religion. Due to the diversity of people, what may make the person feel comfortable and relaxed, might not be applicable in another person. Therefore, prayers, reading religious books or attending spiritual services are the sources that some religious people resort to so that they can be less harmed by the stressful life events²⁴.

McClain, Rosenfeld and Breitbard studies showed that the spiritual wellbeing has a strong effect on the end of life despair in patients suffering from cancer²⁵. In end-stage cancer patients, spiritual and religious comfort might be even more important than the physical and mental health²⁶.

Because technical interventions in relation to life threatening symptoms have been unable to fully meet the difficult problems patients are exposed to, more attention is paid to the strong parameters such as spirituality, religion and hope in communities²¹. Brandy et al. showed that in patients with cancer, spirituality is related to the quality of life as much as physical and emotional health²⁷. Nowadays, it is suggested that religion, spirituality and existential worries be included in investigation of patient's quality of life²⁸. Rustoen et al. concluded that hope has a mediating role between mental distress and better quality of life and the patients who have higher hope levels had less distress and better quality of life⁶. Although in western countries many studies have been conducted on patients' quality of life but the international cancer organization has emphasized the necessity to study the difference between the results of various studies regarding the quality of life so that the effect of cancer and its treatment would be better understood from patients' point of view⁶ which in this sense, might be applicable in our county, too. Therefore, this study was conducted to determine the relationship of religion, spirituality and hope with the quality of life in patients with cancer attending Omid Hospital in Uremia, Iran.

Methods

This is a descriptive correlational study in which 164 patients with cancer attending Omid Hospital in Uremia were purposively selected for 6 months from July till December 2010. Inclusion criteria were age over 18 years, a definite diagnosis of cancer, awareness of their

illness, lack of mental illness and willingness to voluntarily participate in the study. Data collection tool was questionnaires in which the first part investigated the demographics including sex, age, and educational level, type of cancer and duration of illness. In the second part, quality of life was investigated using EORTC QOL-C 30. This tool has 30 items, including three subscales (global health status, functional scales and symptom scales). The scores related to 2 items of quality of life scale include 7-point Likert scale but other items related to the subscales have 1 to 4 points. Functional scale includes 5 subgroups (physical, role, cognitive, emotional, and social) and symptom scale includes 3 items related to nausea and vomiting, 2 items related to pain and 5 single items (dyspnea, insomnia, constipation, diarrhea and financial difficulties). The score varies between 0 to 100. Regarding the functional scale and quality of life, higher scores represent better functions and in symptom scale higher scores show weaker functions²⁹. This scale is translated to Persian and its validity and reliability are confirmed³⁰.

In the third part, spirituality was assessed using the 20-item Spiritual Wellbeing Scale by Paloutzain and Ellison. Ten items measure religious wellbeing and 10 items measure the existential wellbeing. Spiritual wellbeing score is the total of these two sub-scales that range between 20 and 120. Twenty items are scored based on the 6-point Likert scale. Scores between 1 and 6 have a range between strongly disagree to strongly agree. Nine items are scored reversely as well³¹.

Validity of the spiritual wellbeing questionnaire was determined through content validity after being translated to Persian and the reliability of the questionnaire was determined through Cronbach's alpha coefficient ($r=0.88$). In part four, religion was measured using the Duke University Religion Index (DUREL). This index has 5 items in which in

the first item, the frequency of attending mosque and religious ceremonies are investigated through a 6-point Likert scale ranging from “more than once a week” to “never”. The total of the two items represent the religious practice score. The next three items are taken from Hoge’s internal religion instrument which investigates individual’s opinions and religious experiences based on a 5-point Likert scale ranging from “definitely true for me” to “definitely not true for me”. The total of 3 items represented the religious belief scores. In all the 5 items related to religion, scores were calculated reversely and the total score range of religious practices was between 2 to 12 and religious beliefs ranged between 15 to 45.32. The reliability of the questionnaire was determined after being translated using Cronbach’s alpha 0.93. In the fifth section, hope was measured using Herth Hope Index (HHI). This tool is made of 12 items based on 4-point Likert scale. Strongly disagree was considered to have 1 point, disagree 2 points, agree 3 points and strongly agree 4 points. Reverse scoring is used for questions 3 and 6. Reliability of the questionnaire is approved in previous studies by Benzein and Berg¹⁷ and Herth¹⁰. However, in this study once the instrument was translated, its content validity was approved by faculty members of nursing school and its reliability was measured as Cronbach’s alpha of 0.82. The total score on HHI scale varies between 12 to 48 and a higher score represents better hope status. The SPSS software version 16 was used for analysis. The descriptive analysis was used to obtain the total scores of quality of life and the three subscales such as the global quality of life, functional scale and symptom scale related to that, HHI scores, total scores of spiritual wellbeing and its subscales (10 items for religious wellbeing and 10 for existential wellbeing) and religion (religious practices and beliefs).

Pearson’s regression scale was used to determine the relationship between HHI score, global score of spiritual wellbeing, religious wellbeing score, existential wellbeing, religious practices and religious beliefs with the quality of life.

To determine quality of life predicting variables, the multiple regression analysis was used. Quality of life scores were considered as dependent variable and scores related to HHS, spiritual wellbeing, religious wellbeing, existential wellbeing were considered as independent variables. The significance level was 0.05.

Results

The mean age of the patients was 62.46 ± 54.14 , 4.52% were male and 6.47% were female, 5.44% were illiterate, 1.17% were high school dropouts and the rest had high school diploma or higher educational levels. Regarding the type of cancer, most cases were breast cancer (9.15%), lung cancer (8.12%), stomach cancer (11%), blood (6.11%) and colon (1.9%). Sickness duration in participating patients was an average of 5.03 ± 7.07 (months). Descriptive indicators of the three subscales related to the quality of life (global QOL, functional scale, and symptom scale), spiritual wellbeing, religious beliefs, religious practices, and the HHI in patients with cancer related to this study are shown in Table 1. Pearson’s correlation coefficient showed that there is a positive significant relationship between spiritual wellbeing and the functional scale of quality of life ($p=0.0001$). There was a positive significant relationship between HHI and functional scale of quality of life ($p=0.0001$). However, there was no significant relationship between religious beliefs and functional scale of quality of life ($p>0.05$). There was no significant relationship between spiritual wellbeing and symptoms scale, HHI and symptoms scale and religious practices and symptoms scale.

Table 1: Descriptive indicators of quality of life		
variable	Mean	Standard deviation
Religious practices	6.32	3.23
Religious beliefs	14.13	1.95
Spiritual wellbeing	93.81	14.97
Herth Hoe Index	39.11	6.37
Functional scale/QOL	61.31	20.57
Symptoms scale/ QOL	36.11	18.98
Total quality of life	64.32	20.09

There was a significant relationship between spiritual wellbeing and quality of life ($p=0.0001$). There was no significant relationship between religious beliefs and total quality of life, there was a significant relationship between HHI and total quality of life ($p=0.0001$). There was a significant relationship between religious practices and total quality of life (table 2).

To predict the global quality of life, multiple linear regression analysis was used. Results showed that in the first stage, the existential wellbeing with a correlation coefficient of 0.40 determines the 16.7% variance of global quality of life alone. In the second stage, two variables of religious beliefs and religious practices were added with 0.43, the three variables determined 19.2% of variance of global quality of life and ultimately, in the third stage HHI was added to regression, the correlation increased to 0.50 and determined 25.8% variance. Among these four ultimate

Discussion:

The results of the study showed that there was a relationship between spiritual wellbeing and quality of life (functional scale and global quality of life) which represent that having faith in God or an infinite power and the purposeful life has a relationship with the quality of cancer patient's life. These results are in line with the Allah Bakhshian et al. study³³ and Balboni et al.²¹. Moreover, there was a relationship between hope and quality of life (functional scale, global quality of life) and it represents that believing in coming better days and good moments and the possibility of getting rid of problems has a relationship with the quality of life in patients with cancer. This result could be justified in the sense that hope is a powerful adjustment mechanism in chronic patients such as cancer and hopeful people could tolerate the sickness crisis more easily. These results are in line with the results of Esbense

Table 2: relationship between religious practices and total quality of life

	Functional scale	Symptoms scale	Total quality of life
	Pearson correlation coefficient	Pearson correlation coefficient	Pearson correlation coefficient
Spiritual wellbeing	0.33	-0.13	0.34
Religious beliefs	0.05	0.08	0.07
Herth Hoe Index	0.23	-0.06	0.46
Religious beliefs	0.08	-0.02	0.18

**=P<0.01
*=p<0.05

Table 3: Three stage of predicting Quality of life among

Stage	Independent variables	B	β	S.E	R	R ²	F	df	P
1	Existential wellbeing	0.93	0.41	0.16	0.40	0.167	*32.13	1.161	0.00
	Existential wellbeing	0.96	0.37	0.17					0.00
2	Religious Beliefs	-1.29	-0.12	0.83	0.43	0.192	*12.58	3.159	0.12
	Religious practices	0.98	0.15	0.48					0.04
	Existential wellbeing	0.36	0.16	0.22					0.11
	Religious Beliefs	-2.09	-0.20	0.82					0.01
3	Religious practices	0.65	0.10	0.47	0.50	0.258	*13.7	4.158	0.16
	Herth Hope Index	1.27	0.40	0.34					0.00

Dependent variable= scale of Quality of life
*P<0.01

et al.³⁴ Herth¹⁰ and Pipe et al.¹⁶. Moreover, there was a relationship between religious practices and global quality of life which shows that religious practices such as saying prayers, presence in mosque etc. have a relationship with the quality of life in patients with cancer. These results are in line with Rippen-trop study²³ but are not consistent with Balboni et al. study²¹. In this study, both spiritual wellbeing and religious practices were related to quality of life. To justify this result, it can be stated that despite some societies in which people reach spirituality through art or nature, in our society people reach religious wellbeing through religious practices. In other words, saying prayers and attending mosques etc is related to believing in God as an infinite power, and remembering Him makes one comforted and the holy book has enunciated an eternal life after death and this internal comfort might be related to the quality of life.

Regression analysis results showed that HHI and religious beliefs determine the changes in variance of global quality of life and it represents that the patients who had better hopes in life and lived according to religious rules had better quality of life and could better emphasize the multidimensional and powerful concept of hope and the deep role of religious beliefs in adjustment with severe stressing situations. In Rostone et al. study, hope and health status were the predictive variables of quality of life⁶ although in the studies conducted in other countries, spiritual wellbeing had a stronger relationship with quality of life compared with religion³⁶ but our study emphasized more on the role of religion and this is inconsistent with broader spirituality compared with religious affiliation.

Sampling in this study was non-randomized, so it is suggested that in further studies, random sampling be used. Although participating in the study was totally voluntarily but participants might respond to

the religious beliefs and spiritual wellbeing questionnaire unrealistically which are out of researchers' control.

Conclusion:

This was a cross-sectional study and it is suggested that further longitudinal studies be conducted. In this study, the relationship of spiritual wellbeing, religion and hope with the quality of life was determined. It is suggested that a study be conducted to determine the effect of spiritual and religious health interventions on the quality of life in patients suffering from cancer. In this study, the relationship of quality of life, with spiritual wellbeing, religion and hope was determined. Based on these results, it is suggested that nurses have a broader view of caring and consider the patient as a whole person while taking care of them. Moreover, it helps the nurses and clinical professionals to pay attention to purposeful life, believing in God and religious practices and optimism toward future, and design and provide better services in accordance with the quality of life improvement in patients suffering from cancer. Furthermore, due to the fact that in our country, people believe in religious beliefs so it seems that interventional designs with an aim to improve the quality of life would be appreciated by patients and managers.

Acknowledgement:

The authors deeply appreciate all the patients participating in the study as well as the nursing management and other colleagues in Omid Hospital, Urumia.

References

1. Akyuz A, Guvenc G, Ustunsoz A, Kaya T. Living with gynecologic cancer: experience of women and their partners. *Journal of Nursing Scholarship*. 2008; 40 (3) :241–7.
2. Hounsgaard L, Petersen LK, Pedersen BD. Facing possible illness

- detected through screening. Experiences of healthy women with pathological smears. *European Journal Oncology Nursing*. 2007;11:417-23.
3. Reb AM. Transforming the death sentence: elements of hope in women with advanced ovarian cancer. *Oncology Nursing Forum*. 2007; 34 (6) : E70-81.
 4. Michael M, Tannok L. Measuring health related quality of life in clinical trial evaluated the role of chemotherapy in cancer treatment. *Canadian Medical Association Journal* 1998: 1727-34.
 5. Lehto US, Ojanen M, Kellokumpu-Lehtinen P. Predictors of quality of life in newly diagnosed melanoma and breast cancer patients. *Annals of Oncology* 2005;16:805-16.
 6. Rustøen T, Cooper BA, Miaskowski Ch. The Importance of Hope as a Mediator of Psychological Distress and Life Satisfaction in a Community Sample of Cancer Patients. *Cancer Nursing*. 2010;33 (4) :258-67.
 7. Fuller J, Schaller-Ayers J. Health assessment. 3rd ed. Philadelphia: Lippincott Co; 1999. P. 1006.
 8. Wonghongkul T. Uncertainty Appraisal, Hope, and Coping in Breast Cancer Survivors. *Oncology Nursing Forum*. 1999;23 (4) :663-71.
 9. Lee E. Fatigue and hope: relationships to psychological adjustment in Korean women with breast cancer. *Applied Nursing Research*. 2001; 14 (2) :87-93.
 10. Herth K. Enhancing hope in people with a first recurrence. *Journal of Advanced Nursing*. 2000; 32 (6) : 1431-41.
 11. Tarakeshwar N, Vanderwerker LC, Paulk E. Religious coping is associated with the quality of life of patients with advanced cancer. *Journal of Palliative Medicine*. 2006; 9: 646-57.
 12. Nelson CJ, Rosenfeld B, Breitbart W. Spirituality, religion, and depression in the terminally ill. *Psychosomatics*. *Journal of Palliative Medicine* 2002; 43:213-20.
 13. Borman PD, Nicholas DR. Spirituality, religiosity, and the quality of life of oncology patients. *Journal of Clinical Oncology*. 1999;12 (6) :453-60.
 14. Lamp J. Nurses at the bed side influencing outcome. *Nurs Clin North Am* 1997;33 (3) :583-7.
 15. Slevin ML, Plant H, Lynch D, Drinkwater J, Gregory WM. Who should measure quality of life, the doctor or the patient?. *British Journal Cancer* 1988;57: 109-12.
 16. Pipe TB, Kelly A, LeBrun G, Schmidt D, Atherton P, Robinson C. A Prospective Descriptive Study Exploring Hope, Spiritual Well-Being, and Quality of Life in Hospitalized Patients. *Medical Surgical Nursing* 2008; 17 (4) : 247-53.
 17. Benzein E, Berg A. The level of and relation between hope, hopelessness and fatigue in patients and family members in palliative care. *Palliative Medicine*. 2005; 19 (3) :234-40.
 18. Herth K, Cutcliffe JR. The concept of hope in nursing 3: Hope and palliative care nursing. *British Journal of nursing*. 2002; 11 (14): 977-982.
 19. Faran CJ, Herth KA, Popovich JM. Hope and hopelessness: critical clinical constructs. *Journal of Advance Nursing*. 1995; 15:1250-9.
 20. McClementa SE, Chochinovb HM. Hope in advanced cancer patients. *European Journal of Cancer*. 2008; 44: 1169 -1174.
 21. Balboni TA, Vanderwerker LC, Block SD, Paulk ME, Lathan C, Peteet J, et al. Religiousness and spiritual support among advanced cancer patients and associations with end-of-life treatment preferences and quality of life. *Journal of Clinical Oncology*. 2007; 25 (5) :555-60.
 22. Hawks SR, Hull ML, Thalman RL, Richins PM. Review of spiritual health: definition, role, and intervention. *Strategies in health promotion*. *American Journal of Health Promotion* 1995; 9:371-8.
 23. Rippentrop AE, Altmaier EM, Burns CP. The relationship of religiosity and spirituality to quality of life among cancer patients. *Journal of Clinical Psychology in Medical Setting*. 2006;13 (1) :31-7.
 24. Mueller PS, Plevak DJ, Rummans TA. Religious involvement, spirituality, and medicine: Implications for clinical practice. *Mayo Clinic Proceedings*. 2001; 7 (6) :1225-35.
 25. McClain CS, Rosenfeld B, Breitbart W. The influence of spiritual well-being on end-of-life despair in a group of terminally ill cancer patients. *Lancet*. 2003; 361:1603-7.
 26. Meraviglia MG. Critical analysis of spirituality and its empirical indicators: Prayer and meaning in life. *Journal of Holistic Nursing*. 1999; 17:18-33.
 27. Brady M J, Peterman AH, Fitchett G, Mo Mo & Cella D. (1999). A case for including spirituality in quality of life measurement in oncology. *Psychology-Oncology*. 8 (12) : 417-28.
 28. Bufford RK, Paloutzian RF, & Ellison CW. Norms for the spiritual well-being scale. *Journal of Psychology and Theology*. 1991; 19 (23): 56-70.
 29. Fayers P, Aaronson N, Bjordal K, Groenvold M, Curran D & Bottomley A. EORTC QLQ-C30. Scoring Manual. EORTC Quality of Life Group, EORTC Data Centre, Brussels, Belgium. 2001.
 30. Montazeri A, Harirchi I, Vahdani M, Khaleghi F, Jarvandi S, Ebrahimi M, et al. The European organization for research and treatment of cancer quality of life questionnaire (EORTC QLQ-C30): translation and validation study of the Iranian version. *Support Care Cancer*. 1999; 7: 400-6.
 31. Paloutzian RE, Park CL. Psychology of religion and applied areas. In: Paloutzian RE, Park CL. *Handbook of the Psychology of religion and spirituality*. 1th ed. Uk. Guilford press; 2005.
 32. Koenig H, Parkerson GR, Meador K G. Religion index for psychiatric research. *American Journal of Psychiatry*. 1997;153: 885.
 - 6.33. Allahbakhshian M, Jaffarpour M, Parvizy S, Haghani H. A Survey on relationship between spiritual wellbeing and quality of life in multiple sclerosis patients. *Zahedan Journal of Research Medical Sciences* 2010; 12 (3) : 29-32 (Persian).

34. Esbensen BA, østerlind K, Roer O, Hallberg IR. Quality of life of elderly persons with newly diagnosed cancer European Journal of Cancer Care. 2004; 13:443–53.
35. John-Paul Vader. Spiritual health: the next frontier. The European Journal of Public Health. 2006; 2 (12) ;541-7.
36. Livneh H, Lott Sh, Antonak R. Patterns of psychosocial adaptation to chronic illness and disability: a cluster analytic approach. Psychology, Health & Medicine. 2004; 9 (4): 411-30.