Biomedical & Pharmacology Journal Vol. **10**(1), 231-236 (2017)

The Effect of Spiritual Interventions on the Quality of Life among Patients with Common Cancers in Southwest Iran

ALI AHMADI[1] and MOHAMMAD-REZA NOORMOHAMMADI[2]*

[1]Department of Epidemiology and Biostatistics & Modeling in Health Research Center, Shahrekord University of Medical Sciences, Shahrekord, Iran.
[2]Research Institute for Islamic Medicine, Shahrekord University of Medical Sciences, Shahrekord, Iran.
*Corresponding author E-mail: noorshkums@yahoo.com

http://dx.doi.org/10.13005/bpj/1102

(Received: March 04, 2017; accepted: March 06, 2017)

ABSTRACT

Spirituality, sometimes referred to as spiritual health, refers to believing in the existence of an entity or power beyond material life, developing an in-depth sense of unity or attachment to the universe. This study was conducted to investigate the effect of spiritual teachings on life expectancy and quality of life among patients with common cancers in Chaharmahal and Bakhtiari province, southwest Iran. Pretest-posttest on 200 people with different type of cancer in Chaharmahal va Bakhtiari. First, the questionnaires of quality of life and life expectancy were used to gather the patients' data. Then, healthy lifestyle from the Quran perspective was taught to the people by a psychologist, a counselor, and a clergyman. 8 weeks after completion of the teachings, the questionnaires were re-administered to the patients. The data were analyzed by descriptive statistics (including mean and standard deviation) and analytical statistics (paired t-test). The results showed that the intervention had no effect on the quality of life in these patients ($P>0.05$). Moreover, there was not significant effect of the intervention in relation to life expectancy statistics before and after the intervention (P=0.857). The inconsistency between the findings of this study and those of other studies, confirming religion's effect in promoting the quality of life and life expectancy, may be attributed to the difference in the methods, study population, and sample size among the works, or high level of religious beliefs among patients with different type of cancer in Chaharmahal va Bakhtiari province.

Keywords: Quality of Life, Spiritual Therapies, Cancer.

INTRODUCTION

The epidemiological transition of diseases due to controlling communicable diseases, the significance of cancers in this century, and the necessity of preventing and controlling cancers that bring huge economic, social, and psychological burdens for society deserve serous investigations (Bergsma and Engel, 1988; Hayry, 1991). Cancer refers to more than 200 diseases caused by excessive and unplanned cell growth and proliferation due to different environmental and genetic factors and is associated with several physical symptoms and complaints (Park, 1959; Gill and Feinstein, 1994). Currently, certain phenomena such as population ageing, increased number of people with chronic disease-induced disabilities as well as medical technology development and increased knowledge have led to intensification of the need for knowledge about quality of life (QoL)

and its interaction with medicine in the world (Gugqenmous, 1995). QoL has been addressed as an important issue in health care, especially for chronic diseases, for more than a decade (Ghezelseflo and Esbati, 2013). QoL refers to physical, mental, and social well-being which is perceived by an individual or a group of people, including happiness, satisfaction and honor, health, economic achievements, educational opportunities, and creativity (Aldridge, 1995). Within the past two decades, the QoL has been a significant issue in clinical investigations, has been considered an effective dimension of patients' health care and investigated to differentiate patients, predict disease outcomes, and evaluate treatment interventions (Werner, 2012). Currently, the QoL is a main concern of politicians, scientists, and public health experts and is being used as an index to measure health status in public health and medical investigations (Benzein and Saveman, 1998).

Chronic diseases, such as cancer, greatly affect health and consequently QoL. Being diagnosed with cancer is a very unpleasant and possibly unbelivable experience for any individuals. Cancer can greatly disturb the occupation, socioeconomic status, and family life, especially different domains of the QoL including mental and socioeconomic conditions and sexual function, among the patients (Isikhan et al., 2001). Qualitative information about life not only paves the way for more efficacious treatments and future advancements, but also contributes greatly to promoting support plans and rehabilitative measures (Park, 1959). Since the incidence patterns of different types of cancers are different in different populations, and are associated with certain factors including religious, occupational, social, cultural, custom-related, and racial (possibly inherited), appropriate information about different cancers in any regions and suitable training, including religious teachings and prayer, can help to promote the QoL of patients with cancer (Schrank et al., 2012). Religious adaptation is a frequently used adaptation approach to deal with health-related stressors and highly stressful situations. Religious beliefs are considered important in adapting to some crises such as hard-to-treat diseases, child's or friend's death, and parents' divorce. Religious adaptation can help patients with cancer liver longer and be considered a complicated behavior for long-term survival of the patients. Religious teachings can help the patients communicate with a more extensive universe and believing in a divine entity can be a social, emotional, and practical source of support. As well, religious teachings offer good support of health training. Since this helps people survive difficulties, develop an optimistic insight, and promote self-esteem and self-efficacy (Schrank et al., 2012). The purpose of this study was to investigate the effect of religious and spiritual teachings on the life expectancy and the QoL among patients with common cancers in Chaharmahal va Bakhtiari province.

MATERIALS AND METHODS

This work is an interventional, quasi-experimental study involving pretest-posttest. The study population consisted of all the patients with different types of cancer in Chaharmahal va Bakhtiari province. Two hundred people were selected from all of the patients with different types of cancer in Chaharmahal va Bakhtiari by random sampling. The sample size was determined by making a comparison between two groups using the relevant formula, determining the intervention's effect size, and the confidence interval (CI) 95%.

One year since cancer development and being resident in Chaharmahal va Bakhtiari province were the most important inclusion criteria. Investigated sociodemographic characteristics in this study were age, gender, marital status, education level, employment status, economic status, family members number, the duration of caring for the patient, the type of cancer, the date at cancer development, the type of covering insurance, weight, height, and family history of cancer. SF-36 included some items on physical functioning, physical role playing, bodily pain, general health, energy and vitality, social functioning, emotional role playing, and mental health.

First, the questionnaires were administered to the patients. Then, healthy lifestyle from the Quran perspective was taught to the people

by a psychologist, a counselor, and a clergyman through face to face training, group discussions, and pamphlets. Eight weeks after completion of the teachings, the questionnaires were re-administered to the patients. The data were analyzed by descriptive statistics including mean [standard deviation (SD)] and analytical statistics (paired t-test) in SPSS 20.

To observe research ethics, the people provided written consent, the ethics committee of the university approved the study protocol, and the data were dealt with confidential.

RESULTS

The majority of the patients were men, unemployed, literate (able to simply read and write),

Table 1: Distribution of demographic characteristics of the patients with cancer in Chaharmahal va Bakhtiari province

Variables	Characteristics	Frequency (%)
Gender	Male	114 (57)
	Female	86 (43)
Educational levels	Simply able to read and write	132 (66)
	Lower than secondary education	14 (7)
	Secondary education	34 (17)
	Higher than secondary education	20 (10)
Marital status	Single	26 (13)
	Married	172 (86)
	Divorced	0 (0)
	Widow/widower	2 (1)
Employment status	Unemployed	142 (71)
	Employed	18 (9)
	Retired	32 (16)
	Miscellaneous	8 (4)
Economic status	High	0 (0)
	Moderate	50 (25)
	Poor	150 (75)
Age	17-30	18 (9)
	31-60	100 (50)
	61<	82 (41)
Height	158>	24 (12)
	170-158	112 (51)
	170<	64 (32)
Weight	30-60	140 (70)
	80-61	32 (16)
	81<	28 (14)
No. of family members living with each other	1-Apr	130 (65)
	5-Aug	58 (29)
	9<	12 (6)
Caregiver's relationship with patient	The patient himself/herself	16 (8)
	Wife	50 (25)
	Son	30 (15)
	Daughter	20 (10)
	Miscellaneous	84 (42)

Table 2: Comparison of quality of life between before and after intervention

Dimension	Before Intervention		After Intervention		
	Mean	Standard deviation	Mean	Standard deviation	*P* value
Physical Function	16.73	5.91	15.77	4.46	0.144
Role limitations due to physical health	3.92	0.51	3.76	0.92	0.62
Role limitations due to emotional problems	2.96	0.26	2.85	0.58	0.631
Energy/Fatigue	9.27	1.94	9.49	1.98	1.08
Emotional well-being	12.12	2.71	12.51	2.74	0.175
Social Functioning	5.37	1.96	5.59	1.88	0.096
Pain	7.09	2.37	7.51	2.19	0.191
General Health	9.19	1.71	9.31	1.71	0.07

Table 3: Comparison of life expectancy between before and after intervention

Variables	Mean	Standard deviation	p-value
Life expectancy score before intervention	154.22	19.34	0.875
Life expectancy score	154.58	20.87	

and married and had a low economic status. In addition, most of them were 31-60 years old, weighed 30-60 kg, were 159-170 cm high, and lived in one- to four-member families. The most frequent cancer was breast cancer followed by leukemia and gastric cancer (Table 1).

Average QoL in eight dimensions was calculated before and after the intervention. The results showed that the intervention had no effect on the QoL in these patients (P>0.05). Moreover, Tables 2 and 3 indicated that there was not significant effect of the intervention on life expectancy before and after the intervention (P=0.857).

DISCUSSION

Recently, the effects of religion and spirituality have been widely investigated on different domains of physical and mental health. Some studies have demonstrated that the spirituality is highly associated with general health, such that religion and spirituality are considered important resources to adapt to life stressors. Indeed, spirituality not only affects temperaments and mental health, but also improves physical conditions (Ghezelseflo and Esbati, 2013). Besides that, spirituality promotes the ability to deal with the incidence of diseases and speeds up recovery (Aldridge, 1995). Debilitating and chronic diseases may cause certain challenges for people regarding the meaning and purpose of life (Werner, 2012). Over the past 20 years, the association of spirituality has been highlighted with the process of investigating the QoL (Harirchi et al., 2004). Many studies have indicated the association between spirituality, and physical, mental health and adaptation to disease (Benzein and Saveman, 1998).

Inconsistent with our findings, Allahbakhshian et al study on the association between spiritual health and the QoL among patients with multiple sclerosis, indicated a significant association between spiritual health's religious domain and mental QoL as well as existential domain and physical and mental QoL

(Allahbakhshian et al., 2010). Bossing et al found a moderate, significant relationship between the QoL and spiritual health among cancer patients (Bergsma and Engel, 1988). In addition, Jadidi et al found a significant association between spiritual health and QoL in the elderly (Hayry, 1991).

In Hamid et al study, the mean scores of anxiety and depression decreased and that of the QoL increased significantly in intervention group compared to control group. This finding indicated that group meaning therapy caused relief of anxiety and depression and promotion of the QoL in patients with cancer (Hamid et al., 2011).

Moreover, inconsistent with our findings, Saffari et al study demonstrated that religion can be considered an effective factor on the QoL of patients with cancer, and their QoL can be considerably promoted through strengthening their religious beliefs (Saffari et al., 2012). The results of our study indicated that training healthy lifestyle from the Quran perspective had no significant effect in improving the QoL and life expectancy in the patients with cancer ($P>0.05$ and 0.857, respectively).

CONCLUSION

The inconsistency between the findings of this study and those of other studies, confirming religion's effect in promoting the QoL and life expectancy, may be attributed to the difference in the methods, study population, and sample size among the works, or high level of religious beliefs among patients with cancer in Chaharmahal va Bakhtiari province. To investigate the effect of training on the levels of QoL and life expectancy among cancer patients, it is recommended to have the patients attend the lectures about healthy lifestyle, to investigated them for the levels of the QoL and life expectancy once every two months, and then to compare the results among the intervals and with those prior to the intervention. Moreover, it should be determined that on which type(s) of cancer the effects of these interventions are more pronounced.

ACKNOWLEDGEMENT

This article was derived from a research project no. 2354-01-80-1393. Hereby, we gratefully thank the Research and Technology Deputy and the Treatment Deputy of the Shahrekord University of Medical Sciences, the staff of the hospitals, and the patients and their families for cooperation in this study.

REFERENCES

1. Aldridge, D. Spirituality, Hope and Music-Therapy in Palliative Care. *Art Psychother,* **22**(2): 103-9 (1995).
2. Allahbakhshian, M., Jaffarpour, M., Parvizy, S., Haghani, H. A Survey on relationship between spiritual wellbeing and quality of life in multiple sclerosis patients. *Zahedan J Res Med Sci,* **12**(3): 29-33 (2010).
3. Benzein, E., Saveman, B.I. One step towards the understanding of hope: a concept analysis. *Int J Nurs Stud,* **35**(6): 322-9 (1998).
4. Bergsma, J., Engel, G.L. Quality of Life - Does Measurement Help. *Health Policy,* **10**(3): 267-79 (1988).
5. Ghezelseflo, M., Esbati, M. Effectiveness of Hope-oriented Group Therapy on Improving Quality of Life in HIV+ Male Patients. *Procd Soc Behv,* **84**: 534-7 (2013).
6. Gill, T.M., Feinstein, A.R. A critical appraisal of the quality of quality-of-life measurements. *JAMA,* **272**(8): 619-26 (1994).
7. Gugqenmous, I. Quality of life. In: Gugqenmous I. Hoziman I. Quality of life and health: From Black Well Wisenchafet. Berlin, 350 (1995).
8. Hamid, N., Talebiyan, L., Mehrabizade Honarmand, M., Yavari, A.H. Efficacy of Logotherapy on depression, anxiety and quality of life of cancer patients. Journal of Psychological Outcomes (Education and

Psychology) Shahid Chamran University of Ahvaz, **4**(2): 199–224 (2011).
9. Harirchi, A., Rasooli, A., Montazeri, A. Comparison quality of life in hemodialysis patients and kidney transplanting patients. *Payesh,* **3**(2): 117-21 (2004).
10. Hayry, M. Measuring the Quality-of-Life-Why, How and What. *Theor Med,* **12**(2): 97-116 (1991).
11. Isikhan, V., Guner, P., Komurcu, S., Ozet, A., Arpaci, F., Ozturk, B. The relationship between disease features and quality of life in patients with cancer-I. *Cancer Nurs,* **24**(6): 490-5 (2001).
12. Park, K. Quality of health. In: Park SB. Text Book of prevention and social medicine: From Jabalpur. India, **14**(17) (1959).
13. Saffari, M., Zeidi, I.M., Pakpour, A.H. Role of Religious Beliefs in Quality of Life of Patients with Cancer. *Hakim Research Journal,* **15**(3): 243- 50 (2012).
14. Schrank, B., Woppmann, A., Hay, A.G., Sibitz, I., Zehetmayer, S., Lauber, C. Validation of the Integrative Hope Scale in people with psychosis. *Psychiat Res* **198**(3): 395-9 (2012).
15. Werner, S. Subjective well-being, hope, and needs of individuals with serious mental illness. *Psychiat Res,* **196**(2-3): 214-9 (2012).