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Original Article

The effect of two praying methods on quality of life of hospitalized cancer patients

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Abstract

BACKGROUND: Improving quality of life (QoL) has been an important consideration in patients with chronic diseases such as cancer particularly in last two decades. Praying is a valuable nursing care to improve cancer patients' QoL. However, controversies still exist about the effect of different types of praying. This study was conducted to compare the impact of private and collective praying on cancer patients' QoL.

METHODS: A controlled clinical trial was conducted with 70 cancer patients who admitted to Seyyed al Shohada Hospital of Isfahan University of Medical Sciences in 2010. Patients were randomly assigned to two groups of private and collective praying. QoL was assessed using the World Health Organization Quality Of Life Brief (WHOQoL-BREF) questionnaire.

RESULTS: In both private and collective praying methods, the QoL scores increased after the intervention. The mean difference of QoL score between two groups of private praying [0.16(0.32)] and collective praying [0.23(0.15)] was statistically significant ($p = 0.04$).

CONCLUSIONS: Our findings suggest that praying might improve cancer patients' QoL. In addition, collective praying might be more efficacious than private praying in improving cancer patients' QoL. Further studies with a larger sample size are needed to confirm its effectiveness.

KEY WORDS: Cancer, nursing care, quality of life, praying, spirituality.

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Cancer is a chronic disease that affects all aspects of a person's life, therefore it needs a holistic care.[1] Nursing care also means considering all aspects of patients life such as physical, psychological and social.[2] Nurses often have longer and closer contact with patients compared to other care providers; therefore, they have an opportunity to identify patients' problems in all of these dimensions.[3] Addressing the concept of quality of life (QoL) is consistent with holistic cancer care.[1,4,5] In other words, assessing and improving QoL in cancer patients is somehow responding to patients' demands for living and not just surviving.[1]

Spirituality is one of the basic needs of cancer patients that affects their QoL and should be considered by nurses. Spiritual care is inseparable from nursing care[3]. Nurses support physical, mental and spiritual status of patients by their sacrifice and humanity. Spirituality, faith, religion and also the way that they impact peoples daily life, health and illness are important concepts for nurses to be understood for an appropriate care[6]. Nurses have opportunity to improve patients' spirituality.[7]

Among the religious and spiritual resources, the major source which is frequently used by individuals is praying.[8] Alexis stated about positive effects of praying; saying that what we are

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fully sure about praying is its specific and tangible outcomes. Although praying is strange, we should accept it as a fact that might solve our problems.[9] However, people choose different methods of praying and worship based on their habits and attitudes while suffering from problems, especially health challenges.

Many research studies have been accomplished on the effectiveness of praying around the world.[10] In some of these research studies such as Johnson et al., praying had significant impact on improving QoL[11] while some other studies like Woods et al. did not report such an impact.[12] To our knowledge, there is no study that two types of individual and collective praying were compared in context of Iranian culture. Moreover, researchers have experienced that cancer patients tend to pray in their beds during hospitalization, reading prayer books or requesting others such as nurses and their beloved ones to pray with them. Some patients also tend to go to the mosque, sacred places or join a praying group to pray with others. Comparative study of private and collective praying can provide an appropriate support for spiritual care of patients who are living with cancer. This study was designed with the aim of comparing the effect of two methods of private and collective praying on QoL of cancer patients.

Methods

This study as a part of a bigger study was conducted in Seyyed al Shohada Hospital affiliated to Isfahan University of Medical Sciences in 2010. The study was a two-group controlled clinical trial. The subjects were selected from cancer patients who were admitted in general, especial and surgical wards using convenient sampling method and were randomly allocated to private or collective praying groups. Any adult cancer patient aged 18 to 55 years without any record of current psychological problems and was Shiite Moslem with an Iranian nationality was eligible to take part in the study provided that he or she could read the prayer book while listening to the tape and also fill the questionnaire. Moreover, their disease's stage should not have been more than two, patients should have been aware of their cancer diagnosis and they should not have had significant stress and crisis according to Holm's and Raheh assessment tool. Excluded subjects were those who had no willingness to continue study and had more than one session absence or were discharged from hospital before accomplishing the 5 days intervention period.

Sample size was calculated using power analysis with a significance level of 5% and power of 80%. This way, 70 patients selected and randomly divided to two groups of private (n = 35) and collective (n = 35) praying. Data collection was done by means of three questionnaires. The first questionnaire collected demographic data regarding age, sex, marital status, educational level, type of cancer and type of treatment. The second questionnaire consisted of "Holm's and Raheh" assessment criterion of stress and crisis during the last year. The patient's score more than 150 indicated too much stress and the patient were excluded from the study. The third questionnaire was the World Health Organization Quality Of Life Brief (WHOQoL-BREF) questionnaire that used 26 items which assessed the QoL for four domains or dimensions, including physical (7 items), psychological (6 items), social relationship (3 items), and environmental (8 items) domains, and 2 items measuring overall QoL and general health. All 26 items were rated on a 5-point Likert scale. Reliability of this instrument was reported over 90% by the World Health Organization (WHO). In Iran, the validity and reliability of this tool was determined by Nejat et al. with a general Cronbach's alpha coefficient of over 0.70. They have concluded that Persian version of this tool has generally an acceptable validity and reliability.[13]

Sampling was accomplished after obtaining permission of ethics committee of Isfahan University of Medical Sciences. All samples filled out three questionnaires after taking an informed consent. The intervention in both groups was done once a day about an hour before the sunset for 5 consecutive days. The clinical intervention in the private praying group

was done by means of a tape including recorded praying, walkman and headphone and praying book entitled "communication with God". In the collective praying group, the praying was done by presence of a clergyman among group of patients at the praying house. Subjects recited simultaneously with the clergy in the collective praying. The prayers were Ale Yasin pilgrimage, Tavassol supplication, and Imam Ali (PBUH) prayers at Kufa mosque. After 5 days of intervention, the QoL questionnaire was again completed immediately after the last session of intervention.

Statistical analysis of data was done by means of SPSS version 16 software using chi-square and Student's t-test. The pre- and post-intervention differences of QoL obtained from both private and collective praying groups were compared using independent t-test. Paired t-test was applied to compare QoL scores before and after the intervention in each group.

Results

Demographic data of subjects are listed in table 1. In terms of sex, age, marital status, educational level, type of cancer and treatment, no significant differences was seen between two intervention groups.

In the private praying group, QoL significantly increased from 2.83 (0.68) at baseline to 3.01 (0.64) after the intervention ($p = 0.001$, $t = -7.13$). In the collective praying group, it significantly increased from 3.04 (0.57) at baseline to 3.28 (0.44) after the intervention ($p = 0.001$, $t = -7.23$).

While the pre-post QoL mean difference in the private praying group was 0.16 (0.32), in the collective praying group, it was 0.23 (0.15) and the difference between two groups was statistically significant ($p = 0.04$, $t = -2.07$).

Discussion

The QoL scores in both private and collective praying groups significantly improved after the intervention which shows possible efficacy of praying. However, collective praying was more effective. This comparison was quite novel. Some studies on various diseases including cancer indicated the impact of different types of praying particularly intercessory praying on patients' outcomes including QoL, hypertension, anxiety, depression, and even mortality rate of patients.[10]

Table 1. Demographic data

	Private praying group	Collective praying group
Age	36.69 (10.73)	35.35 (10.34)
Sex		
Male	37.10%	37.10%
Female	62.90%	62.90%
Marital status		
Married	80%	85.70%
Unmarried	20%	14.30%
Education		
Diploma	48.60%	42.90%
Other	51.40%	57.10%
Treatment		
Chemotherapy	91.40%	100%
Other	8.60%	
Cancer type		
Leukemia	40%	22.90%
Other	60%	77.10%

In a descriptive study on cancer patients, Johnson et al. determined the effectiveness of prayer as a complementary therapy along with chemotherapy in women with recurrent ovarian cancer and its effects on mood, intellectual status and QoL of these patients. They found that cancer compromised patients' physical, functional, emotional, spiritual and social conditions and also their QoL. They identified that using prayer alongside chemotherapy can improve patients' QoL.[14]

In another study, Seyed Fatemi et al. determined the effect of prayer on the spiritual health and QoL of cancer patients. They reached to this conclusion that the mean score of spiritual health of patients was 98.3 (14.3) and the spiritual health of most patients was in the high range. They found that patients' attitude toward prayer in 52.2% of patients was positive and prayer could promote the spiritual health and QoL of these patients.[15]

There are some studies about prayer in other medical fields. For example, Matthews et al. compared the effect of private prayer and intercessory prayer in patients with rheumatoid arthritis. They came to this conclusion that private prayer was more effective.[16] Safavi et al. evaluated the effect of prayer on blood pressure of women in Isfahan and found the positive effects of prayer on blood pressure.[17] Jahangir et al. in their study on patients with multiple sclerosis found that after the prayer therapy, physical health measures, joy and vitality and the overall QoL score in patients significantly improved after prayer intervention.[18] In another study, they also evaluated the impact of prayer on ferritin and hemoglobin levels in patients with thalassemia. They reached to this conclusion that after the intervention, the average hemoglobin increased and the ferritin level declined and in four cases, patients' intervals for receiving blood increased about twice.[19]

Despite many studies that showed the impact of prayer on QoL of patients with chronic diseases, especially cancer, there are also studies that showed ineffectiveness of prayer. For instance, Meraviglia evaluated the impact of spirituality and prayer on QoL of women who had experienced breast cancer and showed that prayer was positively related with patients' well being while its relation with physical factors was completely reversed. Prayer could not improve QoL of patients.[20]

Woods et al. studied the effect of prayer as a complementary therapy alongside with conventional treatment of patients with alcohol abuse. Results demonstrated that during six months intervention period, no significant difference was determined between intervention and control group. Both groups fully responded to conventional treatment to quit alcohol.[21] Woods' study revealed that there was no significant relation between religious beliefs and religious practices like prayer of patents with aids and their body immune status.[12]

Our findings identified that prayer therapy, especially collective praying can be effective in improving QoL of patients with cancer. One reason for positive effectiveness of collective praying in comparison with private praying may be Shiites belief on reaching answered prayer in a praying group. In Islamic culture, praying in group is so important. In some narrations from our Prophet Mohammad (PBUH), people are encouraged to be together and pray collectively. He stated that "God regards people who gather in group". In Islam, some of the important collective worships such as pilgrimage, prayer and the Friday prayer are recommended. Practical approach of our Prophet Mohammad (PBUH) and our innocent Imams also confirmed collective prayer. For instance, Imam Sadiq (PBUH) stated "Whenever my father encountered a difficult and unpleasant situation, he brought women and children together and then prayed with them". In addition, it was narrated from Imam Sadiq (PBUH) that he said "I have never seen four people get together and start praying God, unless God answers the prayer before they get apart".[22]

Despite the positive impact of prayer on QoL of cancer patients, this intervention had

its own limitations. Disease stage was one of the variables that could affect the general status of these patients. For a better result, we selected patients in their first and second stage of their disease for better collaboration. Some other confounders of this intervention was tendency of patients for different types of praying at the time of illness and hospitalization, recitation of prayer by others such as roommates or relatives of the patients and broadcasting of the religious voices from radio and television. In order to control these confounding factors as much as possible, researchers randomly grouped patients in two private and collective prayer groups. They also tried to provide an equal condition in two interventional groups. We used the 26-item WHOQoL, it is recommended that this study is conducted with a larger sample size and also another questionnaire like 100-item WHOQoL. The efficacy of this intervention over the longer time should be evaluated too.

The authors declare no conflict of interest in this study.

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