Research Paper:
The Elders' Spiritual Well-Being and Their Quality of Life: A Cross-Sectional Study

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ABSTRACT

Background: Because of the rising number of elderly people, their Quality of Life have become more important. Health status has been considered as one of the factors that affect life quality and Spiritual Well-Being is one of its important dimensions. The present study aimed to determine the relationship between Spiritual Well-Being and Quality of Life among the elderly people residing in Arak City, Iran.

Methods: This is a cross-sectional and correlational study. The study sample comprised 400 elderly people residing in Arak, Iran who were selected by cluster sampling method. Spiritual Well-Being was measured using Spiritual Well-Being scale (SWB) and the Quality of Life was assessed by Older People's Quality of Life Questionnaire (OPQOL-35). The obtained data were analyzed by descriptive statistics, along with Pearson correlation test, t-test, and ANOVA in SPSS V. 16.

Results: The Mean±SD score of life quality among the elderlies was 76.24±17.84 and was associated with their marital status and education level (P=0.001). The Spiritual Well-Being score of most elderly people ranged from moderate to high and the Mean±SD score of their Spiritual Well-Being was 96.47±13.43. There was a significant relationship between Spiritual Well-Being and the Quality of Life (r=0.37, P=0.0001).

Conclusion: According to the findings, more attention should be paid to the factors related to the Quality of Life for taking care of the elderly people. Considering the relationship between Spiritual Well-Being and Quality of Life among these elderlies, provision of spiritual care for this group of society is recommended.

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Highlights

- Married elderly people reported a higher quality of life than others.
- Spiritual performance is not related to loss in physical ability.
- All dimensions of quality of life among Iranian elderly men were significantly higher than those in older Iranian women.
- There is a correlation between spiritual well-being and quality of life.

Plain Language Summary

The number of elderly people is increasing all over the world and it is important to know about their quality of life. One of the important areas affecting on quality of life is spiritual health state that we aimed to clarify their relationship. A group of elderly people living in one of the Iranian cities, Arak, were asked to fill the questionnaire related to their health state. After analyzing the gathered data, we realized the strong relationship between spiritual well-being and how these people find life enjoyable and being satisfied.

1. Background

Health improvement, preventive care development, and controlling communicable diseases have increased life span and the population of the elderlies. Aging phenomenon is also the consequence of social and economic conditions, reduction of mortality and morbidity, as well as an increase in life expectancy in the developed countries. However, this is also true for developing countries. It is anticipated that by 2020, the number of world's older population will reach a billion. In general, 16% of the population in the industrialized countries are elderly people, and it is expected to increase up to 3% over the next few decades (Chand & Tung 2014). According to 2011 Iran Statistical Center report, the number of elderly people over 60 years old was about 6.2 million, about 8.2% of the population of Iran (Mehri Nejad, Ramezan Saatchi & Paydar 2017). Obviously, the elderly population of Iran will increase in the future (Zeinalhajlu, Amini & Tabrizi 2015).

Some factors such as the increasing number of elderly people suffering from disabilities and functional disorders, lack of a supportive system in the families due to shrinking family size, women's employment, and family members' dispersion will increase the request for long-term care for the elderly in future decades (López-Soto 2015). "Increasing the life expectancy" was regarded as the main challenge of general health in the 20th century, which has changed into "life with better quality" in the 21st century. The main objective of life in old age is not only living longer, but also how to live; therefore, their lifestyle and life quality should be taken into consideration and the familiarity with the factors affecting their life quality can contribute to the quality of the elderlies' life (Birren et al. 2014).

Along with old age, cognitive compatibility and self-reliance may decrease which in turn influences the life quality of the elderlies (Zeinalhajlu, Amini & Tabrizi 2015). Generally, aging is a predisposing factor to some diseases and disabilities. Furthermore, negative effects of ageing on the ability to protect independence will call for assistance (Kiosses & Alexopoulos 2014). These problems and difficulties, which occur physiologically during the old age, can influence the reduction of life quality during the elderly period. In Iran, about 28% of the elderly people have limitations in physical activities and need help to do their daily activities that leads to poor Quality of Life (Awick et al. 2015).

A study conducted on elderly people residing in Tehran City demonstrated a high rate of disability among this population (Rashedi et al. 2016). Given that the life quality can be easily threatened in this period, consideration of contextual factors influencing the life quality of elderlies can play a significant role in enhancing their Quality of Life (Awick et al. 2015). Based on some evidence, lifestyle can influence physical aging (Kim et al. 2015). Meanwhile, some studies have indicated that the risk of physical and mental diseases among elderly people who live alone was higher than those living with their family members (Liang & Lu 2014).

Health status as an important factor can affect Quality of Life, especially among the elderlies. Based on the World Health Organization definition, health has physical, mental, social, and spiritual dimensions. It is believed that spiritual dimension of health should be greatly emphasized. Some studies revealed that without Spiritual Well-Being, other mental, social, and physical dimensions will not function properly or reach their maximum capacity. Therefore, the highest level of life quality will not be achieved (Chatterji et al. 2015). Recently, a relationship has been found between religion, spirituality, and health status. Some studies have reported that spirituality plays a significant role in one's health, because religion and spirituality are considered as two important sources for adaptation with stressful events of life (Anand, Jones & Gill 2015).

The results of the studies conducted on Spiritual Well-Being among the patients suffering from cancer have revealed a direct relationship between the patients' age and their Spiritual Well-Being, as 96% of the patients over 70 years had high Spiritual Well-Being. Recently, some studies have suggested spiritual forces as a significant factor which provides equanimity, strength, and indescribable vitality for elderly people. It has attracted a lot of attention among nursing theorists, too (Jadidi et al. 2011).

The elderly people with stronger religious beliefs enjoy a better health status compared to others. Furthermore, it has been found that faithful elderlies who suffer from a physical disease have better performance and receive better results from their treatments, compared to those with weak faith (Kim, Kim-Godwin & Koenig 2016). Some other studies have found a significant relationship among spirituality, religiosity, and mental health of elderly people over the age of 60 (Zimmer et al. 2016). Therefore, given the importance of Quality of Life among the elderlies, the present study was conducted to determine the relationship between Spiritual Well-Being and Quality of Life among elderly people living in Arak City, Iran.

2. Materials and Methods

This was a cross-sectional, correlational study which was conducted on 400 elderly people over 60 years living in Arak, a city in the center of Iran. The study data were collected through cluster sampling method. For this purpose, researchers divided the city into four areas using the city map and Arak municipality quadric-district division. So the research could cover the whole city. Then, the researchers marked crowded places in each area like malls, parks, bus stops, and mosques and filled the questionnaires by interviewing citizens older than 60, considering at least 95 subjects from each area. The inclusion criteria comprised having no chronic disability, physical and mental illness, lacking cognitive disorders and being literate or able to interview. Since most of the subjects were illiterate, the researchers filled in most questionnaires by interview. The sampling lasted for three months (December 2016, January and February 2017).

The obtained data were collected by the Older People's Quality of Life Questionnaire (OPQOL-35) and Spiritual Well-Being Scale (SWB). OPQOL-35 has been designed by Bowling and Stenner and its psychometric properties were evaluated in 2011. The reliability and validity of this questionnaire and its Persian version was confirmed in some studies (Jokinen, 2014; Nikkhah et al. 2017). The questionnaire is a 5-point Likert-type scale that rates Quality of Life from (Strongly agree) to (Strongly disagree) and consists of 35 items of religion/culture (2 items), health (4 items); overall life (4 items); area: home and neighborhood (4 items); financial status (4 items); psychological and emotional well-being (4 items); freedom, independence, control over life (5 items); and social relationships and participation (8 items). Higher scores indicate higher QoL. The total scale ranges from 35 (QoL could not be worse) to 175 (QoL could not be better) (Bowling 2009).

Spiritual Well-Being was measured by SWB which is designed by Paluotzian and Ellison and consists of 20 questions, which is answered based on a 6-point Likert-type scale from "completely disagree" to "completely agree". The scale has been divided into two subscales of religious and existential well-being, each including 10 questions, and the total score ranges from 10 to 60. Religious well-being is shown by individual phrases and existential well-being by coupled phrases. The total score is the sum of the two subscales and ranged from 20 to 120. In sum, the scores are classified into three categories: low Spiritual Well-Being (20-40), moderate Spiritual Well-Being (41-99) and high Spiritual Well-Being (100-120) (Chen et al. 2017).

Poloutzian and Ellison calculated its Cronbach α coefficients as 0.91, and 0.93 for religious well-being and existential well-being, respectively. In addition, Allahbakhshian et al. (2010) obtained the Cronbach α coefficient of 0.82 for the questionnaire after translating the questionnaire into Persian, and they also confirmed its validity. The collected data were analyzed by descriptive statistics of frequency, mean and standard deviation, and inferential statistics of Pearson correlation coefficient, t-test and ANOVA in SPSS V. 16.

Table 1. Demographic characteristics of the study elderlies

Variable Type		Demographic Characteristics
Age, y		68.94 ± 7.59
Sex	Male	61 (244)
	Female	39 (156)
Marital status	Single	9.5 (38)
	Married	69.45 (278)
	Divorced	3.8 (15)
	Widow/widower	17.2 (69)
Level of education	Illiterate	29.2 (117)
	Elementary	24 (96)
	Middle school and high school	11.3 (45)
	Diploma and higher	35.4 (142)

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Data are presented as Mean±SD or No. (%)

3. Results

Table 1 presents the demographic characteristics of the study samples. The study results indicated that Mean±SD score of the elderly Quality of Life was 76.24±17.87. Their mean score of Spiritual Well-Being was 96.47±13.43. In other words, the Spiritual Well-Being of a majority of the subjects was at moderate (48.2%) or high (50.4%) level. Although the female's mean score of Spiritual Well-Being was slightly greater than that of males, the difference was not statistically significant. Moreover, the mean score of religious well-being was greater than that of existential well-being (Table 2).

Table 2. Descriptive statistics of the research variables

Variable	Mean ± SD	Max	Min
Spiritual well-being	96.43 ± 13.43	120	20
Existential well-being	47.29 ± 7.9	60	10
Religious well-being	48.7 ± 7.17	60	10
Quality of life	76.24 ± 17.84	160	48
Health	10.22 ± 2.27	18	4
Social relations	8.72 ± 3.76	25	5
Independence, control of life and freedom	8.75 ± 33.6	20	4
Home and neighborhood	65.5 ± 7.2	20	4
Mental and emotional health	18.8 ± 98.2	19	4
Financial condition	35.11 ± 79.8	16	4
Leisure time and activities	22.12 ± 98.3	28	6

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Table 3. The correlation between different dimensions of Quality of Life and Spiritual Well-Being

Variable		Pearson Correlation Test	
		R	P
Quality of Life	Existential well-being	0.326	0.000
	Religious well-being	0.587	0.000
	Spiritual well-being	0.456	0.000
Spiritual well-being	Health	0.65	0.022
	Social relations	0.022	0.964
	Independence, control of life and freedom	0.135	0.007
	Home and neighborhood	0.36	0.000
	Mental and emotional health	0.043	0.000
	Financial condition	0.087	0.081
	Leisure time and activities	0.32	0.000
	Quality of Life	0.37	0.000

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The participant's Spiritual Well-Being score was not related to any demographic variables (P=0.08). Similarly, the scores of existential and religious well-being had no relationship with any demographic variables (P=0.06). As shown in Table 3, the Pearson correlational coefficient test demonstrated that Spiritual Well-Being of the elderly people was related to their life quality (r=0.456; P=0.0001).

Based on t test results, the Quality of Life score was not related to the gender of the subjects. Furthermore, the results of the ANOVA indicated that the Quality of Life score was associated with marital status and education level (P=0.009), as the widows with lower education level got less score than others. However, the Quality of Life score had no relationship with other demographic variables (P=0.12).

4. Discussion

Since the baseline indicator and normative criterion of the Quality of Life among the elderly have not been already determined in Iran, we can assume the mean of 50% with a standard deviation of 10% as the norm of the community and an acceptable indicator for the Quality of Life among the elderlies considering 0-100 criteria which are relevant to the present questionnaire (Jadidi et al. 2011). Therefore, the Quality of Life of the elderly was moderate in the present study, which is consistent with the results of some other studies.

Kumar & Majumdar (2014), Yin et al. (2017), and Hongthong & Somrongthong (2015) determined the life quality among the elderlies as moderate in India, Malaysia, and Thailand, respectively. However, some other studies have shown that the Quality of Life among elderly people in Iran is not desirable (Mazloomymahmoodabad et al. 2014; Nazemi et al. 2015; Jahromi, Ramezanli & Taheri 2015).

In this study, the results of t test indicated that the Quality of Life score was not related to the gender. This finding was congruent with some other studies (Steptoe, Deaton & Stone 2015; Ebrahimi et al. 2014). However, the total mean score of life quality among Iranian male elderlies was significantly higher than that of woman in all dimensions (Hajian-Tilaki, Heidari & Hajian-Tilaki 2017). In addition, some studies have reported that the male subjects have obtained higher Quality of Life scores compared to their female counterparts (Khaje-Bishak et al. 2014). A study in Saudi Arabia indicated a significant difference between the total mean score of life quality among elderly men and women (Soliman et al. 2015). A study in Vietnam assessed the total life quality scores among the elderly men (75.32) and women (72.32) and reported that the life quality among the el-

derly men in all dimensions was higher than that of the women (Van Nguyen et al. 2017).

Some studies have shown that the Quality of Life score among elderly women was lower than that of men at the same age and have related it to longer life span, more illnesses, lower educational level and income, lack of autonomy, and more social and cultural limitations imposed on women (Mangen et al. 2017). The mean score of life quality among the elderlies in Belo Horizonte City in Brazil and in Taiwan was 52.57 and 58.3, respectively (Miranda, Soares & Silva 2016; Chen & Chen 2017).

As the results of these two studies indicate, the mean score of Quality of Life among these elderlies is higher than that the score in the present study. It can be related to the cultural differences, type of disease, and socioeconomic status of the subjects. Moreover, the results of the present study indicated no relationship between the mean score of Quality of Life and other variables, except for marital status; as the married elderlies reported higher Quality of Life than others (P=0.009) which is consistent with the results of some studies (Jadidi et al. 2011; Hajian-Tilaki, Heidari & Hajian-Tilaki 2017; Shi et al. 2017; Wang et al. 2017b; Zhou & Hearst 2016). However the results were inconsistent with some other studies (Buhse, Banker & Clement 2014). In addition, some studies indicate that elderly people with higher educational level have better health status (Chen, Feng & Li 2014; Dai et al. 2016; Tkatch et al. 2016).

The Mean±SD score of Spiritual Well-Being of the elderly in the present study was high (96.47±13.43) and more than half of the subjects achieved a high Spiritual Well-Being score which is in line with many studies (Anand, Jones & Gill 2015; Adib-Hajbaghery & Faraji 2015; Alihosseini, Najar & Haghighizadeh 2017; Chaves & Gil 2015). Some studies have concluded that religion and spirituality are important sources of strength and support among elderly people, which help them to tolerate critical and stressful situations (Jadidi et al. 2011). Although physical abilities decline with aging, spiritual function does not necessarily weaken (Nasiry, Bagheri & Malekzadeh 2016).

In the current study, no significant difference was found between different dimensions of Spiritual Well-Being. However, the finding was inconsistent with the results of other studies (Nasiry, Bagheri & Malekzadeh 2016; Seraji, Shojaezade & Rakhshani 2016). Some studies have indicated that Spiritual Well-Being is related to age, marital status, and educational level, i.e. those with deceased or divorced spouse and lower-education had lower Spiritual Well-Being scores than others (Anand, Jones & Gill 2015; Poor et al. 2016; Ebrahimi et al. 2014). It was found that older people with stronger religious beliefs have a greater life expectancy than others (Poor et al. 2016). However, the present study, did not confirm these results.

The Pearson correlation test determined a significant relationship between Spiritual Well-Being and elderlies' Quality of Life (r=0.445; P=0.000). In fact, based on this finding, the Quality of Life and Spiritual Well-Being assigned 20% of common variance to themselves. In other words, 20% of life quality changes are related to Spiritual Well-Being. This finding is in line with some other studies which emphasized that higher spirituality leads to better health status (Finocchiaro, Roth & Connelly 2014; Fredriksen-Goldsen 2014; Ryff & Singer 2008; Velasco-Gonzalez & Rioux 2014; Wang, Chow & Chan 2017a).

In fact, spirituality during loneliness and difficulties helps to relax and reduce anxiety, and induces a sense of meaningfulness, purposefulness, creativity, and cohesion (Lewis et al. 2014). According to Walker et al. (2017) optimism or a report of good health status, despite physical condition, is a possible way to explain the relationship between Spiritual Well-Being and Quality of Life, as elderly people with higher level of Spiritual Well-Being may be more optimistic and have a better view of their health status.

Body, mind, and spirit are associated with each other; accordingly providing spiritual care is an essential part of holistic nursing care. In other words, health care providers should consider physical, psychological, sociocultural, and spiritual dimensions of health in their caring services (Farahaninia et al. 2018). Based on the results of the present study, spirituality and teaching the ways of Spiritual Well-Being promotion should be considered by those involved in providing care to elders. Along with meeting elders' spiritual needs, their Quality of Life can be improved.

On the other hand, a comprehensive care of patients, including spiritual care and attention to their mental and psychological problems should be prioritized as the main objective of nursing. Therefore, in order to improve the Quality of Life of patients, especially elderlies, it is necessary to pay attention to the spiritual dimension of their lives. Furthermore, the necessary conditions should be provided for nurses' participation in training courses, and conferences on the spiritual aspects of human existence and spiritual care to enhance their knowledge and

skills in this field. Because of the descriptive correlational design of the study, the results should be generalized with caution.

Ethical Considerations

Compliance with ethical guidelines

After obtaining permission from the Ethics Committee of Arak University of Medical Sciences, the researchers completed the study questionnaires. All participants signed the informed consent before filling in the questionnaire and then the questionnaire was given to them along with providing the necessary explanations about the purpose of the study and confidentiality of the obtained data.

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Authors contributions

All authors contributed in preparing this article.

Conflicts of interest

The authors declared no conflict of interest.

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