# Comparison of death anxiety, spiritual health and loneliness among elderly men and women in elderly centers of Kermanshah

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Résumé: Le vieillissement est un phénomène croissant dans le monde, y compris en Iran, ce qui est évident en comparant les résultats des recensements des dernières années. Le but principal de cette étude est de comparer l'anxiété de la mort, la santé spirituelle et la solitude chez les hommes et les femmes âgés dans les centres de personnes âgées à Kermanshah. Le type de cette recherche est causal-comparatif. La population statistique de la recherche comprenait toutes les personnes âgées à Kermanshah. 126 personnes ont été sélectionnées à l'aide de la méthode d'échantillonnage disponible. Pour mesurer les variables, a) Collett-Lester Depression Depress Anxiety Scale; b) questionnaire de solitude; et (c) l'échelle de santé spirituelle a été utilisée. Le test T a été utilisé pour analyser les données. Les résultats ont montré qu'il existe une différence significative entre les hommes et les femmes concernant l'anxiété de mort, la santé spirituelle et la solitude, de sorte que les scores moyens des deux composantes de l'auto-décès et de la mort chez les femmes âgées sont plus élevés que les hommes les composantes de la santé spirituelle (santé existentielle et santé religieuse) chez les femmes âgées étaient plus élevées que chez les hommes âgés et la moyenne des deux composantes de la solitude dues aux relations familiales et aux symptômes émotionnels de la solitude était plus élevée chez les hommes âgés que chez les femmes âgées.

Mots-clés : anxiété de mort, santé spirituelle, solitude, personnes âgées.

#### 1. Introduction

Getting old is a growing phenomenon in the world, including Iran, which is evident in the comparison between the results of the censuses made in recent years. The results of census in 1385 showed that 7.3% of the population consisted of middle-aged people, and this ratio increased to 8.2% in 1390. Given this increase and the importance of problems in this period, meeting the needs and problems of this demographic group can be considered a social imperative (World Health Organization, 2015). Aging cannot be stopped, but by using

appropriate methods, disorders and disabilities related to this period can be prevented or delayed in order to benefit from a long life alongside health and well-being which has always been the object and will of man (Issanchou S, 2015). Some people consider death as a stage in life, and others see it as the end of it. It seems that those who believe in the first view have little to worry about death, but the reality is that, in general, followers of both views get nervous when they think about death (Malliarous, Sarafis, Sotinadou, Serafeim, Karathanasi, Moustaka, 2011). Death anxiety as an unusual and intense fear of death is defined as horror of death or anxiety when thinking about the process of dying or what happens after death (Rice, 2009). When people get old they start thinking about challenges like death of the spouse, reduced physical performance and changes in role such as retirement. Therefore, they tend to develop new relationships (Moberg, 2012). But spirituality and its consequences are a strong source in the person's life to provide the ability to adapt to the needs and individual changes in old age (Manning, 2012).

One of the issues affecting the quality of life – especially among elderly people - is the health condition. Health, as defined by the World Health Organization, has physical, psychological, social and spiritual dimensions. Some scholars believe that spiritual dimension of health needs serious attention. Some studies have shown that without spiritual health, other biological, psychological and social dimensions cannot function properly or reach their maximum capacity, and therefore, the highest level of quality of life cannot be achieved. Indeed, spiritual health makes other dimensions harmonious and increases the adaptation capacity of elderly with changing conditions-including sickness or living in an elderly center (Jadidi, Farahani, Mohammadi and Haghani, 1392). Spiritual health is considered as one of the important dimensions of health along with other physical, psychological and social dimensions. This dimension promotes the general health, is the source of the creation of meaning and purpose in life and is known to have characteristics such as stability in life, peace, feeling of close connection with self, God, society and environment, fit and harmony (Seifirad, Karimi, Sharnsousi and Ahmadi, 2011).

On the other hand, deprivation of social activities makes the elderly susceptible to depression, since non-acceptance by others, social isolation and loneliness are among the most important causes of mental illness in middle ages (Hojjati, Hojjati, Sharifnia, Salmasi, Hosseinzadeh and Farhadi, 2012). Loneliness is a distressing state and occurs when there is a gap between the relationships that the person tends to have and his current relationships (de Jong, van Tilburg, 2016). Evidence suggests that loneliness is a widespread phenomenon, affecting between 25% to 50% of the population over the age of 56 depending on age and sex (Hacihasanoğlu, Yildirim, Karakurt, 2012). The growing number of elderly people who, according to some observers, are neglected as the greatest natural source, considering that old age is a part of life that we are either in it or will be in the future and considering that older people think and worry about death more than other age groups shows the need to pay attention to factors that can reduce the level of death anxiety in this group of people. Evidence suggests that spirituality can help alleviate the anxiety of death, and given the fact that spirituality increases as an innate need during adulthood, and the elderly develop a more mature spiritual in this period, the importance and necessity of research on the spiritual health and its relationship with the anxiety of the death in the elderly is felt. Considering the mentioned issues and since no research has ever been conducted directly about the prediction of death anxiety based on spiritual health and loneliness, as well as considering gender differences and its effect on death anxiety, this study aims to answer the question whether there is any significant difference between

spiritual health and loneliness and death anxiety among elderly men and women in the aging centers of Kermanshah.

#### Research method

The present study is descriptive-correlational. The statistical population of the study consisted of all 60-year-old and higher adults in Kermanshah's elderly care centers in 1396. These people were selected using the Morgan table and available sampling method. The following tools were used to measure the variables:

#### a. Death Anxiety Scale

Collett-Lester's Death Anxiety Scale (1969) was prepared by Collett and Lester. This questionnaire has four subscales and each subscale has eight phrases. In total, there are 32 questions. In 1990, Collett and Lester determined the reliability of this scale for each of the subscales of "self-death", "dying", "death of others", and "dying of others" which were 0.91, 0.89, 0.72, and 87 percent, respectively. These subscales measure the feelings that a person gets because of his own death or others in the general and static sense (imagining his own death and others), and the idea of his death during a gradual process, including aging, mental decline, etc. (dying of self or others). In Iran the revised version of this scale was run on a sample of 200 students for the first time and its coefficient of validity was obtained by correlating with Templer death anxiety scale, which was 00.59 at the significant level of P <0.05; Its reliability was obtained by Cronbach's alpha which was 0.89 and 0.86, respectively (Ismaili and Naderi, 2009).

### b. Spiritual Health Scale

Ellison & Palutzin's Spiritual Health Questionnaire includes 20 questions, ten of which are related to existential health and the other ten are related to religious health. The sum of these two dimensions comprise a spiritual health score ranging from 20 to 120 which is divided into three levels: low (20-40), medium (41-99) and high (120-100). Abbasi et al. (2008) showed the validity and reliability of Ellison and Palutzin's Spiritual Health Questionnaire (alpha coefficient of 0.87) (Jadidi, Farahani, Mohammadi and Haghani, 2013).

### c. Loneliness Scale

This scale was developed by Dehshiri et al. (1388) to measure loneliness and has 38 items in three subscales. The subscales include "loneliness due to family relationships" (16 items), "loneliness due to relationships with friends" (12 items), and "emotional signs of loneliness" (10 items). Total possible scores for these scales is zero and 152 and higher score indicates more loneliness. The reliability coefficient of this scale has been reported 0.92 using Cronbach's alpha. Also, the convergent and divergent validity of the scale was reported through its correlation with the scores of UCLA loneliness scale and the Oxford Happiness Scale (-0.68 and -0.66, respectively). Validity of the scale structure has also been confirmed by factor analysis (Hemmati Alamdarloo, Dehshiri, Shojaee and Hakimi, 1388). The reliability coefficient of this questionnaire was also reported 0.94 in a study on the elderly using Cronbach's alpha (Govari, Forough-Ameri, Foroodnia and Nikian, 1377).

### Findings Descriptive data

In the present study, the frequency distribution of respondents' sex was 48 men (38.1%) and 78 women (61.9%). In the men's group, 5 were never married (10.4%), 10 had dead spouse (20.8%), 10 were divorced (20.8%), and 23 were married to spouse (47.9%). In the female group, 6 were never married (7.7%), 21 had dead spouse (26.9%), 22 were divorced (28.2%) and 29 were married to their spouse (37.2%). Also in the men's group, 36 were undergraduate or uneducated (75%), 9 had diploma (18.8%), and 3 had academic education (6.3%), and in the group of women, 61 were undergraduate or illiterate (78.2%), 12 were graduate (15.4%), and 5 had academic education (6.4 %). The mean and standard deviation of men's age are 79.75 and 732.7, respectively. The mean and standard deviation of women's age are 75.94 and 737.47, respectively. The mean and standard deviation of the total death anxiety score for men were 95.39 and 12.69, respectively, and for women in the group were 102.22 and 13.022, respectively. The mean and standard deviation of spiritual health scores for men was 68.08 and 237.9, respectively, and for the female group were 23.77 and 8.799, respectively. Also, loneliness for male group was 83.21 and 11.223, respectively and for female group it was 31.75 and 11.7111, respectively. Also, the Kolmogorov-Smirnov statistics values are small for all variables and the corresponding significant values are greater than 0.05. therefore, the values of variables data have normal distribution.

#### Inferential data

Hypothesis 1: There is a significant difference between men and women in elderly centers regarding death anxiety.

Table 1. Multivariate analysis. Comparison of mean scores of death anxiety components between elderly men and women

The source of change	Coefficient	value	F	Degree of freedom of hypothesis	Degree of Freedom of Error	significance
sex	Pillai's Trace	0.502	30.440	4	121	0.001
	Wilks' Lambda	0.498	30.440	4	121	0.001
	Hotelling's Trace	1.006	30.440	4	121	0.001
	Roy's Largest Root	1.006	30.440	4	121	0.001

The results of Table 1 shows that independent variable of gender had a significant effect at least on one of the four components of death, dying, death of others and dying of others.

Table 2. Effects tests between variables and comparison of mean components of death anxiety between elderly men and women

The source of change	Dependent variable	sum of squares	Degree of freedom	average of squares	F	significance
sex	Death	62.734	1	62.734	4.717	0.032
	Dying	574.794	1	574.794	53.241	0.001
	Others death	53.809	1	53.809	2.593	0.110
	Others dying	9.488	1	9.488	0.594	0.442

The results of Table 2 shows that there is a significant difference between elderly men and women in aging centers regarding death anxiety

Hypothesis 2: There is a significant difference between the sense of loneliness of men and women in elderly centers.

Table 3.

The source of	Coefficient	value	F	Degree of freedom of	Degree of Freedom of	significance
change				hypothesis	Error	
sex	Pillai's Trace	0.263	14.503	3	122	0.001
	Wilks' Lambda	0.737	14.503	3	122	0.001
	Hotelling's Trace	0.357	14.503	3	122	0.001
	Roy's Largest Root	0.357	14.503	3	122	0.001

The results of Table 3 shows that the independent variable of gender (male or female) in three components of loneliness is significant between the elderly men and women. As can be seen, all four tests, Pillai's Trace, Wilks' Lambda, Hotelling's Trace and Roy's Largest Root are significant at P < 0.01 level and it is concluded that the independent variable of gender has a significant effect at least one of the three components of loneliness due to family relationships, loneliness due to relationships with friends and emotional symptoms of loneliness.

Table 4. Effects tests between variables in comparison of mean of components of loneliness in two groups of elderly men and women

The source of change	Dependent variable	sum of squares	Degree of freedom	average of squares	F	significance
sex	Loneliness due to family relationships	162.463	1	162.463	7.988	0.005
	Loneliness due to relationships with friends	49.448	1	49.448	2.380	0.125
	emotional symptoms of loneliness	543.320	1.	543.320	31.770	0.001

The results of Table 4 show significant or insignificant difference of variables in the comparison of the mean scores of the three components of loneliness in the two groups of elderly men and women. As it is seen, in the source of gender changes, the values of F for the three components of loneliness due to family relationships and emotional symptoms of loneliness are 7.888 and 31.770 respectively, and they are significant at P < 0.01. Therefore, the zero hypothesis is rejected and the hypothesis of the research which states there is a significant difference between the two components of loneliness between the two groups of elderly men and women is proved. According to Table 4, the mean scores of these two components in elderly men are higher than that of elderly women.

#### Discussion and conclusion

The findings showed that the mean scores of two components of self-death and self-dying in elderly women are higher than that of elderly men. This finding is consistent

with the studies of Massoud Zadeh, Setare, Mohammadpour and Madanlou (1387), Buzzanga, V, Miller H, & Perne S. (1989), Kalish (1985), Planasky K, Johnson R (1977), and Mansoumejad and Kajbaf (1391). In the research of Masoudzadeh, Setare, Mohammadpour and Madanlou (2008), it has been shown that the death anxiety in women is more evident, which is consistent with the results of the studies of Buzzanga, V, Miller H, & Perne S. (1989). In these studies, women's score in death anxiety questionnaire were higher (Kalish, 1985). In the study of Buzzanga, the cause of this is the Death Anxiety Measurement Tool (questionnaire), since the fear expressed by the individual is scored and men may have less tendency to express feelings like fear (Plansky and Johnson, 1977). Also, in Mansoumejad and Kajbaf's research (1391), the findings showed that women had higher death anxiety than men, and the explanation is that women are more likely to accept annoying feelings about mortality and men usually avoid them.

As the findings indicated, the mean of the two components of spiritual health (existential health and religious health) in elderly women is higher than that of elderly men. Munoze (2015) and Kandasamy (2011) showed that women also had a better spiritual health score than men. One of the reasons for this difference is women's high spirits and higher life expectancy. Men also tend to use external interests for religious orientation, such as social protection and better social and occupational status through religion, since they are more involved in economic and family affairs. Women in comparison with men enjoy the inner benefits of religious orientation, like the inner peace created by religion, because they are more likely to pray and use religious beliefs because of their particular social and cultural status, such as greater vulnerability to divorce and children's marriage and therefore tend to be more spiritual than men.

The findings showed that the mean scores of two components of loneliness due to family relationships and emotional symptoms of loneliness in elderly men were higher than that of elderly women. This finding coincides with Cacioppo (2006), Pinquart M. & Sorensen S (2010), Shibani Tazarji, Pakdaman, Dadkhah and Hassanzadeh Tavakoli (1389), and is inconsistent with Naderi and Haghshenas (1389), Mansourian, Solhi, Adab and Latifi (1393), Zhang, Gao, Fokkema, Alterman &Qian Liu (2015), Povedano, Cava, Monreal, Varela & Musitu (2015), Gamefski, Teerds, Kraaij, Legerstee & Kommer (2004), and Ghaedi, Sabeti, Rostami and Shams (1387). In explaining these results, it can be said that the sense of loneliness in elderly is not related to the abundance of relationships with children and friends, but rather to the expectations and satisfaction of these relationships. The prevalence of loneliness is higher in elderly people whose expectations are not met with their children and friends and are not satisfied with their relationships (Kasipo, 2006).

Perhaps the reason of increased sense of loneliness in men in comparison with women is that men, especially in Iranian culture, have had more social activities than women before living in nursing homes, and therefore have had wider relations. In addition, these men were once the family manager and most of the family's important decisions were taken based on their ideas. Their residence in the nursing home, on the one hand, reduces the quantity and quality of these relationships, and on the other hand, almost all their previous positions including independence, decision-making power and management power are gone. As a result, it can be said that high levels of loneliness in men are due to the fact that men living in a nursing home feel that they have lost more. However, research has shown that men generally consider their spouse as their source of support, while women mostly consider children, family members and friends as their source of support. Therefore, reliance on less support resource can be attributed to the high level of men's

loneliness. When men lose their spouse, they think that they have lost their supporters, and because they do not find a replacement for them, they feel lonely (Pinckarat and Samensen, 2010). It also seems that men may need more time to get along with others, unlike women who are coordinated in a short time and provide more chances for familiarization (Shaybani, Pakdaman, Dadkhah and Hassanzadeh Tavakoli, 1389).

This finding is contarary to the findings of the Naderi and Haghshenas (1389), Mansourian, Solhi, Adab and Latifi (1393), Zhang, Gao, Fokkema, Alterman & Qian Liu (2015), Povedano, Cava, Monreal, Varela & Musitu (2015). Perhaps this finding is due to the fact that women are more concerned with emotional experiences than men and are more focused on their sadness or use non-adaptive methods to deal with it (Garnefski, Teerds, Kraaij, Legerstee & Kommer, 2004). Therefore, while women empathy more with others, they cannot express their inner feelings and unpleasant emotions properly (Ghaedi, Sabeti, Rostami and Shams, 2008).

Some existing limitations is this research include drugs used by the elderly and the duration of the group's presence in the elderly center which limit the scope and generalization of the research results. The time limit for answering the questionnaires due to the size of the questionnaire and the probability of unrealistic responses to the results somehow effects the results. Since research method is correlational, caution is needed in interpreting the results based on cause and effect method.

At the end, it is suggested that studies be conducted on the relationship between spiritual health and depression and inability of the elderly. According to the findings of this study, it is suggested that group meaning-therapy should be considered as an effective treatment for reducing loneliness and death anxiety in the elderly living in nursing homes. Also, with activities such as implementation of religious ceremonies and the creation of new roles for the elderly within the centers will help to increase their spiritual health and reduce their death anxiety.

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