Relationship among social support, quality of life and loneliness of the elderly

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ABSTRACT
Old age is a sensitive period of human life. Attention to the needs and issues is of utmost importance. The present study was performed to investigate the relationship among social support, quality of life and loneliness of the elderly. The research is descriptive-analytical based on correlation. 105 of the elderly lived at nursing home of Ramsar and they were selected in sampling method. Research data were collected through a questionnaire of multidimensional perceived social support, the world health organization quality of life scale and the social and emotional loneliness scale for adults. Analysis of data using Pearson correlation statistical and multivariate regression methods and using the software SPSS16 was performed. The results showed that there was a significant and negative relationship between emotional support and loneliness of the elderly. There is a significant and negative relationship between quality of life and loneliness of the elderly and they are good predictor emotional support and quality of life for loneliness of the elderly. Therefore, the attention to social factors of health in the elderly, such as social support and quality of life is of paramount importance.

Keywords: social support, quality of life, loneliness, the elderly

INTRODUCTION
Aging is a process that encompasses all living organisms, including humans. Increasing age is not a disease, but it is a vital phenomenon including everyone and in fact, it is a natural evolution in which occur physiological and psychological changes in the body. Today, average life expectancy has reached more than 85 years (Ridel-Heller et al, 2006).

According to the World Health Organization, index of life expectancy is now 67 years in Iranian men and women is 71 years, it is speculated that the population of the elderly in Iran has been increasing and we will face with serious problems on the elderly and solving their problems in future. Therefore, aging and special conditions of the elderly and providing mental and physical health are the most important issues that require special attention (Osouli, 2007). Elderly growth will affect all aspects of society and many challenges will be in health policy makers, families and health care providers. One of the major concerns is to care and obviate effective needs of elderly (Lowel, 2006). On the other hand, the attention to all aspects of human existence, especially the elderly is important as a vulnerable group to improve their quality of life. It seems that one of the factors influencing on the social dimension of quality of life is the issue of social support (Nabavi et al, 2014). In a study performed by Peerenboom, et al (2014), the results showed that there was a significant relationship among depression and loneliness, emotional and social support for the elderly and the impact of social, cognitive function and personality of these
people. High sense of neurosis and resentment was observed in them and low extroversion and high depression associated with emotional loneliness were palpable.

In a study discussed by Samadian and Garousi (2014) on the study of the relationship among attitudes, social support and quality of life of elderly people in Kerman, the results showed that emotional support, financial services, advice and information, support and attitude towards their abilities and attitude and the term of the relationship were the most important variables which they had a significant relationship with quality of life. Among these variables, attitude to support had the greatest impact. Social support has known as the strongest and most powerful oppositional forces for easy and successful encountering people in times of conflict of people with stressful situations and facilitates the tolerance of problems for patients (Chang et al, 2001). By playing a mediating role among stressors of life and physical and mental problems and also strengthening the knowledge of persons result in reducing stresses, increasing survival rates and improving health conditions and improving the quality of life of people (Saramaco, 2001). Illness, disability, mental disorders, death of a spouse, poverty and many other social factors cause the needs of the elderly in different cases from the needs of other segments of society which the attention for them is very important and quality of life is also one of the most important contemporary issues in health care today and one of the biggest health goals to improve the health of individuals and in recent years, this is known as the most important factors in the lives of people, especially the elderly and persons with disabilities (Mokhtari and Qasemi, 2010).

Mokhtari et al (2010) compared quality of life and mental health among the elderly of residents and non-residents of nursing homes. There is a significant relationship between two groups of the elderly in variables of quality of life and mental health of all sizes and scales of these two variables. Also, significant effects of independent variables were observed for variables of age, gender, occupation and economic level to determine the variance in quality of life and mental health so that elderly residents of nursing homes and mental health, anxiety symptoms, physical symptoms, social functioning, and symptoms of depression had a more unfavorable situation. In the research of Koushan et al (2014) performed as the impact of group reminiscence on loneliness in the elderly. The results showed that group reminiscence had positive effects on reducing loneliness of the elderly.

The study of Carlo in Italy (2007) has stated environmental and social conditions and factors affecting the elderly satisfaction and quality of life and loneliness is considered one of effective factors in reducing (Zahmatkeshan et al, 2012). Social support is important for several reasons; first, humans are social creatures and social communication is raised as a major factor in the quality of life of people. Also, adverse effects of social isolation and loss of social ties in the lives of individuals are strong evidence to confirm it. Okabayashi et al (2004) discussed in their study on the investigation of the effect of social support and negative interaction on mental health of the elderly in Japan which the results of this study showed that the effect of different sources of social support and negative interactions on mental health also depends on the nature of social networks. Loneliness has been important as one of the signs of depression and also an independent risk factor of psychological injuries of the aging and according to the elderly this is experienced for various reasons such as physical impairment, loss of relatives and fading of communication (Alipour et al, 2008). On the other hand, increasing social contact can lead to health improvements in this group of the elderly. Motamedi Shalmzari et al in a study discussed on investigation of the role of social support in life satisfaction, general health and loneliness among the elderly which the results showed that there was a relationship among types of social protection and public health and the correlation of the dimension of emotional support was more than tool support (Nabavi et al, 2014). Therefore, the researcher attempts to find out that is there any relationship among...
Research methodology
The present study was performed to investigate the relationship among social support, quality of life and loneliness of the elderly. The research is descriptive-analytical based on correlation. 105 of the elderly lived at nursing home of Ramsar and Tonkabon and they were selected in sampling method and questionnaire is filled to all eligible old age. The instruments used in the study include:

Multidimensional Scale of Perceived Social Support:
this questionnaire was prepared by Zemen et al in 1998 to assess perceived social support from family, friends and other important people in individual life. A total score of perceived social support is also derived from the questionnaire. This scale consists of 12 items and all items are directly scored. Perceived Social Support has many effects on physical and mental state, life satisfaction and a lot of different aspects of quality of life (Lara, 2003) and this is known as a moderating factor influencing the cope and adapt to stressful events of life (FaridLandra, 2007). In studies available in this field, social protection is studied in two forms of perceived and received social supports. In received social support, the amount of supports obtained by individuals is emphasized and in perceived social support, individual assessments of the availability of supports in necessary periods are studied (Breuer, 2008). Breuer et al, in 2008 reported the inter-rater reliability in a sample of 788 subjects of high school youth using Cronbach's alpha, 86 to 90% for subscales of this instrument and 86% for the entire tool (Breuer, 2007). Salami et al mentioned Cronbach's alpha coefficient of three dimensions of received social support from the family, friends and important people of life in 89%, 86% and 82%, respectively (Salami et al, 2009).

World Health Organization Quality of Life Assessment Scale Short Form (1998):
This tool contains 26 questions.

In general, the questionnaire has four subscales evaluating four domains of life, which this is the assessment of physical health (7 items), mental health (6 items), social relations (2 items) and environment of life (8 items). The score for each item is ranging from 1 (very low, never, very dissatisfied) to 5 (very high, always, very satisfied) and a general score. It should be noted that questions 3, 4 and 25 are scored in reverse. This questionnaire is a self-attitude and testing and should answer a tool in a Likert scale of no means completely = 1 and completely = 5 to each question. High score indicates high quality of life and low score indicates low quality of life. This test is normalized by Nejat, Motazeri, HalakouheiNaini, Kazem and Majdzadeh and Cronbach's alpha coefficient is reported in four dimensions in order for the healthy and diseased samples as follows:
Physical health is 0.70 and 0.72 and mental health 0.73 and 0.70, social relations 0.55 and 0.52 and in dimension of environmental health 0.83 and 0.82.

Social and Emotional Loneliness Scale for Adults:
This scale was designed and prepared by De Tomaso, Brown and Best in 2004 based on classification of Weiss. This scale consists of 15 items and three subscales romantic loneliness (5 items), family (5 items) and social (5 items) and romantic emotional loneliness is obtained from total scores on romantic and family subscales. In contrast, each item contains 5-point scale from strongly disagree (score 1) to strongly agree (score 5). All items except items 14 and 15 are scored reversely and obtaining more score in each dimension of this scale indicates more loneliness on that dimension. In the study of Jokar et al (2011), the validity and reliability of the questionnaire were tested. The results of the correlation of this scale with other measures indicate favorable convergent and divergent validity of the questionnaire. Also, Cronbach's alpha coefficient was used for reliability and the value of this coefficient for dimension of this questionnaire is calculated in romantic loneliness dimension 92%, loneliness of family 0.84, social loneliness 0.78.
**Findings**
In order to test the research hypotheses, Pearson correlation and multiple regression tests were used and the results are presented in tables.

**Table1.** The results of the correlation between social support and loneliness of the elderly

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Social support of the family</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Social support of friends</td>
<td>0.68*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Social support of others</td>
<td>0.78*</td>
<td>0.71*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Total score of social support</td>
<td>0.91*</td>
<td>0.87*</td>
<td>0.92*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Romantic loneliness</td>
<td>-0.59*</td>
<td>-0.59*</td>
<td>-0.68*</td>
<td>-0.69*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Family loneliness</td>
<td>-0.61*</td>
<td>-0.77*</td>
<td>-0.65*</td>
<td>-0.74*</td>
<td>0.68*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Social loneliness</td>
<td>-0.73</td>
<td>-0.51*</td>
<td>-0.60*</td>
<td>-0.69*</td>
<td>0.61*</td>
<td>0.60*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>8. Total score of loneliness</td>
<td>-0.73*</td>
<td>-0.73*</td>
<td>-0.74*</td>
<td>-0.81*</td>
<td>0.89*</td>
<td>0.89*</td>
<td>0.82*</td>
<td>1</td>
</tr>
</tbody>
</table>

P<0.001*

As it is shown in Table4-6, there are simple correlation coefficients between loneliness and social support subscale of the family -0.73, (p<0), subscale of social support of friends 0.73, (p<0), subscale of social support of others -0.74, (p<0.001) and total score of social support -0.81, (p<0.001) which the coefficient obtained are significant and they answer the first hypothesis of the research.

**Hypothesis2: There is a relationship between quality of life and loneliness of the elderly.**

**Table2.** Results of correlation analysis between quality of life and loneliness of the elderly

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Physical health</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Mental health</td>
<td>0.77</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Social relationship</td>
<td>0.73</td>
<td>0.78</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Environmental health</td>
<td>0.77</td>
<td>0.80</td>
<td>0.78</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Total score for quality of life</td>
<td>0.90</td>
<td>0.92</td>
<td>0.87</td>
<td>0.92</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Romantic loneliness</td>
<td>-0.67</td>
<td>-0.69</td>
<td>-0.68</td>
<td>-0.64</td>
<td>-0.73</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Family loneliness</td>
<td>-0.58</td>
<td>-0.66</td>
<td>-0.75</td>
<td>-0.61</td>
<td>-0.69</td>
<td>0.68</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Social loneliness</td>
<td>-0.45</td>
<td>-0.50</td>
<td>-0.58</td>
<td>-0.61</td>
<td>-0.60</td>
<td>0.61</td>
<td>0.60</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>9. Total score of loneliness</td>
<td>-0.66</td>
<td>-0.74</td>
<td>-0.78</td>
<td>-0.71</td>
<td>-0.78</td>
<td>0.89</td>
<td>0.89</td>
<td>0.82</td>
<td>1</td>
</tr>
</tbody>
</table>

As it is shown in Table 4-7, there are simple correlation coefficients between loneliness and physical health subscale -0.66, (p<0.001), subscale of mental health -0.74, (p<0.001), subscale of social relationship -0.78, (p<0.001) and subscale of environmental health -0.71, (p<0.001) and total score of quality of life -0.78, (p<0.001) which the coefficient obtained are significant and they answer the second hypothesis of the research.
**Hypothesis3:**
there is a relationship between social support and quality of life and loneliness of the elderly. The results of regression analysis are presented in Table 3 in order to determine the role of predictor variables between social support and quality of life in explaining the variance criterion of loneliness of the elderly. Before performing regression analysis, it is essential that the most important assumptions of multiple regression analysis, independence of independent variables or non-association of error scores of independent variables with each be examined through Durbin-Watson test. In general, we can say that if the value of test statistics is from 1.5 to 2.5, we can accept independence of observations and follow the analysis (Tabachnick and Fidell, 2000; quoted by Beshlideh, 2012). The results of the Durbin-Watson test in regression analysis in the method of input of predictor variables with sexual satisfaction obtained 2.25 indicating independence of predictor variables.

**Table 3.** Multiple regression analysis of factors affecting loneliness of the elderly

<table>
<thead>
<tr>
<th>Source of change</th>
<th>Sum of squares</th>
<th>Degrees of freedom</th>
<th>Mean of sum of squares</th>
<th>F ratio</th>
<th>Level P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>912.89</td>
<td>2</td>
<td>4551.44</td>
<td>152.45</td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td>Remaining</td>
<td>3045.15</td>
<td>102</td>
<td>29.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12148.05</td>
<td>104</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results in Table 4 show that F ratio of regression analysis, loneliness, social support and quality of life is significant. In other words, variable of social support and quality of life predict loneliness of the elderly.

**Table 4.** The results of regression coefficient of predictor variables of social support and quality of life in anticipation of loneliness of the elderly

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>B</th>
<th>B</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social support</td>
<td>0.22</td>
<td>-0.416</td>
<td>-5.87</td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td>Quality of Life</td>
<td>0.551</td>
<td>-0.518</td>
<td>-7.32</td>
<td>P&lt;0.001</td>
</tr>
</tbody>
</table>

As it can be seen in Table 5, the regression coefficients show that among the variables entered into the regression equation, social support and quality of life predictors are suitable for loneliness of the elderly. T value obtained social support variables (p<0.001), -7.32 and standard coefficient β of this predictor variable is 0.518 indicating the significance of these variables in predicting loneliness of the elderly.

In other words, among the variables entered into the regression equation, the variable of quality of life enjoys strong predictor. This finding answers the third hypothesis of the study.

**DISCUSSION AND CONCLUSION**

In studying the first hypothesis based on that there is a relationship between social support and loneliness of the elderly, the results showed that there was a significant relationship between social support and loneliness of the elderly. This means that low social support is increasing loneliness. To describe the nature of loneliness, Weiss used two emotional loneliness and social loneliness terms. Emotional loneliness creates due to the lack of close emotional attachment to another person and follows emotions such as anxiety and emptiness in the person. In contrast, social loneliness causes the lack of participation in social relationships and results in loneliness.
and futility in the person (Johntila, 2009). Kilpatrick (2005) also reported that people who experience loneliness, when they enjoy social support, they better cope with problems and their mental health is possible with better ease. In explaining the findings of this hypothesis, it can be inferred that one of crucial factors to creating a sense of well-being and psychological well-being of the elderly is to have a person who the elderly can rely on and trust him, he shares in the grief and joys with him and he refers to him in troubled times. Social support is associated with the development of psychological adjustment; social support helps people have sense of security, peace and belonging in stressful situations. Those who consider their social relationships insufficient are more at risk of developing symptoms of mental disorders (Landman and Karlien, 2005).

The findings suggest that the elderly who have fewer interactions, they feel more alone and those who have more social emotional support have experienced less loneliness. Interacting with friends and more or less with neighbors leads to reducing loneliness in them (Lee, 1987).

High loneliness of the elderly living at nursing home may be due to their social isolation. They lose useful and effective relationships with their close friends due to their residence at a nursing home and also due to reducing the relationship, material and psychological supports also reduce that this is not non-effective in high loneliness of the elderly in these centers. In addition, people in these centers lose the ability to dominate their life and can make decisions and choose, in these circumstances, they find themselves powerless, passive and totally dependent on their assessment and have reached the absurdity (Weller et al, 1982). It is noteworthy that the quality of social relationships to the abundance of social relations in the incidence of loneliness is more important and more decisive. In other words, loneliness of the elderly is not related to the frequency of relationships with children and friends, but rather on this is related to the expectations and satisfaction of this relationship. The prevalence of loneliness is higher in the elderly who their expectations from visiting their children and friends are not met and are not satisfied with them (Cacioppo, 2006). The results of the second hypothesis that, there is a relationship between quality of life and loneliness in old people, showed that there was a significant relationship between quality of life and loneliness; this means that between loneliness and meaningful quality of life subscales observed high correlation. Studies have considered many factors affecting the quality of life of the elderly. In studying Bergland (2007), these factors included social practices, good health, personal housing. The study of Cavallero in Italy (2007) has stated loneliness as the most important factors affecting the elderly satisfaction and quality of life and he considers loneliness as one of factors affecting in its reduction. Sguizzatto (2006) mentioned inactivity and activity, Schmitt (2007) said mental disorders and Inouye (2007) stated unfavorable socio-economic situation and the lack of adequate protection as reasons for the decline in the quality of life of elderly. Goodman (1997) concluded in a research that two factors are effective in quality of life, one factor is based on an instrument and reflects personal and family situation. The second factor is communication and reflects the quality of interpersonal communication. These two factors are similar to Maslow's second and third needs, the need for security and the need to belong and love. This issue shows the importance of different aspects of life to improve the quality of life. In a word, to improve the quality of life this should be improved in all aspects of life. Loneliness is most common in adulthood (Henrish & Galon, 2006) and even according to Sipola & Boscì (1999), loneliness in this period may be a natural experience, except in some degree of loneliness that may lead to significant changes in the roles, relationships and personal beliefs. On the other hand, loneliness is a serious and important risk factor for increased mortality in the elderly and changes created in the period of aging such as loss of sexual function, experience major life events such as retirement, loss of income, loss of social relationships and divorce cause loneliness in the elderly. A review of the studies performed on the problems of
loneliness in the elderly shows that loneliness is the source of many of the mental problems such as depression, suicide and despair (Pot et al, 2008). Pierrenboom et al (2015) studied the relationship between depression and loneliness, emotional and social support for the elderly and the impact of social, cognitive function and character of the people and the results showed that depression was severely associated with emotional loneliness but this had no correlation with social loneliness.

High sense of neurosis and resentment and low sense of control were important factors in loneliness. Several other factors including low extroversion and high depression associated with emotional loneliness were palpable.

The results of the third hypothesis based on that there is a relationship between social support and quality of life of loneliness of the elderly, showed that there was a significant and direct relationship between social support and quality of life of loneliness so that by increasing the amount of social support and quality of life, loneliness reduces in the elderly.

This means that the elderly, who receive social support and quality of life desired ratio, suffer less from loneliness. One of the most important factors to creating a sense of well-being and being good psychologically in the elderly has a person, who can rely on and trust him, he shares in the grief and joy with him and he refers to visit him in troubled times. Social support is associated with the development of psychological adjustment; social support helps people to have feeling of sense of security, peace and devotion in stressful situations. Those who consider insufficient social relationships are most at risk of developing symptoms of mental disorders (Parkson, 1991).

Social support creates mutual commitment and also the impression in which the person has the feeling of loving, caring, self-esteem and worth and all of them have a significant relationship with positive health results.

Social support by reducing depression, anxiety and other psychological problems is related. One of efficient factors on compatibility with aging process and the problems affecting with older age is social support (Koob, 1976). The elderly who enjoy more social support, quality of life and high health of their participation in various social networks including family and friendship networks provide resources to support neighboring relationships which through more attraction in these networks enjoy support and subsequently health and better quality of life. Mikaela et al (2011) believe that if the physical distance between parents and children leads to reducing face to face interactions, reducing health care, and reducing help the elderly in their housework and daily activities, but not emotional supports cannot be ignored through increasing the distance.

These conditions increase psycho-emotional support, financial support, gifts, recommendations and orders as well as increase the engagement. The source for supporting the elderly is family. Having family support is considered an important factor to provide a pleasant and enjoyable and rewarding experience. Scott et al (2010) state when the family supports for the elderly, this creates a sense of self-worth and belonging. This is belonging that he is meaningful in life and closer to his goals. The effects of having family support are mental health and reduction of depression. More relationship with recreational centers and using facilities leads to expanding communication of elderly communication and low sense of loneliness and isolation of these patients. One of the factors that can reduce feelings of loneliness experience includes frequent contact with children and relatives.

The elderly, who have poor social network, do not receive adequate support and emotional satisfaction (Hazer and Boylu, 2010). On the other hand, loneliness has shown significant correlation with the consent of the location of living. Loneliness has considerably a relationship by sex, marital status, living in special settlements, fear and need help with daily activities (Ocamota, Ushea, Oka, 2005). Spouses’ bereavement, social isolation and loneliness that result from it can lead to depression. Loss of friends and comrades increases depression, in addition to the increased longevity of the elderly, their children's lack is experienced.
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