Introduction: Social support is one of the most important indices affecting adaptation to aging process as well as the problems and complications of the aging period such as anxiety, death and social support. This study was aimed to determine the correlation of social support with death anxiety among the elderly of Tehran, Iran.

Methods: In this correlational study, 208 elderly referring to the daycare centers of Tehran were selected through cluster random sampling. Data were collected by demographic questionnaire, Vaux Social Support Appraisals Scale (SS-A) and Templer death anxiety scale. Both social support and death anxiety scales have been validated in Iran and enjoy the required reliability.

Results: From among the participant elderly, 5.3% were male and 67% were single, with their mean age of 66.6 years. Also, 60.1% were under diploma in terms of education and 64.9% lived in their personal houses with their families. The results showed the mean social support of 24.94 and mean death anxiety of 24.43 for the elderly. Further, Pearson correlation coefficient indicated a reverse correlation between social support and death anxiety (r = -0.020).

Conclusion: Death anxiety was reduced with increased social support among the elderly. Social support, a component affecting the mental health and spirit of the elderly, can be considered a cheap source and a social capital in line with decreasing death anxiety, increasing dynamicity and improving the life quality of the elderly.

Keywords: Social Support, Anxiety, Aged

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Restlessness, sadness, grief, loss of appetite, hypertension, respiratory irregularities, palpitations and disturbance in concentration and performing daily activities are symptoms of these stressors. As a result of these factors and the reasons mentioned, it can be concluded that stress and anxiety largely affect the elderly and can extensively risk their health (7, 8).

Uchino et al. reported evidence about the factors related to age increase and hypertension and acute stress (9). On the other hand, although individuals have undoubtedly differences with regard to susceptibility to psychological diseases, these differences become larger under the influence of social status and more importantly the individuals’ perception of the given situation. Thus, it is quite important to seriously consider the social factors affecting mental health, the most important of which is perceived or received social support by the individuals (10, 11).

Social support is a determinant of health that is concerned with the social dimension of human and has been increasingly taken into account in the recent years (12, 13). Miller found that social supports protect the elderly against the harmful effects of stress and promote their emotional and physical welfare (14). Also, the study of Gallagher et al. on the elderly’s perception of social support showed that the elderly that were connected to the social networks and received informal social support had better psychological and physical health than those who had less communication with others (15).

Birditt et al. reported that the number of social networks can predict the heightened reaction to diastolic blood pressure (16). Further, Alipour et al. emphasized the significance of the social factors determining health, especially social supports in mental disorders of the elderly. Therefore, it is essential to pay attention to this inexpensive economic resource to cope with stress and anxiety among the elderly, thereby improving their life quality (17).

Goudarz et al. demonstrated a positive correlation between social support and psychological well-being. Hence, enhancing social support in the elderly can have a significant impact on the psychological well-being and social performance of the elderly. On the other hand, promoting social supports can reinforce psychological well-being in the elderly (18). Krause showed that emotional support reduced the harmful effects of financial problems on satisfaction with life (19).

Since the elderly in any society are experienced workforce affecting the development of country, and prevalence of any psychological disorders among them can lead to the loss of material and spiritual investments, identifying their psychological status and analyzing the related factors can affect the development of this susceptible group of community, and its positive effects and benefits return to the whole society in the long run (20).

Hence, owing to the importance of correct behavior with the elderly and given the specific role of family in supporting the elderly, which is very important in this period of time and plays a pivotal role in the quality of their life, the present study was carried out to investigate the correlation of social support and death anxiety in the elderly living in and out of the nursing homes of Tehran in 2016.

Methods

Procedure and sampling

In this correlational study, the samples were selected by cluster random sampling. First, five regions were chosen from among the municipal regions by simple random sampling. Then, the elderly daycare centers in the given regions were visited, and questionnaires were completed and collected after taking permission from the authorities and attracting the participants’ cooperation. The inclusion criteria consisted of people aged ≥ 60 years living in Tehran in the past year, being able to answer the questions and the elderly’s or their relatives’ consent to participate in the study. The exclusion criteria involved lack of cooperation during the study, the elderly with psychological and physical problems, and unwillingness to continue the interview in any stage of the study.

Measure

The data were collected by demographic questionnaire, Vaux Social Support Appraisals Scale (SS-A) and Templer death anxiety scale. These questionnaires were completed by the elderly as self-report.

Vaux social support scale includes 23 items and 3 subscales, including family, friends and other, characterized by Yes/No options. A score above the mean indicates higher social support and below the mean shows lower social support among the elderly (21). The validity and reliability of this scale have been previously confirmed by various studies. In Iran, Ebrahimie-ghavam provided a two-point scale (Yes/No) for this questionnaire, with a Cronbach’s alpha level of 0.90 (22).

To measure death anxiety in this research, Templer death anxiety scale was used, which had the maximum application. It is a self-administered scale consisting of 15 True/False items, the true response indicating the presence of anxiety in the person. The scores are ranged from zero to fifteen. High score (above the mean, score 8) indicates a high degree of death anxiety (23). The validity and reliability of this scale have formerly been confirmed by many studies in Iran. Rajabi & Bohrani have translated this scale into Persian. The Cronbach’s alpha values obtained for the triple factors have been reported to be 49, 68 and 60 % by factor analysis (24). Templer reported the test-retest reliability coefficient of 83 % for this scale (23). Therefore, there was no need to determine the validity and reliability of the scales again.
Social Support and Death Anxiety in the Elderly

Ethical Considerations

All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation and with the Helsinki Declaration of 1975. This article was taken from a research project, with ethical code IR.USWR.REC.1395.327, approved by the Deputy of Research and Technology at University of Social Welfare and Rehabilitation Sciences.

Data analysis

For data analysis, descriptive statistics, including mean, standard deviation and ratios and inferential statistics were run in SPSS Version 22.0. (Armonk, NY: IBM Corp.). Kolmogorov-Smirnov test was applied to analyze the normality of distribution of variables and Pearson correlation coefficient was used to determine the correlation between variables.

Results

A total of 208 older adults were included in this analysis. The mean age of the participants was 66.60 ± 6.58 years (SE: 0.457). The characteristics of the sample are presented in Table 1.

As Table 2 illustrates, mean of SS-A score in older adults was 24.94, which indicates a good level of social support. Also, correlation analysis showed a negative significant correlation between death anxiety, age, and social support, respectively (r = -0.775, r = -0.640).

Table 3 indicated that there was significant relationship between SS-A and factors were as follow: marital status and residential status. It means single older adults and living in nursing home had experience worst social support.

Discussion

This study evaluated the correlation of social support and death anxiety among the elderly of Tehran, Iran in 2016. The findings showed no significant correlation between age and social support and between age and death anxiety. However, all participants were elderly with no age differences. There are contradictory reports about the relationship of age with death anxiety, some showing a directly ascending association between age increase and death anxiety (25), but some others indicating a curved relationship, increasing with age increase and reaching its peak during the middle age (26). Also, Masoudzadeh et al. and Aghajani et al. showed no association between age and death anxiety (27, 28). These findings are in contrast with the results of Keyes and Shapiro (29). The researchers tend to think that factors such as different research environments, number of samples and study population have caused these differences.

Table 1. Characteristics of the participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>115</td>
<td>55.3</td>
</tr>
<tr>
<td>Female</td>
<td>93</td>
<td>44.7</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>68</td>
<td>32.7</td>
</tr>
<tr>
<td>Married</td>
<td>140</td>
<td>67.3</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>31</td>
<td>14.9</td>
</tr>
<tr>
<td>Guidance school</td>
<td>125</td>
<td>60.1</td>
</tr>
<tr>
<td>Academic</td>
<td>52</td>
<td>25</td>
</tr>
<tr>
<td>Residential status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nursing home</td>
<td>17</td>
<td>8.2</td>
</tr>
<tr>
<td>Alone</td>
<td>45</td>
<td>21.6</td>
</tr>
<tr>
<td>With spouse</td>
<td>135</td>
<td>64.9</td>
</tr>
<tr>
<td>With relatives</td>
<td>11</td>
<td>5.3</td>
</tr>
</tbody>
</table>

Table 2. Descriptive statistics, and correlation matrix of the variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Age</th>
<th>SS-A</th>
<th>DAS</th>
<th>Mean</th>
<th>Range</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1</td>
<td>0.104</td>
<td>-0.775 *</td>
<td>66.60</td>
<td>6-89</td>
<td>6.589</td>
<td>0.457</td>
</tr>
<tr>
<td>SS-A</td>
<td>1</td>
<td>0.640 *</td>
<td>24.94</td>
<td>24-42</td>
<td>3.538</td>
<td>0.245</td>
<td></td>
</tr>
<tr>
<td>DAS</td>
<td>1</td>
<td>24.43</td>
<td>16-30</td>
<td>3.211</td>
<td>0.223</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* P < 0.05 - ** SS-A: Social Support Appraisals Scale - *** DAS: Templer Death Anxiety Scale

Table 3. Statistics values for correlation matrix of the variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>Marital status</th>
<th>Education</th>
<th>Residential status</th>
<th>Gender</th>
<th>Marital status</th>
<th>Education</th>
<th>Residential status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test value</td>
<td>-0.080 t</td>
<td>-4.3.4 t</td>
<td>0.890 F</td>
<td>24.130 F</td>
<td>-0.833 t</td>
<td>1.249 t</td>
<td>0.302 F</td>
<td>1.286 F</td>
</tr>
<tr>
<td>df</td>
<td>206</td>
<td>206</td>
<td>205</td>
<td>204</td>
<td>206</td>
<td>206</td>
<td>205</td>
<td>204</td>
</tr>
<tr>
<td>P-value</td>
<td>0.423</td>
<td>&lt;0.001</td>
<td>0.412</td>
<td>&lt;0.001</td>
<td>0.406</td>
<td>0.213</td>
<td>0.740</td>
<td>0.280</td>
</tr>
</tbody>
</table>

Discussion

This study evaluated the correlation of social support and death anxiety among the elderly of Tehran, Iran in 2016. The findings showed no significant correlation between age and social support and between age and death anxiety. However, all participants were elderly with no age differences. There are contradictory reports about the relationship of age with death anxiety, some showing a directly ascending association between age increase and death anxiety (25), but some others indicating a curved relationship, increasing with age increase and reaching its peak during the middle age (26). Also, Masoudzadeh et al. and Aghajani et al. showed no association between age and death anxiety (27, 28). These findings are in contrast with the results of Keyes and Shapiro (29). The researchers tend to think that factors such as different research environments, number of samples and study population have caused these differences.
The results of this study indicated no significant relationship between gender and social support and death anxiety. Schumaker et al. showed no significant difference between the male and female Japanese samples, but reported a significant difference between the Australian men and women. Hence, death anxiety in Australian women was higher than men (25). A study has reported a higher death anxiety for women than for men, increasing death concern in women than in men (30). Fortner and Neimeyer reported no significant relationship between death anxiety in men and women (31). Further, Comstock and Partridge conducted a longitudinal study on fifty thousand mature individuals over eight years. They found a lower death anxiety and fear in women regularly attending religious ceremonies (32). The researchers believe diverse results obtained in different studies may be due to the effect of culture, religion and rituals governing the society as well as the differing roles of men and women and even the expression of anxiety and fear on the part of men.

Based on the findings, social support in the married couples was higher, but there was no association between death anxiety and marital status. Regarding the association of this variable with marital status, the mean score of social support in all dimensions in the elderly living with their spouse was higher than those living alone because of such reasons as death of spouse. These findings are indicative of the key role of partners in providing a supportive environment, especially during aging (33). The results of Barry et al. also confirm this issue (34). The findings of the study by Madnawat and Kachhawa carried out in India are not in line with the results of the present study. They showed that death anxiety in the elderly living with their families was higher, perhaps because in India individuals are strongly dependent upon their families and consider death as a factor isolating them from their families, thereby increasing their fear of death (35).

The findings indicated no significant correlation between education level and social support and death anxiety. Death anxiety results are in line with the findings of Nouhi et al. (36). With regard to the association of social support and education level in the elderly, the results showed no significant relationship between social support subscale and education, which is in contrast with the results of Vahdani Nia et al. This may be associated with the roles of men and women and even the expression of anxiety. Death anxiety results are in line with the findings of Barry et al. also confirm this issue (34). The findings of the study by Madnawat and Kachhawa carried out in India are not in line with the results of the present study. They showed that death anxiety in the elderly living with their families was higher, perhaps because in India individuals are strongly dependent upon their families and consider death as a factor isolating them from their families, thereby increasing their fear of death (35).

**Conclusion**

Based on the findings, it can be concluded that perceived social support among most of the elderly is at an average level, while there are still close supportive relationships and strong familial bonds in the society, and perceived social support is expected to increase more. Implementation of strategies to enhance social support among the elderly, followed by their social well-being is of great significance in this regard. In general, given the effect of perceived social support on the social well-being of the elderly and importance of this aspect of health, more attention is required to be given to this issue among the vulnerable elderly.

**Study limitations**

A limitation of this study is the sampling method and low sample size. Also, spirit and social support are subjective concepts and the judgment and self-evaluation of research groups should be trusted for their measurement. Hence, more comprehensive studies with complete random sampling are recommended to be designed for the elderly. Moreover, further studies are suggested to identify other factors affecting various dimensions of health among the elderly.

**Conflicts of interest**

No potential conflicts of interest were disclosed.

**Acknowledgement**

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**Authors’ contribution**

Study conception and design: MH, BE.
Acquisition of data: BE.
Analysis and interpretation of data: VR.
Drafting of manuscript: MH, VR.
All the authors have read the final manuscript and approved that.

**References**
