INVESTIGATION OF THE RELATIONSHIP BETWEEN THE LEVELS OF LONELINESS AND SOCIAL SUPPORT PERCEIVED BY CAREGIVERS OF BEDRIDDEN PATIENTS

Hacer GÖK UĞUR*
Oya Sevcan ORAK*
Funda BASKÖY*
Sevcan SERDAROĞLU*
Özlem KÜÇÜKÖNER *

Abstract
The aim of this study was to determine the relationship between the levels of loneliness and social support perceived by caregivers of bedridden patients. The study population of this descriptive study consisted of 120 caregivers of bedridden patients registered in the home care unit of Ministry of Health-Ordu University, Training and Research Hospital as of May 31, 2013. The whole study population was studied without performing any sampling in the study. The study was completed with 106 caregivers who agreed to participate in the research and who have patients alive during the study period. Data were collected through home visits and face-to-face interview method between June 1 and August 31, 2013. "Patient and Caregiver Introductory Information Form", "Multidimensional Scale of Perceived Social Support" and "UCLA Loneliness Scale" were used for data collection. The data were analyzed using the percentage distribution, arithmetic mean, Mann-Whitney U test, Kruskal Wallis test and Spearman correlation coefficient.

A statistically significant difference was found between mean social support scores and caregivers' age, family type, degree of relatedness and ability to obtain support (p<0.05). A statistically significant difference was found also between mean loneliness scores and caregivers' family type, educational status and duration of care (p<0.05). A statistically significant negative relationship was found between mean perceived social support scores and loneliness scores of the caregivers (p<0.01). The levels of loneliness were decreased as the social support perceived by caregivers increased.

Keywords: Bedridden Patients, Caregivers, Social Support, Loneliness.

INTRODUCTION
Being confined to bed is the status of an individual who cannot meet their own needs and perform the daily activities partially or completely(Erken ve Soydemir, 2014). Bedridden patients may not perform the activities of daily living (bathing, toilet needs, hair care, oral care, dressing, eating, moving, ensuring security, establishing interpersonal relationships, ability to use manual skills) independently. Being confined to bed can be for a short or long term. Therefore, bedridden patients need a caregiver(Anonymous, 2012). Caregivers who follow up the bedridden patients can have some physical, psychological, social and financial problems (Kılıç Akça and Taşçı, 2005; Akyar and Akdemir, 2009; Kapucu et al., 2009; Tuna and Olgun, 2010; Atağün et al., 2011; Dökmen, 2012; Bedük and Karaaslan Esen, 2014). The psychological health of the caregivers is affected due to the limitation of their social life (Kılıç Akça and Taşçı, 2005). Caregivers need the social support and the support of their family and friends. They also need to feel that they are not alone (Mitrani and Czaja, 2000). Social support provided by the

* Health School, Ordu University; (Correspondence author: Hacer Gok Uğur, hacer32@gmail.com)
spouse, family and friends is accepted as the help given to individuals who are under stress or hard situation (Norris and Kaniasty, 1996; Ardahan, 2006; Khoshid and Gürol Arslan, 2006). Social support can be given by family members (spouse, children or beloved); friends, neighbor or colleagues; the social and community relations (clubs or religious institutions); social support groups. Support resources can be the people or institutions that show the love and attention to the individual or the family, give a sense of trust and belonging, accept the individual’s interests and values (Tuan, 1993). Individuals get the social support primarily from their first degree relatives and family and secondly from the social support groups. Individuals support each other regarding the emotional, informational, friendship and the property maintenance in these social relationships. In this regard, people who experience the adverse events have less strength in order to cope with mental distress compared to the ones who have higher social support levels (Eroğlu, 2000). The lack of social support can affect the mental health of the caregivers. Caregivers who cannot get sufficient support from their family or friends generally feel themselves isolated and alone in this job (Anonymous, 2014).

The perception of caregivers with respect to the social support affects their psychological well-being and loneliness levels (Mitrani and Czaja, 2000; Stoltz et al., 2004; Ekwall et al., 2005; Coetsee, 2007; Essandor, 2012). Loneliness happens as a result of the interaction between the individual and environmental effects and it is the cognitive and sensory strain state that afflicts people, causes disappointment, leads to be alienated from others and fail to perform the desired sense of social integration (Duy, 2003). Peplau and Perlman (1982) states that the loneliness occurs due to the difference between the real relationships and the individual wishes. Younger specifies the loneliness as a feeling of being alone despite the longing for others. According to Younger, loneliness is the aimlessness and annoying status and this situation gives the individual an impression of being aimless and useless (Younger, 1995). On the other hand, Weiss (1973) indicates that loneliness creates a negative emotion to protect the individuals from dangers of leaving and therefore, it acts as a mechanism that enhances the familiarity.

Kraus et al. (1993), states the importance of the sufficient social networking in order to prevent the loneliness. There is an inverse correlation between the loneliness and the number of friends, regular friends and family relations (Çorapçıoğlu Özkürçügil, 1998). Caregivers are sensitive to loneliness because they have limitations in their lives (Hansen et al., 2013). The loneliness of caregivers decreases as their perception of the social support increases (Ekwall et al., 2005; Coetsee, 2007; Bal Yılmaz et al., 2008; McRae et al., 2009). The social support perception of caregivers positively affects their health status and the family life (Mitrani and Czaja, 2000). It is important to determine the loneliness levels of caregivers and provide the social support systems in order to maintain the psychological well-being of the caregivers. In this study, we aim to determine the relationship between the loneliness perception and the loneliness levels of caregivers who follow up the bedridden patients.

METHODS

The study population of this descriptive study consisted of 120 caregivers of bedridden patients living in Bucak, Yenimahalle, Şubaşı and Şahincili quarters in the Province of Ordu in Turkey and registered in the home care unit of Ministry of Health-Ordu University, Training and Research Hospital as of May 31, 2013. The whole study population was studied without performing any sampling in the study. The study was carried out with 106 caregivers who agreed to participate in the research and who kept the patients alive. Of the caregivers, 2 were excluded since they did not agree to participate in the research, and 12 were excluded because of the death of their patients during the study period. Data were collected through home visits between June 1 and August 31, 2013, using face-to-face interview method. "Patient and Caregiver Introductory Information Form", "Multidimensional Scale of Perceived Social Support" and "UCLA Loneliness Scale" were used for data collection.

The Patient and Caregiver Introductory Information Form: This was prepared by researchers in line with the literature in order to determine the socio-demographic
characteristics of the patients and caregivers. In the first part of the questionnaire, there are questions to determine patients’ age, gender, marital status, educational status, social security status, disease type, level of being bedridden, bedridden duration and use of medication. Basic Index of Activities of Daily Living was used to determine the level of dependency of the patients. The index developed by Katz determines the daily living activities of individuals, and consists of 6 questions on activities such as bathing, dressing, toileting, transferring, continence, and feeding. In the scoring of the index, 1 point is given if the individual performs independently, 2 points is given if the individual gets assistance, and 3 points is given if the individual is unable to perform given activity. In the scale, 0-6 points indicate independence, 7-12 points indicate semi-independence, and 13-18 points indicate dependence(Katz et al., 1963). In the second part of the form, there are questions to determine age, gender, family type, income level, educational status, employment status, presence of a chronic disease, type of chronic disease, degree of relatedness, care duration, support obtained during care, and the supporting person.

**Multidimensional Perceived Social Support Scale:** This scale used in the study was developed by Zimet et al. (1988), to determine the social support perceived by caregivers, adapted to Turkish by Eker and Arkar (1995), and its Turkish revision was carried out by Eker et al. (2001). The scale consists of 12 items in total, and has 3 sub-scales of 4 items each on the origin of support. It's a 7-point scale (1: absolutely not, 7: absolutely yes). The sub-scale score is obtained by summing up the points given in each of the four items in each sub-scale, and the total score of the scale is obtained by summing up the sub-scale scores. The social support scale has three sub-scales of family, friends and special person. The lowest and highest scores of the scale are 12 and 84 respectively. And, the lowest and highest scores of the sub-scales are 3 and 7 respectively. The social support factors increase as the score increases in the scale. Higher scores indicate higher perceived social support. Cronbach's alpha method was used to measure internal consistency, and the alpha coefficients were found between 0.80 and 0.95(Eker et al. 2001). In this study, the Cronbach’s alpha coefficients for social support from family, friends, special persons and total were found as 0.94, 0.89, 0.92, and 0.91 respectively.

**UCLA Loneliness Scale:** UCLA Loneliness Scale was used to determine the levels of loneliness of the caregivers. The scale was developed by Russell et al. (1978), and revised by Russell et al. (1980), and it was adapted to Turkish by Demir (1989). It's a Likert-type scale consisting of 20 items in total. Increasing scores in the scale indicate an increase in the level of loneliness. The lowest and highest scores of the scale are 20 and 80 respectively. A score between 20 and 40 shows a mild level, 41-60 shows a moderate level, and 61-80 shows a high level loneliness. The internal consistency coefficient of the scale was 0.94, and also the test retest reliability coefficient was 0.94(Demir, 1989). The Cronbach’s alpha coefficient was 0.92 in this study.

In the study, the dependent variables are the social support and levels of loneliness perceived by caregivers; and, the independent variable is the introductory characteristics of caregivers. Data were analyzed with SPSS 15.0 statistical software package using the percentage distribution, arithmetic mean, Mann-Whitney U-test, Kruskal Wallis test and Spearman correlation coefficient. p<0.05 was accepted as the level of significance. Written approval was obtained from Ministry of Health-Ordu University, Training and Research Hospital, and verbal consent was obtained from caregivers in order to comply with ethical principles in the study.

**RESULTS**

The mean age of the patients included in the study was 71.58±19.53, and 60.4% was female, 54.7% was illiterate, 40.6% had stroke, 89.6% was taking medicine, and the mean duration of being bedridden was 8.36±9.45 years (Table 1).
Table 1: Introductory Characteristics of Patients

<table>
<thead>
<tr>
<th>Introductory Characteristics</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ 44 years</td>
<td>13</td>
<td>12.3</td>
</tr>
<tr>
<td>45-59</td>
<td>6</td>
<td>5.7</td>
</tr>
<tr>
<td>60-74</td>
<td>27</td>
<td>25.5</td>
</tr>
<tr>
<td>75-89</td>
<td>52</td>
<td>49.1</td>
</tr>
<tr>
<td>≥ 90 years</td>
<td>8</td>
<td>7.5</td>
</tr>
<tr>
<td>Mean Age</td>
<td>71.58±19.53</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>64</td>
<td>60.4</td>
</tr>
<tr>
<td>Male</td>
<td>42</td>
<td>39.6</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>58</td>
<td>54.7</td>
</tr>
<tr>
<td>Single</td>
<td>48</td>
<td>45.3</td>
</tr>
<tr>
<td>Educational Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>58</td>
<td>54.7</td>
</tr>
<tr>
<td>Literate</td>
<td>19</td>
<td>17.9</td>
</tr>
<tr>
<td>Primary education</td>
<td>23</td>
<td>21.7</td>
</tr>
<tr>
<td>High-school</td>
<td>6</td>
<td>5.7</td>
</tr>
<tr>
<td>Social Security Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>89</td>
<td>84.0</td>
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<tr>
<td>None</td>
<td>17</td>
<td>16.0</td>
</tr>
<tr>
<td>Type of Disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td>43</td>
<td>40.6</td>
</tr>
<tr>
<td>Stroke and diabetes</td>
<td>12</td>
<td>11.3</td>
</tr>
<tr>
<td>Stroke and hypertension</td>
<td>14</td>
<td>13.2</td>
</tr>
<tr>
<td>Heart disease</td>
<td>7</td>
<td>6.6</td>
</tr>
<tr>
<td>Alzheimer</td>
<td>11</td>
<td>10.4</td>
</tr>
<tr>
<td>Cancer</td>
<td>7</td>
<td>6.6</td>
</tr>
<tr>
<td>Disabled</td>
<td>12</td>
<td>11.3</td>
</tr>
<tr>
<td>Basic Daily Living Activities Scale Score</td>
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<td></td>
</tr>
<tr>
<td>Independent (0-6 points)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Semi-dependent (7-12 points)</td>
<td>12</td>
<td>11.3</td>
</tr>
<tr>
<td>Dependent (13-18 points)</td>
<td>94</td>
<td>88.7</td>
</tr>
<tr>
<td>Time Period of Being Bedridden (Years)</td>
<td>8.36±9.45</td>
<td></td>
</tr>
<tr>
<td>Drug Use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uses</td>
<td>95</td>
<td>89.6</td>
</tr>
<tr>
<td>Does not use</td>
<td>11</td>
<td>10.4</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>100</td>
</tr>
</tbody>
</table>

The mean age of the caregivers was 51.54±11.62, and 88.7% was female, 56.6% had a nuclear family structure, 56.6% had balanced income, 50.9% was primary school graduate, 83% was unemployed, 57.2% had chronic disease, the mean duration of care was 7.63±8.38 years, 85.8% had obtained support in giving care, and 91.2% was supported by family members (Table 2).

Table 2: Introductory Characteristics of Caregivers

<table>
<thead>
<tr>
<th>Introductory Characteristics</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30-44</td>
<td>28</td>
<td>26.4</td>
</tr>
<tr>
<td>45-59</td>
<td>49</td>
<td>46.2</td>
</tr>
<tr>
<td>60-74</td>
<td>25</td>
<td>23.6</td>
</tr>
<tr>
<td>≥ 75</td>
<td>4</td>
<td>3.8</td>
</tr>
<tr>
<td>Mean Age</td>
<td>51.54±11.62</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>94</td>
<td>88.7</td>
</tr>
<tr>
<td>Male</td>
<td>12</td>
<td>11.3</td>
</tr>
<tr>
<td>Family Type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear Family</td>
<td>60</td>
<td>56.6</td>
</tr>
<tr>
<td>Extended Family</td>
<td>46</td>
<td>43.4</td>
</tr>
<tr>
<td>Income Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income is lower than expenses</td>
<td>40</td>
<td>37.7</td>
</tr>
<tr>
<td>Balanced</td>
<td>60</td>
<td>56.6</td>
</tr>
<tr>
<td>Income is higher than expenses</td>
<td>6</td>
<td>5.7</td>
</tr>
<tr>
<td>Educational Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>15</td>
<td>14.2</td>
</tr>
<tr>
<td>Literate</td>
<td>16</td>
<td>15.1</td>
</tr>
<tr>
<td>Primary education</td>
<td>54</td>
<td>50.9</td>
</tr>
<tr>
<td>High-school</td>
<td>17</td>
<td>16.0</td>
</tr>
<tr>
<td>University</td>
<td>4</td>
<td>3.8</td>
</tr>
<tr>
<td>Employment Status</td>
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<tr>
<td>Employed</td>
<td>18</td>
<td>17.0</td>
</tr>
<tr>
<td>Unemployed</td>
<td>88</td>
<td>83.0</td>
</tr>
<tr>
<td>Presence of Chronic Diseases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>50</td>
<td>47.2</td>
</tr>
<tr>
<td>Type of Chronic Disease (n=50)</td>
<td>None</td>
<td>56</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------</td>
<td>----</td>
</tr>
<tr>
<td>Herniated disc</td>
<td>14</td>
<td>28.0</td>
</tr>
<tr>
<td>Hypertension</td>
<td>11</td>
<td>22.0</td>
</tr>
<tr>
<td>Hypertension and herniated disc</td>
<td>5</td>
<td>10.0</td>
</tr>
<tr>
<td>Diabetes</td>
<td>5</td>
<td>10.0</td>
</tr>
<tr>
<td>Hypertension and diabetes</td>
<td>5</td>
<td>10.0</td>
</tr>
<tr>
<td>Panic attack</td>
<td>4</td>
<td>8.0</td>
</tr>
<tr>
<td>Goiter</td>
<td>6</td>
<td>12.0</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Degree of Relationship</th>
<th>Spouse</th>
<th>21</th>
<th>19.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daughter</td>
<td>29</td>
<td>27.4</td>
<td></td>
</tr>
<tr>
<td>Son</td>
<td>6</td>
<td>5.7</td>
<td></td>
</tr>
<tr>
<td>Daughter-in-law</td>
<td>19</td>
<td>17.9</td>
<td></td>
</tr>
<tr>
<td>Sibling</td>
<td>5</td>
<td>4.7</td>
<td></td>
</tr>
<tr>
<td>Carer</td>
<td>16</td>
<td>15.1</td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>10</td>
<td>9.4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time Period of Care (Years)</th>
<th>7.63±8.38</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Supported in Giving Care</th>
<th>Yes</th>
<th>91</th>
<th>85.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>15</td>
<td>14.2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supporting Person (n=91)</th>
<th>Family members</th>
<th>83</th>
<th>91.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carer</td>
<td>4</td>
<td>4.4</td>
<td></td>
</tr>
<tr>
<td>Relatives</td>
<td>4</td>
<td>4.4</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

It was found that caregivers' mean social support score was 62.08± 19.24 and mean loneliness score was 38.51±13.06 (Table 3).

Table 3: Distribution of Mean Scores in Social Support Scale and Loneliness Scale Taken by Caregivers

<table>
<thead>
<tr>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Social Support from the Family</td>
<td>4.00</td>
<td>28.00</td>
<td>23.83</td>
</tr>
<tr>
<td>Perceived Social Support from Friends</td>
<td>4.00</td>
<td>28.00</td>
<td>19.60</td>
</tr>
<tr>
<td>Perceived Social Support from a Special Person</td>
<td>4.00</td>
<td>28.00</td>
<td>18.65</td>
</tr>
<tr>
<td>Social Support Total Score</td>
<td>12</td>
<td>84</td>
<td>62.08</td>
</tr>
<tr>
<td>Loneliness Scale</td>
<td>20.00</td>
<td>69.00</td>
<td>38.51</td>
</tr>
</tbody>
</table>

A statistically significant negative relationship was found between mean social support scores and loneliness scale scores of caregivers (p<0.01). The levels of loneliness were decreased as the social support perceived by caregivers increased (Table 4).

Table 4: Relationship Between Mean Scores in Social Support Scale and Loneliness Scale Taken by Caregivers

<table>
<thead>
<tr>
<th>Loneliness Scale</th>
<th>Perceived Social Support from the Family</th>
<th>Perceived Social Support from Friends</th>
<th>Perceived Social Support from a Special Person</th>
<th>Social Support Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loneliness Scale</td>
<td>r -</td>
<td>r -0.489</td>
<td>p .000**</td>
<td></td>
</tr>
<tr>
<td>Perceived Social Support from the Family</td>
<td>r -0.588</td>
<td>0.364</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Perceived Social Support from Friends</td>
<td>p .000**</td>
<td>0.000**</td>
<td>0.000**</td>
<td></td>
</tr>
<tr>
<td>Perceived Social Support from a Special Person</td>
<td>r -0.533</td>
<td>0.306</td>
<td>0.776</td>
<td>-</td>
</tr>
<tr>
<td>Social Support Total Score</td>
<td>p 0.000**</td>
<td>0.001**</td>
<td>0.000**</td>
<td>0.000**</td>
</tr>
</tbody>
</table>

***= p<0.01 . Kolmogorov-Smirnov test was used to test for normal distribution of the variables; and, Spearman Correlation coefficient was utilized because of the lack of normal distribution.

No statistically significant difference was found between mean social support scores and caregivers' gender, income level, educational status and duration of care (p>0.05). A statistically significant difference was found between mean social support scores and caregivers' age, family type, degree of relatedness and ability to obtain support (p<0.05). No statistically significant difference was found between mean loneliness scores and caregivers'
age, gender, income level, employment status, degree of relatedness, and ability to obtain support (p>0.05). A statistically significant difference was found between mean loneliness scores and caregivers' family type, educational status and duration of care (p<0.05) (Table 5).

Table 5: Comparison of Introductory Characteristics of Caregivers and Mean Scores Taken in Social Support Scale and Loneliness Scale

<table>
<thead>
<tr>
<th>Introductory Characteristics</th>
<th>Perceived Social Support from Family</th>
<th>Perceived Social Support from Friends</th>
<th>Perceived Social Support from Special Person</th>
<th>Social Support Total Score</th>
<th>Loneliness Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>30-44</td>
<td>23.43±8.12</td>
<td>19.46±6.02</td>
<td>19.25±7.79</td>
<td>62.8±17.06</td>
</tr>
<tr>
<td></td>
<td>45-59</td>
<td>25.02±6.16</td>
<td>21.51±7.24</td>
<td>20.96±4.83</td>
<td>68.6±15.74</td>
</tr>
<tr>
<td></td>
<td>60-74</td>
<td>23.12±5.03</td>
<td>17.04±9.26</td>
<td>14.3±10.10</td>
<td>56.9±21.55</td>
</tr>
<tr>
<td></td>
<td>≥ 75</td>
<td>16.50±9.81</td>
<td>13.25±11.30</td>
<td>13.25±11.24</td>
<td>40.3±37.61</td>
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<td>KW; p</td>
<td>4.612; 0.203</td>
<td>7.119; 0.068</td>
<td>9.676; 0.022*</td>
<td>8.089; 0.044*</td>
<td>7.584; 0.055</td>
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<td>Gender</td>
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<td>23.5±7.66</td>
<td>19.5±±8.02</td>
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<td>MWU; p</td>
<td>464.000; 0.259</td>
<td>553.000; 0.912</td>
<td>474.300; 0.367</td>
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<td>394.000; 0.090</td>
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<td>MWU; p</td>
<td>960.500; 0.002*</td>
<td>1156.000; 0.150</td>
<td>1030.500; 0.024*</td>
<td>998.000; 0.020*</td>
<td>1016.000; 0.020</td>
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<td>63.1±18.52</td>
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<td>KW; p</td>
<td>2.351; 0.309</td>
<td>0.615; 0.735</td>
<td>0.018; 0.991</td>
<td>0.98; 0.952</td>
<td>3.276; 0.194</td>
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<td>High-school</td>
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<td>20.7±8.95</td>
<td>68.2±18.39</td>
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<tr>
<td>KW; p</td>
<td>8.121; 0.087</td>
<td>5.777; 0.216</td>
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<td>6.436; 0.169</td>
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<td>Unemployed</td>
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<td>534.000; 0.029</td>
<td>592.500; 0.090</td>
<td>592.000; 0.091</td>
<td>744.000; 0.686</td>
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<td>Degree of Relationship</td>
<td>Spouse</td>
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<td>Daughter</td>
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<td>21.4±5.56</td>
<td>21.2±8.49</td>
<td>69.0±18.02</td>
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<td>Son</td>
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<td>23.0±5.72</td>
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<td>73.0±17.15</td>
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<td>Daughter-in-law</td>
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<td>Sibling</td>
<td>25.4±7.7</td>
<td>15.0±7.07</td>
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<td>58.7±16.15</td>
</tr>
<tr>
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<td>Carer</td>
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<td>20.2±8.93</td>
<td>66.0±16.66</td>
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<td>Mother</td>
<td>24.2±8.27</td>
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<td>60.3±16.38</td>
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<td>KW; p</td>
<td>21.936; 0.001*</td>
<td>13.187; 0.040*</td>
<td>13.677; 0.033*</td>
<td>16.669; 0.011*</td>
<td>12.124; 0.059</td>
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<td>Supported in Giving Care</td>
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<td>24.9±5.94</td>
<td>19.4±7.92</td>
<td>18.6±9.27</td>
<td>64.2±19.43</td>
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<tr>
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<td>No</td>
<td>16.3±7.07</td>
<td>18.2±7.40</td>
<td>18.4±7.47</td>
<td>63.4±19.22</td>
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<td>MWU; p</td>
<td>425.500; 0.008*</td>
<td>591.000; 0.403</td>
<td>653.000; 0.787</td>
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<td>Time Period of Care</td>
<td>r/p</td>
<td>0.040; 0.685</td>
<td>0.070; 0.476</td>
<td>0.007; 0.942</td>
<td>0.029; 0.766</td>
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*p<0.05 ; Kolmogorov-Smirnov test was used to test for normal distribution of the variables; and, Mann-Whitney u-test, Kruskal Wallis test and Spearman Correlation coefficient was utilized because of the lack of normal distribution.
DISCUSSION

The mean social support scale score of the caregivers included in the study was found as 62.08±19.24. Caregivers were found to perceive the most social support from their families and the least social support from their special ones (Table 3). Similarly, it was reported that relatives of patients with cancer, primary caregivers of patients diagnosed with psychiatric disorders, and relatives of patients with stroke perceive the most social support from families and the least from special ones (Tel et al., 2010; Tuna and Olgun, 2010; Bedük and Karaaslan Eşer, 2014). In our study, 91.2% of caregivers were supported by their family members; and, this fact may affect this higher social support perceived from family.

In the study, the levels of loneliness were found to decrease as the social support perceived by caregivers increases (Table 4). Similarly, the levels of loneliness were reported to decrease as the social support increases in mothers of children patients with cancer, relatives of patients with Alzheimer's disease, and relatives of patients with Parkinson's disease (Ekwall et al., 2005; Coetsee, 2007; Bal Yilmaz et al., 2008; McRae et al., 2009). Our study findings are consistent with the literature.

In the study, the perceived social support was found to decrease as the age of caregivers increases (Table 5). It was also found that the social support decreases as the age of mothers of children with disabilities, relatives of patients with stroke, relatives of patients with Alzheimer's disease and relatives of patients with Parkinson's disease increases (Aras and Tel, 2009; Coşkun and Akkaş, 2009; McRae et al., 2009; Tuna and Olgun, 2010; Yurtsever et al., 2013). The findings in this study are in line with these findings. No statistically significant difference was found between mean social support scores and genders of the caregivers (p>0.05), (Table 5). Similarly, no statistically significant difference was reported between age and the perceived social support in caregivers of patients diagnosed with psychiatric disorders and patients with chronic obstructive pulmonary disease (Aras and Tel, 2009; Tel et al., 2010). On the other hand, social support was found to be higher in male caregivers of patients with Alzheimer's disease (Yurtsever et al., 2013). Since our study was carried out with caregivers of bedridden patients, this may lead to non-discrimination of gender in giving support to the caregivers. The perceived social support was found to be higher in caregivers living in extended families (Table 5). The higher number of people and shared responsibilities in an extended family may be effective in increased perceived social support. Although there was no statistically significant difference between mean social support scores and income levels of the caregivers, the mean social support score was higher in caregivers with higher levels of income (Table 5). The social support was reported to increase as the income level increases in mothers of children with disabilities, relatives of children patients with cancer, and relatives of patients with Alzheimer's disease (Coşkun and Akkaş, 2009; Yurtsever et al., 2013; Alsancak et al., 2014). The possibility to reach more resources may affect the perceived social support in caregivers with higher levels of income. Although there was no statistically significant difference between mean social support scores and educational statuses of the caregivers, mean social support score increases as educational status increases (Table 5). The social support was reported to increase as the educational status increases in mothers of children with disabilities, relatives of children patients with cancer, and relatives of patients with Alzheimer's disease (Coşkun and Akkaş, 2009; Yurtsever et al., 2013; Alsancak et al., 2014). One of the social support types is the informational support. Informational support is a descriptive and analytical type of support in coping with events deemed as a problem (Khorshtid and Gürol Arslan, 2006). Since the informational support is higher in people with higher educational status, the resulting better problem solving skills may affect the perceived social support. No statistically significant difference was found between mean social support scores and employment status of the caregivers (p>0.05), (Table 5). Similarly, Mermer et al. (2010), reported that the employment status does not affect social support. A statistically significant difference was found between mean social support scores and degree of relationship between the caregiver and the patient (p<0.05). The perceived social support was found to be higher in caregivers who were sons of patients (Table 4). Tang and Chen (2002), and Alsancak et al. (2014) reported that the degree of
relatives of patients affects the perceived social support. Yurtsever et al. (2013), reported that the degree of relatives of patients with Alzheimer's disease does not affect the perceived social support. In our study, the higher perceived social support in caregivers who were sons of patients may be related to the culture of Turkey. The caregiver role of women is considered normal in Turkey, and this may lead to more support given to male caregivers. As a matter of fact, Dökmen (2012) stated that men have difficulty in giving care, and hence they are in need of family support more. The perceived social support was found to be higher in caregivers who obtain support in care (Table 5). Similarly, Tel et al. (2010) found that the social support perceived by caregivers of patients diagnosed with psychiatric disorders was higher in those obtain support from the family circle. Caregivers who obtain support in care may perceive more social support due to the emotional, social, informational and instrumental help provided by their inner circle (Khoshid and Gürol Arslan, 2006). No statistically significant difference was found between mean social support scores of the caregivers and duration of care (p>0.05), (Table 5). Similarly, it was reported that the duration of care did not affect the perceived social support in relatives of patients with Alzheimer’s disease (Yurtsever et al., 2013). Dökmen (2012), stated that social support decreases with increasing duration of care. Since our study was carried out with caregivers of bedridden patients, this may lead to continuous support to the caregivers.

The mean loneliness score of caregivers was found as 38.51±13.06 (Table 3). The levels of loneliness in mothers of children patients with cancer, in relatives of patients with Parkinson's disease, and in relatives of patients with Alzheimer's disease were reported as 41.41±11.75, 40±10.6, and 37.35±9.7 respectively (Beeson et al., 2000; Bal Yılmaz et al., 2008; McRae et al., 2009). These findings are in line with our study findings.

No statistically significant difference was found between mean loneliness scores and ages of the caregivers (p>0.05), (Table 5). Similarly, studies on caregivers report that age does not affect the level of loneliness (Ekwall et al., 2005; Sarıhan, 2007; Bal Yılmaz et al., 2008; McRae et al., 2009). These results support our study findings. Although there was no statistically significant difference between mean loneliness scores and genders of the caregivers, the mean loneliness score was higher in female caregivers (Table 5). Dereli et al. (2010), states that gender does not affect the level of loneliness. Dökmen (2012), however, reported that neuropsychiatric symptoms were more common in female caregivers. We can say that the higher emotional sensitivity of women compared to males affects loneliness. In the study, the level of loneliness was found to be higher in caregivers who have a nuclear family structure (Table 5). In their study, Ekwall et al. (2005), states that the presence of other members in a family affects the loneliness. Insufficient social support resources of caregivers living in a nuclear family may affect this loneliness. And, although there was no statistically significant difference between mean loneliness scores and income levels of the caregivers, the mean loneliness score was found to be higher in caregivers with lower levels of income (Table 5). It was reported that the income level was effective in loneliness and mental condition of elderly caregivers and caregivers of patients over 65 years old (Ekwall et al., 2005; Kılıç Açıka and Taşçı, 2005). Perlman and Peplau (1998), and Bal Yılmaz et al. (2008) found that the loneliness was higher in caregivers with poor economic status. Insufficient resources that can be reached by caregivers with poor economic status may affect this loneliness. The loneliness of caregivers was increased with decreasing level of education (Table 5). Similarly, Perlman and Peplau (1998) reported that the educational status affects loneliness, and McRae et al. (2009) and Sarıhan (2007) stated that the loneliness was higher in caregivers with lower educational status. These results support our study findings. Although there was no statistically significant difference between mean loneliness scores and employment statuses of the caregivers, the mean loneliness score was found to be higher in unemployed caregivers (Table 5). Bal Yılmaz et al. (2008), reported that the employment status was not effective on the level of loneliness in mothers of children patients with cancer. Perlman and Peplau (1998), however, stated that the loneliness was higher in unemployed caregivers. It is thought that loneliness is affected by wider social network in employed people. And, although there was no statistically significant difference between mean
loneliness scores of caregivers and degree of relationship between the caregiver and patient, the mean loneliness score was found to be higher in caregiver spouses (Table 5). Beeson et al. (2000) reported that the degree of relatives was effective on loneliness. Kılıç Akça and Taşçı (2005) stated that the mental health problems experienced by caregivers of patients over 65 years old increase with decreasing degree of relatedness. Having additional responsibilities of the spouses, in addition to patient care, may affect loneliness. Although there was no statistically significant difference between mean loneliness scores of caregivers and support obtained in giving care, the mean loneliness score was found to be higher in caregivers who had no additional support in care (Table 5). Ekwall et al. (2005), stated that living with a partner or family members affects the level of loneliness in elderly caregivers. Kılıç Akça and Taşçı (2005) reported that the mental health of caregivers of patients over 65 years had been affected less in caregivers who obtained support in care. The higher social support perceived by caregivers, who obtained support in care in our study, may be effective on their loneliness feelings. The levels of loneliness of caregivers were decreased with increasing duration of care (Table 5). The increased duration of care leads to increased knowledge and experience on, as well as decreases sensitivity (Dökmên, 2012).

In conclusion, mobilizing the social support systems of caregivers of bedridden patients may be effective in increasing the perceived social support and decreasing loneliness. Therefore, it is important to identify the needs of caregivers, as well as the needs of patients.

Note: This study was presented as a poster in 14th National Nursing Congress held in Bodrum, Turkey in October 25-27, 2013.

REFERENCES


COETSEE, MJ. (2007). The Psychological Health Implications of Social Support For The Alzheimer Caregiver, Unpublished Master’s Dissertation, South Africa: Department of Psychology in the Department of Psychology Faculty of Humanities at the University of Pretoria.


