SOCIAL SUPPORT, LONELINESS AND PERCEIVED STRESS IN GERIATRIC PATIENTS OF DEPRESSION

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ABSTRACT

Background: Ageing is a universal process which is considered as associated with declining health status. With a rapidly aging society, Geriatric Mental Health is becoming an important public health concern. Depression is a common cause of distress among older adults that leads to physical, mental and social dysfunction and significantly decreases quality of life.

Objective: This study aimed to examine the Social Support, Loneliness and Perceived Stress in Geriatric Patients of Depression.

Methodology: It was a cross-sectional and comparative study in nature, in which 30 geriatric (Age = 60 or above) patients with Depression were compared with 30 geriatric Non-Depressive of same age group on Social Support, Loneliness and Perceived Stress.

Measures: Socio-demographic details and clinical details were recorded with the help of socio-demographic and clinical data sheets designed separately for both groups. Thereafter MMSE was administered. University of California Los Angeles Loneliness Scale, Perceived Stress Scale, Social Support Questionnaire, Geriatric Depression Scale and General Health Questionnaire (only on control group) were administered on those who fulfilled the inclusion criteria after screening by MMSE to rule out any neuro-cognitive disorders.

Results: No significant difference between two groups on various socio-demographic variables such as education, domicile and family background etc was found as they were comparable groups. It was analyzed that Depression co-related positively with Loneliness and Perceived Stress whereas Social Support is inversely correlated with Depression. Statistically significant differences were found in Social Support, Loneliness and Perceived Stress between Depressive and Non-Depressive groups.

Conclusion: Lack of Social Support, Loneliness and high level of Perceived Stress are the risk factor for Geriatric Depression.

Key words: Social Support, Loneliness, Perceived Stress, Geriatric Patients, Depression

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Conflict of Interests: None
I. INTRODUCTION:

Growing old is a universal process which is considered to be associated with deteriorating health. With a rapidly aging world, Geriatric Mental Health is emerging as an important public health issue. Depression is a common cause of distress among elderly that leads to physical, mental and social dysfunction and significantly decreases quality of life. Depression is also the most common psychiatric disorder among the geriatric persons which can manifest as Major Depression or as Minor Depression characterized by a collection of mild depressive symptoms. In an Indian study, the prevalence of Geriatric Depression within the previous one month was found to be 12.7%. The Important risk factors in late life Depression are considered to be loss of the partner, low social and interpersonal support.  

Social Support may be defined as any information that leads to the person to believe that he or she is cared for, loved and is an esteemed member of a network of mutual obligation. Social Support is amongst the important factors that play a vital role in maintaining well-being in the elderly. Social Support is moderator of stressful life events. Lack of Social Support can lead to both physical and mental health problems. Elderly who had lost their spouse experience lower self-esteem which leads to higher Emotional Loneliness and social Loneliness or perception of less social support. Loneliness is defined in many ways, but all definitions share the same conceptualization that this is an unpleasant, anxiety inducing subjective experience that is the outcome of inadequate social relationships.

Loneliness is a major issue relating to quality of life and wellbeing facing the older adult. Older adults are often at risk for Loneliness because of disruptions to social networks over time. Retirement reduces social relationships that are related to work in this age group. Disability or illness may prevent them from participating in usual activities with others or may mean a loss of independence that necessitates moving away from familiar people and communities. Over the years, there has been a strong positive correlation between Loneliness and Depression in the elderly population. In one quasi-experimental, cross-sectional, pilot study in the United Kingdom, Minardi and Blanchard in 2004 found that Loneliness is a factor that might relate to Aging and Depression (n= 24). A strong association between Depression and Loneliness was found in the study.

Perceived Stress is also an important indicator of mental and physical health. Stress occurs when individuals encounter situations they perceive as threatening; demanding or that exceeds their capacity to cope-up. Perceived Stress is associated with not only exposure to stressors, but also personal coping skills and resources to deal with stressful situations. Unmanaged stress can result in a series of negative changes on physiological processes and behavioral patterns, including Depression. With increasing age, elderly are naturally exposed to new and unfamiliar stressors, but are challenged with acquiring adequate coping resources and skills. Older adults are vulnerable to stress in their lives due to their increased risk of Multiple Losses, Health-Related Problems in Aging, Dependence on Caregivers, Emotional Loneliness, Limited Income and Social Support.

AIM:

This study aimed to examine the Social Support, Loneliness and Perceived Stress in Geriatric Patients of Depression

II. MATERIALS AND METHODS

SAMPLE:

An incidental purposive sample of 60 patients (30 with Depression and 30 Non-Depressive) aged 60 years or above fulfilling the inclusion criteria was inducted. Case Group was inducted from out-patient services of department of Psychiatry, Govt. Medical College & Hospital, Chandigarh and Control Group was inducted from senior citizen registration counter of Govt. Medical College & Hospital, Chandigarh.

Inclusion Criteria for case group:

- Patient aged 60 years or above (Any gender) with diagnosis of Depression as per ICD-10 DCR (Non-psychotic Features)
- Able to read and write English/Hindi/Punjabi
- Score ≥ 10 on Geriatric Depression Scale
- Mini mental status examination score ≥ 24
- Patient who gave consent for participation in study

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Exclusion Criteria for case group:
- Patient who had co-morbid substance abuse, intellectual disability or any other psychiatric disorder
- Patient with definitive diagnosis of dementia or non-depressive psychiatric illness, which may preclude accurate screening for Depression

Inclusion Criteria for control group:
- Patient aged 60 years or above (Any gender)
- Patient attending geriatric clinic for their medico-surgical illnesses
- General Health Questionnaire score ≤ 3
- Geriatric Depression Score ≤ 9
- Mini mental status exam score ≥ 24
- One who could read/write Hindi/English/Punjabi
- Patient who gave consent for participation in study

Exclusion Criteria for control group:
- Patient who had co-morbid substance abuse, intellectual disability and any other psychiatric disorder
- Patient with definitive diagnosis of dementia

III. RESEARCH DESIGN:
This study was cross-sectional and comparative in nature. Face-to-face interview survey method using structured questionnaires was adopted for this study.

MEASURES:
All participants participated in the study signed a general consent form that gave a brief explanation of the research project, described benefits and risks of participation and explained their rights to confidentiality. Keeping in view the objectives of the present study the following tools were administered on the selected sample:

Socio-Demographic Data Sheet for Case group (Geriatric Depressive Patients) and Control group (Geriatric Non- Depressive Patients):
This was specially developed to record the various socio-demographic details: gender, marital status, education, domicile, income and family type for subjects of case group.

Mini Mental Status Examination (MMSE).10
This is an 11-item validated widely used screening tool of cognitive function. It is a tool that can be used to systematically and thoroughly assess mental status. It measures five areas of cognitive function: orientation, registration, attention and calculation, recall, and language. The maximum score is 30. A score of 23 or lower is indicative of cognitive impairment. The MMSE takes 5-10 minutes to administer and is therefore practical to use repeatedly and routinely. MMSE has been validated and extensively used in both clinical practice and research.

Geriatric Depression Scale-Hindi Version (GDS-H).11
The instrument has been tested and used extensively with the older population in many countries and translated into many languages. The target population for the GDS is healthy or medically ill and mild to moderately cognitively impaired older adults. Hindi version of GDS is prepared by Ganguli et al. in 1999. It is found to have 92% sensitivity and 89% specificity.

University of California Log Angeles loneliness Scale (UCLA).12
The UCLA Loneliness Scale (Version 3) developed by Russell in 1996 was used in this study to measure loneliness. The scale consists of 20 questions and is designed to identify feelings of loneliness in large groups of respondents, including older adults. Respondents are asked to respond to each question on a 1-3 scale, from ‘never’ to ‘often’. Higher scores on this scale indicate more intense feelings of loneliness. Higher scores on this scale indicate more intense feelings of loneliness. Hindi translation of the scale was used for those who didn’t understand English as per WHO guidelines.
The Perceived Stress Scale (PSS) is developed by Cohen in 1983. It is the most widely used psychological instrument for measuring the perception of stress. It is a measure of the degree to which situations in one’s life are appraised as stressful. Items are designed to tap how unpredictable, uncontrollable, and overloaded respondents find their lives. The scale also includes a number of direct queries about current levels of experienced stress. This scale is first translated into Hindi and then back-translated into English according to WHO guideline of translation and adaption of instruments.

PGI Social Support Questionnaire (PGI-SSQ)
PGI Social Support Questionnaire (P.G.I.-S.S.Q.) is developed by Dr. Nehra et al. in 1998 to measure social support available to the individual. It is an 18 item (in Hindi) scale with the reliability r=.59 (p<.01) and validity .80 (p<.01), each item differentiates normals from neurotics at .01 level.

General Health Questionnaire (GHQ)-12 (Hindi)
The GHQ is a self-report screening instrument for psychiatric morbidity. A 12 item Hindi version of Goldberg’s GHQ was standardized in Hindi by Gautam et al. in 1987. This was developed to assess the psychological components of ill health; the GHQ evaluates change in a patient’s ability to perform daily functions over ‘the past few weeks’. The instrument generally shows good ability to detect psychiatric disorders, although the developers note that it may have limited ability to detect certain symptoms of anxiety, particularly phobias. The GHQ remains a widely used and versatile tool to screen for psychological distress, although it is not used in isolation for diagnostic purposes.

IV. PROCEDURE

30 geriatric Patients with Depression (with age 60 or above) were recruited in Case Group for the study from OPD services of Department of Psychiatry of Govt. Medical College & Hospital and 30 non-depressive geriatric patients were recruited from the senior citizen registration counter of Govt. Medical College & Hospital. An informed written consent for the study was taken from the patients meeting inclusion criteria. For case group, socio-demographic details and clinical details were recorded with the help of socio-demographic sheet. Thereafter MMSE, University of California Los Angeles (UCLA) Loneliness Scale, Perceived Stress Scale, Social Support Questionnaire, Geriatric health questionnaire and Geriatric Depression Scale-Hindi Version were also administered to find out cognitive function, loneliness, social support, health condition and depression of them.

In control group (Non-Depressive geriatric patients), socio-demographic details were recorded with the help of socio-demographic sheet for this group. Patients were administered the afore-mentioned scale after screening with MMSE as well as GHQ as per the inclusion criteria for this group. No interference was done by the investigator in treatment and no advice was provided regarding the treatment. These cases were referred back to respective consultant after data collection. Data collected from the assessment were analyzed using relevant Statistical Methods. The assessment procedure with each individual took about one hour.

V. RESULTS:

Statistical Analysis
Descriptive and inferential statistical methods were used to analyze the obtained data with the help of Statistical Package for Social Sciences (SPSS) 20. Mean, Standard Deviation, Chi Square, Student’s t- Test and Pearson Correlation Test were used in data analysis. Following were the major findings:

The mean age in Depressive Group was around 65 years (65.57 ± 4.94). In Non-Depressive (control group) mean age was same as in case group i.e. around 65 years (65.57 ± 5.49). As shown in Table-1 each socio-demographic variable the chi square value was found to be statistically non-significant, so both groups were comparable on socio-demographic variables.
**TABLE-1:**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Groups</th>
<th>Depressive N=30</th>
<th>Percentage (%)</th>
<th>Non-depressive N=30</th>
<th>Percentage (%)</th>
<th>$\chi^2$</th>
<th>p values</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td>Male</td>
<td>18</td>
<td>60.00%</td>
<td>22</td>
<td>73.33%</td>
<td>1.200</td>
<td>0.273</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>12</td>
<td>40.00%</td>
<td>8</td>
<td>26.67%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td>Married</td>
<td>27</td>
<td>90.00%</td>
<td>26</td>
<td>86.67%</td>
<td>0.219</td>
<td>0.896</td>
</tr>
<tr>
<td></td>
<td>Unmarried</td>
<td>1</td>
<td>3.33%</td>
<td>1</td>
<td>3.33%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Widowed</td>
<td>2</td>
<td>6.67%</td>
<td>3</td>
<td>10.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>Illiterate</td>
<td>2</td>
<td>6.67%</td>
<td>3</td>
<td>10.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>10</td>
<td>33.33%</td>
<td>6</td>
<td>20.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Middle</td>
<td>7</td>
<td>23.33%</td>
<td>1</td>
<td>3.33%</td>
<td>11.10</td>
<td>0.085</td>
</tr>
<tr>
<td></td>
<td>Matric</td>
<td>3</td>
<td>10.00%</td>
<td>12</td>
<td>40.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inter Diploma</td>
<td>3</td>
<td>10.00%</td>
<td>3</td>
<td>10.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Graduate</td>
<td>3</td>
<td>10.00%</td>
<td>3</td>
<td>10.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post Graduate</td>
<td>2</td>
<td>6.67%</td>
<td>2</td>
<td>6.67%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Domicile</strong></td>
<td>Rural</td>
<td>9</td>
<td>30.00%</td>
<td>10</td>
<td>33.33%</td>
<td>0.77</td>
<td>0.781</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>21</td>
<td>70.00%</td>
<td>19</td>
<td>63.33%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td>NIL</td>
<td>1</td>
<td>3.33%</td>
<td>1</td>
<td>3.33%</td>
<td>3.073</td>
<td>0.381</td>
</tr>
<tr>
<td></td>
<td>Up to 5000</td>
<td>9</td>
<td>30.00%</td>
<td>4</td>
<td>13.33%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5000-10000</td>
<td>6</td>
<td>20.00%</td>
<td>5</td>
<td>16.67%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Above 10000</td>
<td>14</td>
<td>46.67%</td>
<td>20</td>
<td>66.67%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Family Type</strong></td>
<td>Nuclear</td>
<td>10</td>
<td>33.33%</td>
<td>14</td>
<td>46.67%</td>
<td>4.867</td>
<td>0.088</td>
</tr>
<tr>
<td></td>
<td>Extended</td>
<td>6</td>
<td>20.00%</td>
<td>10</td>
<td>33.33%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Joint</td>
<td>14</td>
<td>46.67%</td>
<td>6</td>
<td>20.00%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Significant at 0.01 (2 tailed) * Significant at 0.05 (2 tailed)**

**Table-2** shows the comparison of means between Depressive (case-group) and Non-Depressive (control-group) as per the scores On Geriatric Depression Scale (GDS), Social Support Questionnaire (SSQ), UCLA-Loneliness scale (UCLA-LS) and Perceived Stress Scale (PSS).

The mean score of Depressive Group i.e. 23.33 was higher than that of Non-Depressive Group i.e. 5.53 and t-value (4.867) was found to be statistically significant at 0.01 (p-value 0.000) on GDS. The mean score (40.53) of Depressive Group was lesser than that of Non-Depressive Group (50.30) and the t-value (20.373) was found to be statistically significant at 0.01 (p-value 0.000) on SSQ. The mean score (43.90) of Depressive Group was higher than that of Non-Depressive Group (10.93) and the t-value (19.547) was found to be statistically significant at 0.01 (p-value 0.000) on UCLA-Loneliness scale. The mean score (36.00) of depressive group was higher than that of non-depressive group (15.43) and the t-value (14.716) was found to be statistically significant at 0.01 (p-value 0.000) on PSS.
### TABLE-2:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Standard Error Mean</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDS-H</td>
<td>Depressive</td>
<td>30</td>
<td>23.33</td>
<td>4.18</td>
<td>0.76</td>
<td>20.373</td>
<td>0.000**</td>
</tr>
<tr>
<td></td>
<td>Non-depressive</td>
<td>30</td>
<td>5.53</td>
<td>2.33</td>
<td>0.42</td>
<td>5.650</td>
<td>0.000**</td>
</tr>
<tr>
<td>SSQ</td>
<td>Depressive</td>
<td>30</td>
<td>40.53</td>
<td>7.20</td>
<td>1.31</td>
<td>19.547**</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Non-depressive</td>
<td>30</td>
<td>50.30</td>
<td>6.14</td>
<td>1.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UCLA-LS</td>
<td>Depressive</td>
<td>30</td>
<td>43.90</td>
<td>7.90</td>
<td>1.44</td>
<td>14.716</td>
<td>0.000**</td>
</tr>
<tr>
<td></td>
<td>Non-depressive</td>
<td>30</td>
<td>10.93</td>
<td>4.78</td>
<td>0.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSS</td>
<td>Depressive</td>
<td>30</td>
<td>36.00</td>
<td>6.40</td>
<td>1.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Non-depressive</td>
<td>30</td>
<td>15.43</td>
<td>4.19</td>
<td>0.76</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Significant at 0.01 (2 tailed) * Significant at 0.05 (2 tailed)

Table-3 shows that there was negative correlation (r = -0.644) between the GDS and SSQ scores which was significant at 0.01 level whereas Loneliness Scale Scores were positively correlated (r = 0.910) and are significant at 0.01 level and score of PSS scores were also positively correlated (r = 0.897) with GDS scores with 0.01 level of significance. Social Support was negatively correlated (r = -0.712) with score of Loneliness scale with 0.01 level of significance. It was also negatively correlated (r = -0.632) with Scores of PSS with the same level of significance. Loneliness Scale Scores were positively correlated (r = 0.861) with PSS scores with 0.01 level of significance.

### TABLE-3:

<table>
<thead>
<tr>
<th></th>
<th>GDS</th>
<th>SSQ</th>
<th>LS</th>
<th>PSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDS</td>
<td>1</td>
<td>-.644**</td>
<td>.910**</td>
<td>.897**</td>
</tr>
<tr>
<td>SSQ</td>
<td>-.644**</td>
<td>1</td>
<td>-.712**</td>
<td>-.632**</td>
</tr>
<tr>
<td>UCLA-LS</td>
<td>.910**</td>
<td>-.712**</td>
<td>1</td>
<td>.861**</td>
</tr>
<tr>
<td>PSS</td>
<td>.897**</td>
<td>-.632**</td>
<td>.861**</td>
<td>1</td>
</tr>
</tbody>
</table>

** VI. DISCUSSION: **

The present study was carried out to study Social Support, Loneliness and Perceived Stress in Geriatric Patients of Depression. In this study, there was no statistically significant difference in both Depressive (case group) and Non-Depressive (control group) groups across various socio-demographic characteristics such as gender, marital status, and education, domicile and income and family type.

Level Depression was found to be inversely correlated (r = .644) with level of Social Support in the present study. These findings are supported by in a study by Vink et al. in 2008 in which Important risk factors in late life Depression were found to be loss of the partner, low social and interpersonal support.

In present study Loneliness was found to be positively associated (r = 0.910) with Depression. A strong positive correlation between Loneliness and Depression in the elderly population was confirmed by a cross-sectional, pilot study conducted in the United Kingdom, in which it was revealed that Loneliness was a factor that might relate to aging and Depression (n= 24).

A positive correlation (r = 0.897) was found to be in Perceived Stress and Depression in the present study. Unmanaged stress can result in a series of negative changes on physiological processes and behavioral patterns, including Depression (8). In a study Choi and Jun in 2009 found that with increasing age, older adults have new
and unfamiliar stressors, but lack adequate coping resources and skills. Older adults are vulnerable to stress in their lives due to their increased risk of multiple losses, health-related problems in aging, dependence on caregivers, emotional Loneliness, limited income and Social Support, and diminished resilience to transitions in later life.

In summary, Loneliness is the strongest predictor of Depression. Hence, Loneliness should be targeted in the treatment of Depression. A lack of social relationship has been found to be related to Loneliness. There exists a positive association between Depression, Loneliness and Perceived Stress whereas Social Support is inversely related to Loneliness, Perceived Stress and Depression. Social Support may work as a protective factor against Geriatric Depression.

VII. CONCLUSION:
In brief, the findings of the study show that Perceived Stress and Loneliness are the contributory factors of Depression whereas Social Support is a protective factor from Depression in geriatric population. It has also been observed that depressed people perceive more Stress, Loneliness and lack of Social Support than non-depressed.

REFERENCES: