Cognitive Functions, Activities of Daily Living, Depression and Caregiver Burden in Elderly: A Clinic Based Study

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ABSTRACT

Background: Caregiver burden can lead to negative health outcomes for caregivers and patients. Associated factors need to be studied to identify those most vulnerable to such risks and manage them effectively. Objectives: (1) To determine the level of cognitive functioning, ability to perform activities of daily living (ADL) and depression in elderly, along with the burden experienced by their primary caregiver. (2) To understand the relationship of cognitive function, ADL, depression and caregiver burden. Sample and Design: Cross-sectional and correlational study conducted on 35 elderly patients and their primary caregivers approaching the Geriatric Mental Health Clinic. The sample was selected from Department of Psychiatry, Government Medical College and Hospital, Chandigarh. Tools used were Hindi Mental Status Examination, Everyday Abilities Scale for India, Geriatric Depression Scale–Hindi Version and Zarit Burden Interview Results: Degree of cognitive impairment and difficulty performing ADL were positively and significantly correlated with perceived caregiver burden. However, degree of depression did not significantly correlate with caregiver burden. Conclusions: Caregiver burden was found to be significantly related with cognitive impairment and difficulty in performing activities of daily living by elderly.

Keywords: depression, activity of daily living, cognitive functions, caregiver burden, elderly.

INTRODUCTION

According to the WHO, over 20% of adults aged 60 and over suffer from a mental or neurological disorder worldwide. The most common mental and neurological disorders in this age group are dementia and depression, which affect approximately 5% and 7% of the world’s older population, respectively. In India, while the reported prevalence of geriatric psychiatric morbidity in the community varied from 8.9–61.2 %, data from a recent epidemiological study indicated an average of 20.5% mental health morbidity in older adults. The mental disorders frequently found in the elderly population of India are dementia and mood disorders, particularly depression.

Cognition is the mental action or process of acquiring knowledge and understanding through thought, experience, and the senses. Cognitive impairment then refers to unexpected deficits in neuro cognitive domains. The unexpected can mean different from baseline, different from age-matched controls, or different from the level of other domains in an individual including complex attention, executive function, learning and memory, language, perceptual-motor and social cognition. Activities of Daily Living or ADLs refer to people’s daily self-care activities (such as feeding, bathing, dressing, etc.) and the ability to perform these can be used as an assessment of functional status.

Caregiver Burden is the extent to which caregivers perceive that care giving has had an adverse effect on their emotional, social, financial, physical, and spiritual functioning. Caring for a disabled older person is one of the most stressful and challenging events for families over the life course. Particularly when caring for a relative suffering from cognitive impairment, decreased degree of independence in performing ADLs or depression, families are faced with often overwhelming.
and uncontrollable stress that can take a toll on their emotional health and well-being. Studies indicate a significant proportion of caregivers suffer from anxiety and depression symptoms. The risk factors identified were caring for care-recipients with cognitive impairment or decline, and greater scores on the Geriatric Depression Scale.

Hence it becomes important to identify caregivers at risk of negative health outcomes and intervening to attenuate the stress associated with the Caregiving experience. Caregiver burden also negatively impacts the person being cared for as the stress can result in negative styles of caring.

**OBJECTIVES**

- To explore the levels and to understand the relation amongst cognitive functions, activity of daily living (ADL), depression and caregiver burden among primary caregiver visiting the “Geriatric Mental Health Clinic (GMHC)” of tertiary care centre.

**METHOD**

**Sample:**

Data was collected from 35 patients and their primary caregivers who fulfilled the following inclusion criteria: patients had to be above 60 years of age; had to know and understand at least one of three languages at the time of data collection viz. Hindi, Punjabi or English; had to be accompanied by primary caregivers. The “primary caregiver” was defined as any caregiver of the patient, aged 18 years and above, staying with the patient and taking care of the patient for the maximum amount of time. Patients or caregivers with any severe physical disability or medical illness as well as those unwilling to give consent were excluded from the study.

**Design:**

The study was cross-sectional and correlational in nature.

**Tools:**

- Socio-Demographic Data and clinical Sheet: For collection of socio-demographic profile and clinical parameters of the patients
- Hindi Mental Status Examination (Dwivedi and Ganguly, 1996): To assess cognitive functions
- Everyday Abilities Scale for India (Fillenbaum, Chandra & Ganguli, 1999): For the assessment of activity of daily living.
- Geriatric Depression Scale–Hindi Version (Ganguli, Dube & Johnston, 1999): To assess the presence of depressive symptoms
- Zarit Burden Interview (Zarit, Reever & Bach-Peterson, 1980): To assess the caregiver burden.

- Descriptive Statistical analysis using SPSS was carried out after data a collection.

**Procedure:**

- Patients above 60 years or above approaching Department of Psychiatry, OPD along with primary caregiver.
- Participants who met the inclusion and exclusion criteria and gave informed consent for the study, were administered HMSE, EASI and ZBI.
- After the tool administration, data was statistically analysed.
- According to the analysis, conclusion was drawn.

**RESULTS**

<table>
<thead>
<tr>
<th>Socio-Demographic Variable</th>
<th>PATIENTS (N=35)</th>
<th>CAREGIVERS (N=35)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (Mean Age)</td>
<td>67.65</td>
<td>38.48</td>
</tr>
<tr>
<td>Gender</td>
<td>Male: 11%</td>
<td>Male: 52%</td>
</tr>
<tr>
<td></td>
<td>Female: 89%</td>
<td>Female: 48%</td>
</tr>
<tr>
<td>Education</td>
<td>Formally Educated: 90%</td>
<td>Formally Educated: 88%</td>
</tr>
<tr>
<td></td>
<td>No Formal Education: 10%</td>
<td>No Formal Education: 12%</td>
</tr>
</tbody>
</table>
DISCUSSION

Results indicate significant negative correlation between cognitive impairment and caregiver burden scores. Higher score on HMSE means lesser the cognitive impairment. Hence, this implies that more the cognitive impairment in patients, greater the perception of burden in the caregiver of the patient. The increased caregiver burden, perhaps, can be attributed to the emotional distress experienced by the primary caregiver. Another possibility behind increased caregiver burden, may be due to increase in workload while taking care of an individual with significant cognitive impairment. Thus, knowing the reduction of cognitive capacity related to caregiver burden is essential for preserving caregiver health.

Activities of daily living and caregiver burden was positively and significantly correlated, implying that more the dysfunction in carrying out daily activities in patients, greater the perception of burden in the caregiver of the patient. Earlier studies have found that poorer ADL performance is associated with higher caregiver burden. Prime reason behind this could be the increased responsibility experienced by the caregivers.

Depression and caregiver burden was not significantly correlated. This implies that prevalence of depression among elderly patients doesn’t have any effect on perception of burden in the caregiver of the patient. The findings are inconsistent with the findings of earlier research, which concluded that levels of caregiver burden were similar to those found in studies with carers of elderly people with dementia, indicating that depressive symptoms in elderly can be considered an important source of distress for caregivers. However, sample size is too small to make such an assertion with confidence.

CONCLUSION

Cognitive impairment and activities of daily living was significantly related to caregiver burden. Whereas depression was not significantly associated with perception of caregiver burden in the primary caregiver. However, current research was conducted on a small sample, therefore, is not generalizable to the population at large. Future researchers can focus on doing a comparative study which further explores the difference in the perceived caregiver burden of various psychiatric illnesses in the geriatric population and possible causes for the same.

REFERENCES


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