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Caregiver burden of elderly psychiatric and medically ill patients: A comparative study

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Abstract

Caregivers of elderly patients suffering from chronic illnesses are at increased risk of health problems themselves. In India, caregivers of elderly patients are usually close family members. The aim of the study was to assess and compare the burden on caregivers of elderly medical and psychiatric patients. A total of 60 elderly patients and their caregivers (30 patients and 30 caregivers in each group) were included in the study. Burden on the caregivers of elderly psychiatric patients was significantly more than that of caregivers of elderly medical patients and worsens with the deterioration of general health and quality of life of elderly patients and with increasing age and duration of care giving. Proper intervention to reduce the burden among the caregivers of elderly patients, particularly psychiatric patients, should be routinely incorporated for the betterment of both the patients and caregivers.

Keywords: caregiver burden, elderly, psychiatric.

Introduction

In most countries, the proportion of people aged over 60 years is growing faster than any other age group and by the year 2020, world's elderly population is expected to be 2 billion, most of which will be living in developing countries¹. India is an ageing country as in 2001 elderly people (aged 60 years or above) accounted for 7.4% (71 million) of total population and is expected to reach 173 million by 2026². This poses a significant burden on resources of country proportion of dependent population is increasing and working population is decreasing. More than 20% of elderly suffer from a mental or neurological disorder and 6.6% of all disability among over 60s is attributed to neurological and mental disorders. The most common

neuropsychiatric disorders in this age group are dementia and depression followed by Anxiety disorders (3.8%) & substance use problems (1%) and around a quarter of deaths from self-harm are among those aged 60 or above³.

Caregiver may be defined as a person responsible for meeting both physical and psychological requirements of the dependent individuals⁴. Caregiver burden is a state resulting from providing the necessary care to an impaired older adult & that threatens either the physical or psychological wellbeing of the caregiver^{5,6}. In developing countries like India most of the care for the elderly is provided by informal caregivers, most of whom are family.Grad and Sainbury first acknowledged the caregiver burden in psychiatric patients residing at home⁷. Providing care to an

elderly often restricts the personal, social, and occupational life of the caregiver & has been identified as a chronic stressor that places caregivers at risk for physical and emotional problems⁸. Caregivers have less time to spend with friends, fulfill family obligations, or to pursue leisure activities⁹. Furthermore, caregivers are often faced with difficult care giving tasks while faced with verbal, physical aggression, confusion and behavior problems of demented care recipients¹⁰.

Caregivers frequently suffer from depression, have poorer quality of life, report more physical and psychological symptoms, and use more frequent prescription medications & healthcare services than comparable non-caregivers^{11,12}. But only when problems & difficulties experienced by caregiver reaches a point where signs of burnout are clearly apparent and do not allow the things to run comfortably for both caregiver and elderly only then they are given proper consideration.

Previous research has shown conflicting results regarding the predictors of caregiver burden, particularly the one related to degree of disability of care recipients causing functional impairment in the basic daily activities, duration of time spent as caregivers & relationship between the caregiver and the care-recipient. While some studies shows a significant relationship between them, other found no or weak association. Caregiver burden associated correlate with depression behavioral problems in dementia patients ¹³⁻¹⁶. It is also known that caregivers of mentally ill patients experience higher level of stress than caregivers of patients with chronic medical illness⁴.

Care of elderly psychiatric patient is a real challenge for caregivers and the needs of caregivers are often neglected, leading to impairment of their quality of life as well as that of care recipients. Unfortunately only meager of Indian studies have investigated the interactions between patient characteristics, caregiver attributes and support mechanisms, which eventually determine burden of care experienced by caregivers. So, it is still a thrust area of research, as there is paucity of data comparing the burden experienced by caregivers of elderly psychiatric and medically ill patients. So the present study is an attempt to provide a better insight to the caregiver burden of elderly patients, so that it can be detected and managed at early stages.

Methodology

A cross sectional study was conducted in a Medical College of northern India and all the elderly psychiatric patients aged more than 60 years of age and their primary caregivers (of at least 18 years of age, living with the elderly patient, providing care and responsible for their day to day life decisions for a minimum of 1 year duration and are themselves not suffering from any major medical or psychiatric illness) attending psychiatric, who agreed to give a written informed consent to participate in the study were included. controls having no (previous & current) mental illness, and suffering from a chronic medical illness, attending medicine OPD along with their primary caregivers were also included. Only subjects who were in a physical condition to carry out the interview were selected. All the elderly patients and their caregivers were assessed using pre- structured socio demographic parameters, detailed history general examination, and mental examination, vitals, WHO OOL (Quality Of Life) -BREF¹⁷, General Health Questionnaire (GHQ)-30¹⁸. In addition to that caregivers were also assessed using Zarit's Burden Interview (ZBI)¹⁹.

Results

Table 1: socio-demographic characteristics of elderly patients

SDP elderly							
			Illness		Chi-square	df	p-value
	Frequency	Percentage					
Age			Psychiatric	Medical			
60-67	30	50	16	14			
68-75	22	36.7	10	12			
≥76	8	13.3	4	4	3.15	2	0.854
Mean age of elderly psychiatric patients: 68.16±5.88 years							
Mean age of elderly	medical pation	ents: 68.73±5	.92 years				
Sex							
Male	40	66.67	23	17			
Female	20	33.3	7	13	2.70	1	0.10
Marital status							
Single	2	3.33	0	2			
Married	40	66.67	19	21			
Widow/widower	11	18.3	7	4			
Divorced/separated	7	11.6	4	3	3.06	3	0.382

Table 2: socio-demographic characteristics of caregivers of elderly patients

SDP caregiver	Frequency	Percentage	Illnes	SS	Chi-square	df	p- value
Age	1 1	C	Psychiatric	Medical			
18-30	2	3.33	1	1			
31-40	20	33.33	12	8			
41-50	15	25	9	6	3.723	4	0.445
51-60	13	21.67	4	9			
≥61	10	16.66	4	6			
Mean age of caregiver of Mean age of caregiver of caregiver of caregiver of the mean age of the				1			1
Sex							
Male	27	45	11	16	1.684	1	0.194
Female	33	55	19	14			
Marital status							
Single	45	75	23	22			
Married	15	25	7	8	0.089	1	0.766
Relationship							
Spouse	16	26.66	8	8			
Son	21	35	9	12			
Daughter	5	8.33	4	1			
Sibling	4	6.66	1	3	4.429	5	0.489
Daughter in law	9	15	6	3			
Distant relation	5	8.33	2	3			
Educational status							
Illiterate	12	20	5	7			
Primary	14	23.33	7	7			
secondary	18	30	9	9			
middle	9	15	4	5	2.644	5	0.755
Intermediate/high school	5	8.33	3	2			
Graduate/postgraduate	2	3.33	2	0	1		
Occupatinal status							
Unemployed worker	7	11.66	4	3	1		
Unskilled worker	13	21.66	6	7	1		
Semi skilled worker	12	20	5	7	1		

Skilled worker	12	20	6	6	2.864	6	0.826
Clerical, shop owner,	9	15	4	5			
farmer							
Semi-professional	5	8.33	3	2			
professional	2	3.33	2	0			
Income							
<979	2	3.33	1	1			
980-2935	4	6.66	2	2			
2936-4893	8	13.2	4	4			
4894-7322	16	26.4	8	8	0.952	6	0.987
7323-9787	14	23.33	6	8			
9788-19574	10	16.66	5	5			
>19575	6	10	4	2			

^{*} Significant at 0.05 level, ** Significant at 0.01 level, *** Significant at 0.001 level

Table 3: Independent t-test of socio-demographic characteristics of caregivers

	N	illness		T value	Df	p-value
		Psychiatric	Medical			
Age caregiver (years)	30	44.3±10.2	48.5± 11.03	-1.534	58	0.130
Monthly Income caregiver (Rs)	30	8920.0±6496.8	8283±5319.8	0.415	58	0.679
Caregiver duration (years)	30	5.86±4.7	6.36±4.66	414	58	0.680

^{*} Significant at 0.05 level ,** Significant at 0.01 level ,*** Significant at 0.001 level

Table 4: Independent t-test of CBS, GHQ-30 & WHO-QOL BREF

		Psychiatric (N=30)	Medical (N=30)	t-value	df	p-value
Caregiver burden scale	60	50.3±12.84	36.2±10.67	4.636	58	0.000***
GHQ -30 caregiver	60	45.5±11.4	32.8±9.05	4.778	58	0.000***
WHOOOL –BREF caregiver	60	80.1±6.6	99.9±5.97	-12.200	58	0.000***

^{*}Significant at 0.05 level ,** Significant at 0.01 level,*** Significant at 0.001 level

Table 5: Comparison of caregiver burden in male and female caregivers

		S	Sex	t- value	df	p-value
		Male	Female			
caregiver burden	Psychiatric	45.3±13.1	53.2±12.06	-1.694	28	.101
score	medical	35.6±11.86	36.8±9.53	-0.310	28	0.759

Table 6: Zarit's caregiver burden inventory

Severity	Caregiver Elderly Psychiatric	Caregiver Elderly Medical	Chi-square	df	p-value
No/minimal burden (0-20)	0	2			
Mild to moderate (21-40)	8	18]		
Moderate to severe(41-60)	13	10	15.237	3	0.002**
Severe (61-88)	9	0			

^{*} Significant at 0.05 level ,** Significant at 0.01 level ,*** Significant at 0.001 level

Table 7: Correlation of various parameters in both group of caregivers

	Illness	Age caregiver	Income caregiver	GHQ caregiver	WHOQOL caregiver	Caregiver duration	GHQ elderly	WHO- QOL elderly
Caregiver	Psychiatric	0.974**	-0.924**	0.992**	-0.981**	0.966**	0.975**	-0.978**
burden	Medical	0.982**	-0.919**	0.989**	-0.992**	0.979**	0.960**	-0.992**
scale								

^{*}Correlation is significant at 0.05 level ,**Correlation is significant at 0.01 level

^{***}Correlation is significant at 0.001 level

Discussion

A total of 60 caregivers of elderly psychiatric and medical patients were enrolled in the study. Most of the caregivers in our study are family members, sons, spouses, daughters and daughter-in-law, as is the trend in most of the non western countries including India^{20,21,22}. Females constituted the major fraction of this (55%). Our study failed to find any significant difference in the burden between male and female caregivers, consistent with previous reports^{23,24}. In the present study, burden on the caregivers of elderly psychiatric patients is found to be significantly higher as compared to caregivers of elderly medical patients. Several previous studies have also presented with similar results^{4,25-27}, and have considered the possibility that this might be because of inappropriate and bizarre behaviors (disturbed sleep cycle, mood swings, abusive behavior, aggressive and violent outbursts etc) demonstrated by psychiatric patients, along with an inability to understand the sacrifices and troubles of their caregivers ^{4,24}.

In our participants, burden on caregivers was found to increase with a corresponding increase in their age, and is consistent with the several previous studies^{4,23,28}. With increasing age, there is an increase in caregiver vulnerability and a consequent reduction in their ability to cope with mental and physical stresses⁴. Therefore, an increasing age might act as a negative factor in determining the wellness of these caregivers. In the present study, burden on both the caregivers of elderly medical and psychiatric patients was found to positively correlate with care giving duration. This is a controversial area, and the evidence regarding this is inconclusive. While several previous studies²⁹⁻³¹ agree with this finding of ours, there is also evidence which state that there might be no such association with duration²⁵, or that this burden on caregiver might be biphasic, increasing with duration of illness during the initial part and then, as the caregivers adjusted to their new lifestyle, reducing subsequently²³. We believe that this latter observation might be made

in prospective studies, and present methodology lacked this design.

General health and quality of life of caregivers of elderly psychiatric patients was found to be poorer than that of caregivers of elderly medical patients; and ZBI score showed positive and negative correlation with GHQ-30 and WHO-QOL scores (for both caregivers and elderly patients) respectively. These findings suggest that social, personal and occupational worsening of elderly patient negatively might reflect on the caregivers and deteriorate their perceived general health and quality of life and responsible for more severe caregiver burden.

Conclusion

Burden on caregivers of elderly psychiatric patients is significantly higher than that of caregivers of elderly medical patients. Age of caregiver and duration of care giving are important determinants of burden in both elderly medically ill and psychiatric patients, although here is no significant difference in burden between male and female caregivers. In a country like India where family members are the major caregivers of the elderly patients it is important to identify the needs of caregivers before it hampers the efficiency of the caregiver and provide suitable interventions to reduce the burden and improve quality of life of both caregiver and patient.

Limitations

Small sample size

Type of medical or psychiatric illness not considered

Cross sectional study without follow up data

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