

Frequency of Depression Among Caregivers of Patients with Parkinson's Disease

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ABSTRACT

Objective: To determine the frequency of depression in caregivers of Parkinson's disease patients.

Study Design: Descriptive cross-sectional

Place and Duration of Study: Conducted at Qazi Hussain Ahmed Medical Complex Nowshera for the duration of six months from 1st August, 2019 to 31st January, 2020.

Methodology: A total of 150 cases fulfilling the inclusion/exclusion criteria were enrolled. Detailed history was taken from the caregivers by the researcher. The caregivers were evaluated for depression according to DSM-IV criteria, the presence/absence of depression was recorded. Data was analyzed by SPSS 24.0.

Results: Caregiver's common age was calculated as 49.64±5.30 years, 48.67% (n=73) were male and 51.33% (n=77) were females. Frequency of depression in caregivers of Parkinson's disease patients was recorded in 44.67% (n=67) whereas 55.33% (n=83) caregivers had no depression.

Conclusion: The frequency of depression is higher in caregivers of Parkinson's disease patients; however, the results of our study generated the baseline data and it will be helpful for the caregivers and psychiatrists as well while managing the Parkinson's disease.

Keywords: Parkinson's disease, caregivers, depression

INTRODUCTION

Parkinson's disease (PD) is one of the most common neurodegenerative disorders with almost ten million people worldwide[1]. The Asian population is projected to grow from 2.57 million in 2005 to 6.17 million in 2030[2]. It is a progressive disorder with both engine and non-motor symptoms which can have a profound effect not only on patients, but also on family members[3].

Caregivers are recognised to have a decreased quality of life (QoL) for PDs[4], with decreased social and job schedules in order to become more involved in care[5]. Caregiver spouses are less likely than non-caregiver spouses to spend time outside their house or take vacations[6] and elderly caregivers also face age-related difficulties themselves. The responsibility of caregivers (CB) is a growing consideration for caregivers who care for family members. CB refers to the stress and effects of caring and refers to physical, mental and socio-economic problems which caregivers may encounter[7]. The correlation between increasing CB and decreasing QoL and caregiver depression is significant[8-9]. Research has shown that psychological distress is greater for PD caregivers relative to the general population.

The objective of the present study was to investigate the prevalence of depression among caregivers of PD patients.

MATERIALS AND METHODS

This descriptive cross-sectional study conducted at Qazi Hussain Ahmed Medical Complex Nowshera for the duration of six months from 1st August, 2019 to 31st January, 2020. One hundred and fifty cases were included. Detailed history was taken from the caregivers by the researcher. The caregivers were evaluated for depression

according to DSM-IV criteria; the presence/absence of depression was recorded.

The data was entered and analyzed in through SPSS-24.0.

RESULTS

There were 48.67% (n=73) males and 51.33% (n=77) were females with mean age was 49.64±5.30 years. Depression in caregivers of Parkinson's disease patients was recorded in 44.67% (n=67) whereas 55.33% (n=83) had no depression (Table 1).

Table 1: Baseline characteristics (n=150)

Variable	No.	%
Gender		
Males	73	48.67
Females	77	51.33
Age (years)		
40 - 50	82	54.67
51 - 60	67	45.33
Depression		
Yes	67	44.67
No	83	55.33

Table 2: Comparison of depression according duration of care giving

Duration of care giving (months)	Depression		P value
	Yes	No	
7 - 12	23	25	0.77
>12	44	53	

The mean duration of care giving was recorded as 14.67±4.29 months. The data was stratified for age, gender, duration of caregiving, relation with the patient i.e. spouse, brothers, sisters, son, daughter to address the

effect modifiers. Post stratification chi-square test was applied to see the significance. P value <0.05 was considered as significant (Table 2 2-3)

Table 3: comparison of depression in care givers of Parkinson's disease according to relation

Relation	Depression		P value
	Yes	No	
Spouse			
Yes	22	29	0.58
No	45	49	
Son			
Yes	11	30	0.003
No	56	48	
Daughter			
Yes	17	10	0.05
No	50	68	
Sister			
Yes	10	14	0.62
No	57	64	
Brother			
Yes	7	11	0.50
No	60	67	

DISCUSSION

This research has been designed in the opinion that previous studies have shown that Parkinson disease have a higher depression rate, but no local and international study has shown the level of depression in Parkinson's disease caregivers. The findings of our study will, however, provide a basic data and support caregivers and psychiatrists to treat the Parkinson's disease. We contrasted our findings with an earlier study that recorded 57.4% of PD patients with depression [8].

We have observed depression in 44.67% of caregivers in this sample. A research by Eloise H et al [10] recorded that the incidence of depression among caregivers with a care period of more than 6 months was considerably high. In our sample, 48.67% of patients were male and 51.33% female. In this analysis, we found that the level of depression was high among caregivers who were over 12 months, which was 29.33 percent. We observed depression in 23 carers, which lasted less than 12 months. These findings showed similarities to many other studies in which the rate of depression among PD patient caregivers and mostly caregivers over 12 months was relatively large [11-12].

In this study, we found 14.67% of caregivers who were spouse and depressed composed of depression, 7.33% were patient son and depressed, 11.33% caregivers were daughters, 10 caregivers were sisters and 7 caregivers were brothers of patients who were found to have depression. Many previous studies have shown that QoL of caregivers for PD patients has been influenced by possible treatment. Previous research identified a high incidence of depression for spousal caregivers [13-14].

Better QoL was correlated with more psychologically attentive caregivers. Aware people have demonstrated that there is a problematic regulation system, which helps them to get rid of negative emotions and improve mental health [15]. This method could be useful for caregivers with high

neuroticism [16-18]. A diligent individual may easily resolve unforeseen obstacles.

CONCLUSION

Parkinson's disease is one of the world's most common, highly morbid neurodegenerative disorders. Patient caregivers with PD have an important role to play in PD treatment. Caregivers of PD patients are most likely to experience anxiety and depression and those factors affect QoL caregivers. In our study, however, we concluded that the frequency of depression is higher in patients caring for Parkinson's disease, the results of our study produced the basic data and will be helpful for carers and psychiatrists, as well as for Parkinson's disease.

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