

Frequency of Depression in Caregivers of Patients with Epilepsy

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ABSTRACT

Background: Epilepsy is the neurological issue and disorder that causes fits or seizures, which are brief bursts of involuntary autonomic function or sensation caused by an excessive electrical discharge in the brain. Caregiving of such patient is a difficult experience that can have a negative impact on the caregiver's physical and mental health.

Objective: To determine the frequency of depression in caregivers of patients with epilepsy

Study Setting: Department of Psychiatry, Jinnah Hospital Lahore.

Duration of Study: May 30, 2017 to November 29, 2017

Study Design: Cross-Sectional Study

Subjects & Methods: A total of 130 caregivers of patients with epilepsy were enrolled. Hospital Anxiety Depression Scale (HADS) was used to determine the depression in caregivers of epilepsy patients who were initially non-psychiatric patients, and the cut-off point of 8 or more above in depressive subscale indicated depression. Respondents with score of 8 and above in HADS depression sub-scale was considered to have depression. Data were entered and analyzed using SPSS v22.0.

Results: A total of 130 caregivers of patients with epilepsy were included. Age range in this study was from 20 to 50 years with mean age of 34.5±8.7 years. Among 130 caregivers of patients with epilepsy, 87 (66.9%) were males and 43 (33.1%) were females. Among caregivers of patients with epilepsy, 68 (52.3%) had depression.

Conclusion: Caregivers presented with high depression esteems as they didn't have a top-quality of life.

Keywords: Depression, Epilepsy, Caregivers.

INTRODUCTION

Epilepsy is the neurological condition that causes fits or seizures, which are abrupt, involuntary, and time-limited changes in behaviour, such as changes in awareness, motor function activities, autonomic functioning, or sensation over a short period of time. Epilepsy affects around fifty million individuals globally, with about 90% of them living in poor nations. It is for the most part realized that epilepsy impacts patients' personal satisfaction. This effect shows itself in an assortment of ways, including loss of control and freedom, low confidence, dread, bitterness, disparagement, way of life, social and occupation impediments, and monetary tensions.¹⁻⁵

Providing care is a troublesome encounter that can adversely affect the parental figure's physical and emotional well-being. Guardians of people with seizure problems have an immense obligation on their hands. They must set up time to attend all medical visits, manage drug regimens, and respond to any changes in their patient's functioning. As they strive to provide enough and appropriate assistance for the patient, caregivers may get worried, disappointed, or sad. The psychological anguish they are experiencing can have an impact on the quality of treatment offered to patients, which in turn can have an impact on their prognosis.⁶⁻⁸

The presence of an epileptic kid in the family has an impact on the overall well-being of the primary caregivers, who are usually women, who are regularly sincerely overpowered by the youngster's disorder. Nervousness, anxiety, misery, sensations of dismissal, low confidence, and responsibility have all been depicted by these mothers, who are more worried about their youngsters' epilepsy than their spouses.⁹⁻¹¹ In one research, the prevalence of generalised anxiety was found to be 12 percent, whereas the prevalence of major depressive illness was found to be 50.5 percent.¹⁰ In another study, depression was discovered in 65.7 percent of carers, and it was found to be strongly related with both caregivers' male gender.¹¹

Another research found that 37.5 percent of people had severe depressive symptoms, while 48.8 percent had poor Satisfaction with Life Scale ratings.¹² Anxiety was found in 49 percent of carers and despair in 31%, according to a research.¹³

Objective: To determine the frequency of depression in caregivers of patients with epilepsy

MATERIALS AND METHODS

Study Place: Department of Psychiatry, Jinnah Hospital Lahore.

Study Period: May 30, 2017 to November 30, 2017

Study Design: It was a Cross Sectional Study

Sampling Technique: Non-Probability Consecutive Sampling

Sample Size: The sample size of 130 was estimated by using 95% confidence level and 8% margin of error and the percentage of depression from previous literature was 31% among the caregivers of patients with epilepsy.¹³

Sample Selection

Inclusion Criteria: Respondents of age 20-50 years, both genders, caregivers of diagnosed cases of epilepsy for more than 6 months were enrolled. Epilepsy was defined as at least two unprovoked seizures occurring more than 24 hours apart and including one or more parts of the body.

Exclusion Criteria: Caregiver with the history of chronic diseases (asthma or sickle cell disease), h/o anxiety, depression or any psychiatric disease, epileptic patients of mixed disorders

Data Collection Procedure: After approval of research from Internal Review Board, caregivers of patients with epilepsy were enrolled. Informed consent was taken to enroll them in the study. Demographic detail such as age was noted. The Hospital Anxiety Depression Scale (HADS) was used to determine the level of anxiety and depression among caregivers of epilepsy patients. The HADS cut-off point of 8 and above in depressive subscale indicated depression. While those with scores of less than 8 was considered to be normal.

Statistical Analysis: Data was entered and analyzed in SPSS v22.0. Frequency and percentage were estimated for qualitative variables like gender, duration of care and depression. Quantitative variable like age of caregiver and depression score were expressed by Mean±S.D.

RESULTS

A total of 130 caregivers of patients with epilepsy were included. Among 130 caregivers of patients with epilepsy, 87 (66.9%) were males and 43 (33.1%) were females. Age range in this study was

from 20 to 50 years with mean age of 34.5±8.7 years. Most of the caregivers 48 (36.9%) were in 20 - 30 years of age group, while 46 (35.4%) and 36 (27.7%) were in 31 - 40 years and 41 - 50 years of age groups respectively. There were 41 (31.5%) caregivers who were taking care of patients from < 2 years, 54 (41.5%) had duration of care 2 - 5 years, while 35 (26.9%) had duration of care >5 years respectively. Most of the caregivers of patients with epilepsy 52 (40.0%) had high socio - economic status, while 47 (36.2%) and 31 (23.8%) had low and middle socio - economic status respectively. Most of the caregivers of patients with epilepsy 53 (40.8%) were illiterate, while 36 (27.7%) and 41 (31.5%) were matric or above and graduate or higher respectively. Table 1

Among caregivers of patients with epilepsy, 68 (52%) had depression, while 62 (48%) had HADS score less than 8 and showed no depression or were mildly disturbed. Fig 1

Among males, depression was detected in 46 (52.9%) caregivers while among females, depression was detected in 22 (51.2%) caregivers. The difference in both genders was significant (p-value > 0.05). In caregivers aged 20 – 30 years, depression was detected in 25 (52.1%) caregivers, in caregivers aged 31 - 40 years, depression was detected in 21 (45.7%) caregivers and in caregivers aged more than 40 years, depression was detected in 22 (61.1%) caregivers. The difference was although insignificant but overage caregivers were more depressed (p-value > 0.05). The caregivers who were taking care of patients from less than 2 years, depression was detected in 22 (53.7%) caregivers, caregivers who were taking care of patients from 2 – 5 years, depression was detected in 24 (44.4%) caregivers, and caregivers who were taking care of patients from more than 5 years, depression was detected in 22 (62.9%) caregivers. The difference was although insignificant but caregivers were taking care of patient for more than 5 years were more depressed (p-value > 0.05). The caregivers belong to low socio – economic status, depression was detected in 21 (44.7%) caregivers, caregivers belong to middle socio – economic status, depression was detected in 20 (64.5%) caregivers, and caregivers belong to high socio – economic class, depression was detected in 27 (51.9%) caregivers. The difference was although insignificant but caregivers belong to middle socio – economic status were more depressed (p-value > 0.05). The caregivers who were illiterate, depression was detected in 43 (81.1%) patients, while in 22 (61.1%) caregivers who had education matric or above and in 3 (7.3%) caregiver who were graduated or had higher education. The difference was observed as significant and illiterate caregivers and caregivers who had education matric or above were more depressed than caregivers with higher education level (p-value < 0.05). Table 2

Table 1: Frequency distribution of gender

Gender	Frequency	Percent
Male	87	66.9
Female	43	33.1
Mean Age	34.5 ± 8.7 years	
20-30 years	48	36.9
31-40 years	46	35.4
41-50 years	36	27.7
Duration of care		
<2 years	41	31.5
2-5 years	54	41.5
>5 years	35	26.9
Socio-economic status		
Low (<15,000)	47	36.2
Middle (15,000-50,000)	31	23.8
High (>50,000)	52	40.0
Educational status		
Illiterate	53	40.8
Matric or above	36	27.7
Graduate or higher	41	31.5

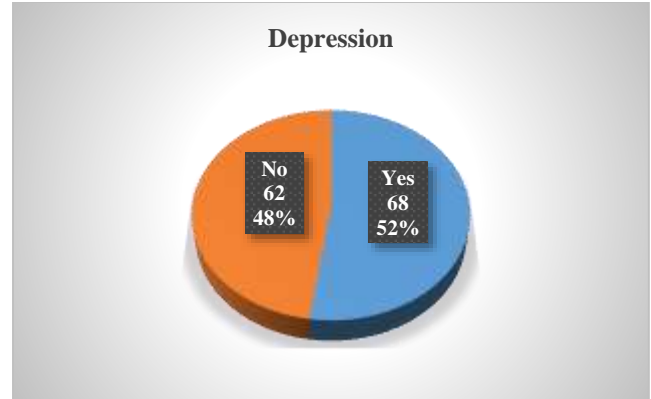


Fig 1: Frequency distribution of depression

Table 2: Stratification of depression with respect to gender

Gender	Depression		Total	p-value
	Yes	No		
Male	46	41	87	0.854
	52.9%	47.1%	100%	
Female	22	21	43	0.854
	51.2%	48.8%	100%	
Age groups				
20-30 years	25	23	48	0.380
	52.1%	47.9%	100%	
31-40 years	21	25	46	0.380
	45.7%	54.3%	100%	
41-50 years	22	14	36	0.380
	61.1%	38.9%	100%	
Duration of care				
<2 years	22	19	41	0.231
	53.7%	46.3%	100%	
2-5 years	24	30	54	0.231
	44.4%	55.6%	100%	
>5 years	22	13	35	0.231
	62.9%	37.1%	100%	
Socio-economic status				
Low (<15,000)	21	26	47	0.229
	44.7%	55.3%	100%	
Middle (15,000-50,000)	20	11	31	0.229
	64.5%	35.5%	100%	
High (>50,000)	27	25	52	0.229
	51.9%	48.1%	100%	
Educational status				
Illiterate	43	10	53	0.00001
	81.1%	18.9%	100%	
Matric or above	22	14	36	0.00001
	61.1%	38.9%	100%	
Graduate or higher	3	38	41	0.00001
	7.3%	92.7%	100%	

DISCUSSION

Caring for young patients (around 20 - 30 years old) was four times more likely to be stressful than caring for individuals 40 years and older. This conclusion is consistent with findings from earlier research conducted in Kaduna, Nigeria, Zambia, America, and Pakistan. Caregivers who received inadequate social support were shown to be more depressed than those who received excellent social support.¹⁴⁻¹⁸ Social support has been demonstrated to function as a buffer against the detrimental consequences of family caregiving, according to a study conducted among caregivers of epilepsy patients in India.¹⁹

The variations in the findings might be due to methodological differences among the research participants, such as the sensitivity of various screening methods and differences in clinical and other psychosocial variables. The Burden Assessment Scale and the HADS were employed in just a few of the studies to assess depression.²⁰ This prevalence of depression in our study was also lower (52%) than studies conducted in Ethiopia

among caregivers of the patients with severe mental illness in general (56.67 percent) and schizophrenia in specific (58 percent).^{11, 21-23}

Another major related factor was stigma. Caregivers in this study were shown to be three times as likely to be disturbed as those who were not stigmatised [adjusted odds ratio: 3.03, 95 percent confidence interval: 1.63-5.66], which is similar to other mental illnesses and situations.^{19, 20, 24} Age, gender, unemployment, living with the patient, location, and caregivers known medical disease were not shown to be related with depression in our study.

In one research, the prevalence of generalised anxiety was found to be 12 percent, whereas the prevalence of major depressive illness was found to be 50.5 percent.¹⁰ Depression was discovered in 65.7 percent of caregivers in another study, and it was found to be strongly related with male gender of care.¹¹ Another research found that 37.5 percent of people had severe depressive symptoms, while 48.8 percent had poor Satisfaction with Life Scale ratings.¹² Anxiety was found in 49 percent of caregivers and despair in 31%, according to a research.¹³

In the current study, the total prevalence of depression among carers of epilepsy patients was 52.3 percent. This research's prevalence is somewhat lower than that of a study conducted in Katsina (65.7%), but greater than that of Kaduna (52%), Lagos (39.6%), Pakistan (49%), Western Ontario (50%), and India (52%).^{11, 21, 22, 25, 26}

Non-Hispanic white people had lower rates of any depressive symptoms than Hispanic and non-Hispanic black people. When poverty was factored in, however, there was no significant difference in depression rates by race or Hispanic origin.²⁷ In the United States, an estimated 16.1 million individuals aged 18 and older experienced at least one major depressive episode in the previous year in 2015. This equated to 6.7 percent of all adults in the United States.²⁸

Depressive symptomatology was found to be quite comparable across cultures in Canada, Iran, Japan, and Switzerland, according to a World Health Organization joint research on the evaluation of depressive disorders.²⁹ In nine European populations, Copeland et al., discovered a broad range of depression prevalence in the elderly. Females had a greater frequency than men, and there was no consistent relationship between prevalence and age. According to a meta-analysis, the total prevalence is 12.3 percent, with females reporting 14.1 percent and males reporting 8.6 percent.³⁰

CONCLUSION

Caregivers presented with high depression values as they did not have a good quality of life. Thus caregivers of epilepsy patients must be screened out on regular intervals in order to detect depressive or anxiety symptoms on early basis and manage them accordingly to prevent complications develop due to depression.

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