

Research Article

Relation of depression with age and taking medication in cases of epilepsy

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ABSTRACT

Objective: To assess relation of depression with age and taking medication in cases of epilepsy

Material and methods: This cross sectional study was conducted at D.G Khan Hospital D.G Khan from March 2017 to September 2017. Depression was assessed in cases of epilepsy.

Results: Total 100 epileptic patients were included in the study. Among them 64 (64%) were males and 36 (36%) were females. 55% of the females and 47% of the males were married. Mean age of the patients was 30.5 ± 5.34 59% of the patients were on antiepileptic drugs already. About 65% had epileptic fit during last one month.

Conclusion: Depression is common in epileptic patients. If undiagnosed, it could significantly affect the quality of life of these patients. As effective treatment is available, there is need for clinicians treating epilepsy patients to routinely screen for depression.

Key words: Epilepsy, depression, vulnerable

INTRODUCTION

Almost 30-50% of epileptic patients have clinical depression as well.^{1,2} Incidence of suicide and deliberate self-harm is believed to be at least five times higher in epileptic patients than in general population. Patients with temporal lobe epilepsy are even more vulnerable to commit suicide.³ Also in children it is one of the neurological conditions in children, shown to be strongly associated with suicidal behavior.⁴ Depression has also been found to be the most important factor associated with reduced quality of life (Qol) in epilepsy rather than epilepsy itself.⁵ Unfortunately depression remain unrecognized and untreated in large number of epileptic patients and usually not given attention in the overall management of epilepsy.⁶ Few studies have been carried out to know the prevalence of epilepsy in Pakistan.⁷ Depression is one of the most prevalent psychiatric disorders occurring in patients with epilepsy.⁸ Most of the time it is under recognized

and has a huge impact on their quality of life.⁸⁻
¹⁰Patients with epilepsy have a higher prevalence of depression than the general population and studies estimate the incidence to range between 20% and 54%.¹¹⁻¹³

MATERIAL AND METHODS

This cross sectional study was conducted at D.G Khan Hospital D.G Khan from March 2017 to September 2017. Depression was assessed in cases of epilepsy. All the patients were included in the study who presented during the study period. Informed consent was obtained from all the patients. Patients who were mentally treated or who had psychiatric illness other than depression were excluded. Similarly patients having other medical problems were also excluded. A total of 100 patients were included in the study.

Demographic data including age, gender, education, marital status and seizure type was obtained. For assessment of depression we used Hamilton Rating Scale for depression. The data was entered in SPSS version 16 and analyzed. Mild, moderate, sever and very severe types of depression were assessed in the form of frequencies.

RESULTS

Total 100 epileptic patients were included in the study. Among them 64 (64%) were males and 36 (36%) were females. 55% of the females and 47% of the males were married. Mean age of the patients was 30.5 ± 5.34 59% of the patients were on antiepileptic drugs already. About 65% had epileptic fit during last one month. Depression was diagnosed in 28% of the patients. Out of them 9 were females and 19 were males. So in females depression was diagnosed in 25% of the patients and in males depression diagnosed in 29.68% of the patients of epilepsy. Depression was more common in age group of 18-35 years of age.

Fig. 1: Gender Distribution of the patients

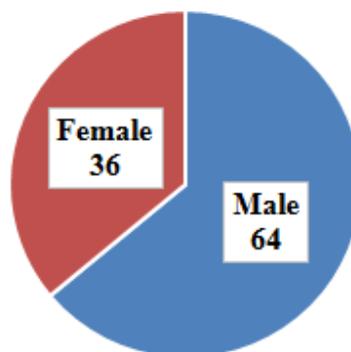
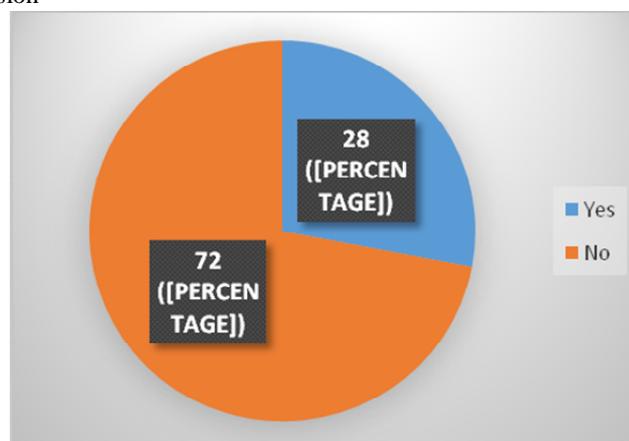


Fig. 2: Frequency of depression



Categorized into mild, moderate, severe and very severe according to Hamilton Rating Scale for depression. Only one patient had very severe depression and two were having severe depression. Notably all three of them were males, not taking antiepileptic drugs and having fit during last one moth. Rest of the patients were having mild to moderate depression. Another finding of our study is that rate of depression was higher in the patients not taking the antiepileptic drugs i.e. 29.26% (12 patients), as compared to 27.1% (16 patients out of 59 patients). But the difference was not statistically significant.

Chi-square test of association shows that epilepsy was not significantly associated with depression. There was no significant difference in degree of depression between married and unmarried patients. No significant association was found between educational level and degree of depression. No patient was on antidepressant medication.

Stratification of the patients for gender

Gender	Depression		Total (%)	P. value
	Yes (%)	No (%)		
Male	19 (29.69)	45 (70.31)	64 (64)	0.6511
Female	9 (25)	27 (75)	36 (36)	
Total	28 (28)	72 (72)	100	

Stratification of the patients for taking medication

Taking Medication	Depression		Total (%)	P. value
	Yes (%)	No (%)		
Yes	12 (20.34)	47	59	0.0456
No	16 (39.02)	25	41	
Total	28 (28)	72 (72)	100	

Stratification of the patients for Age

Age (Years)	Depression		Total (%)	P. value
	Yes (%)	No (%)		
18-35	35 (66.04)	18 (33.96)	53 (53)	0.003
36-50	5 (25)	15 (75)	20 (20)	
51-65	11 (40.74)	16 (59.26)	27 (27)	
Total	28 (28)	72 (72)	100	

DISCUSSION

This study found the frequency of depression among epilepsy patients to be 28% that is close to previous studies. Despite its relatively high prevalence, no patient was on anti depressant medication. The reason of this phenomenon is that the patients in our society do not think that they need to report their symptoms of depression and clinician do not see a need to inquire about depression or to treat it, in epileptic patients. Depression was more common in age group 18 to 35 years, accounting for 12 (42.8%) out of the total 28 patients depression. This is similar to a study from Nigeria¹⁴ the reason may be that this age group is searching for jobs and marriage partner. They may be having more social difficulties in this struggle due to epilepsy.

Another finding of our study is that rate of depression was higher in the patient not taking the anti epileptic drugs although difference was not statistically significant. Our hypothesis is that antiepileptic drugs like sodium valproate and carbamazepine for example are also mood stabilizers and this difference is due to this effect. In epilepsy patients, factors related to seizures, such as the type of seizure, frequency of seizures, age of onset, the duration of illness, whether the illness is controlled or not, the number of medications used, additional neurological deficits and psychosocial factors may be related to the development of psychopathology.¹⁵⁻¹⁷ we could not study these factors in relation to development of depression in epileptic patients. This study has shown that many of epileptic patients can have depression also. Depression is a

treatable condition and effect of treatment can give these patients a new life.

CONCLUSION

Depression is common in epileptic patients. If undiagnosed, it could significantly affect the quality of life of these patients. As effective treatment is available, there is need for clinicians treating epilepsy patients to routinely screen for depression.

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