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Original Article

Assessment of profile of epileptic patients

Anil Kumar

Assistant Professor, Department of General Medicine, Major S D Singh Medical College & Hospital, Farrrukhabad, Uttar Pradesh, India

ABSTRACT:

Background: Epilepsy is the chronic disorder of brain that affects people around the globe. The present study was conducted to assess profile of epileptic patients. **Materials & Methods:** 65 patients of epilepsy of both genders were enrolled. Parameters such as socio- economic status, type of seizures, frequency of seizure, Use of antiepileptic drugs etc. was recorded. **Results:** Out of 65 patients, males were 40 and female were 20. Socio-economic status was upper middle in 12, lower middle in 20, lower in 28 and upper in 15 patients. Type of seizure was generalized in 45 and focal seizures in 20. Frequency was <1 in 14, 1-4 in 38 and >5 in 13 patients. Antiepileptic drugs used was sodium valproate in 22, carbamazepine in 6 and levetiracetam in 37 patients. The difference was significant (P< 0.05). **Conclusion:** Most common type of seizure was generalized and patients with lower socio- economic status were commonly involved.

Key words: Epilepsy, Seizures, socio- economic status

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Corresponding Author: Anil Kumar, Assistant Professor, Department of General Medicine, Major S D Singh Medical College & Hospital, Farrrukhabad, Uttar Pradesh, India

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INTRODUCTION

Epilepsy is the chronic disorder of brain that affects people around the globe.[1] Epilepsy has been defined as "A recurrent paroxysmal disorder of cerebral function characterized by sudden, brief attacks of altered consciousness, motor hyperactivity, sensory phenomena or inappropriate behavior caused by abnormal excessive discharge of cerebral neurons".[2] It also includes the Neurobiological, Cognitive, Psychological and social consequences of seizures. It can be classified as: Grand mal epilepsy, Absence seizures (formerly called petit mal seizures), Myoclonic seizures, Focal motor seizures "Jacksonian seizure".[3]

Epilepsy can be accompanied by changes in cognition and behaviour and can also be associated with psychiatric illness.[4] Psychiatric co-morbidity with epilepsy may precede, co-occur or follow the diagnosis of epilepsy.[5] The increased risk for psychiatric disorders in epilepsy can be related to a number of clinical, psychosocial and biological factors.Socioeconomic status is generally poor in developing countries, which plays an essential role in prognosis of this disease.[6] The outcome in epileptic patients largely depends upon Treatment Gap (proportion of epileptics which are in need of treatment but does not receive it). It was found that, this gap is 75%, 50%, 10% in low-income, middle-income and high-income countries respectively.[7]The present study was conducted to assess profile of epileptic patients.

MATERIALS & METHODS

The present study comprised of 65 patients of epilepsy of both genders. The consent was obtained from all enrolled patients.

Data such as name, age, gender etc. was recorded. Parameters such as Socio- economic status, type of seizures, frequency of seizure, Use of antiepileptic drugs etc. was recorded. Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Total- 65		
Gender	**Males**	**Females**
Number	40	25

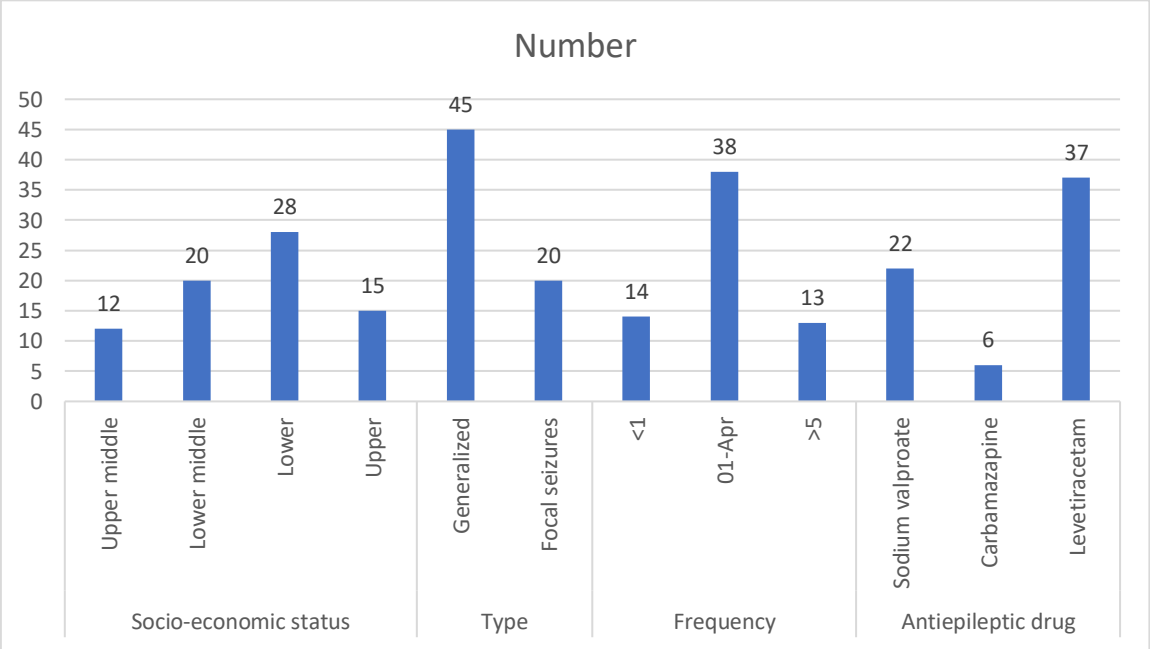
Table I shows thatout of 65 patients, males were 40 and female were 20.

Table II Assessment of parameters

Parameters	Variables	Number	P value
Socio-economic status	Upper middle	12	0.82
	Lower middle	20	
	Lower	28	
	Upper	15	
Type	Generalized	45	0.02
	Focal seizures	20	
Frequency	<1	14	0.05
	1-4	38	
	>5	13	
Antiepileptic drug	Sodium valproate	22	0.04
	Carbamazapine	6	
	Levetiracetam	37	

Table II, graph I shows that socio-economic status was upper middle in 12, lower middle in 20, lower in 28 and upper in 15 patients. Type of seizure was generalized in 45 and focal seizures in 20. Frequency was <1 in 14, 1-4 in 38 and >5 in 13 patients. Antiepileptic drugs used was sodium valproate in 22, carbamazepine in 6 and levetiracetam in 37 patients. The difference was significant (P< 0.05).

Graph I Assessment of parameters



DISCUSSION

Psychosocial factors predisposing to depression in people with epilepsy include, limitations, restrictions and adjustment difficulties in social settings which the disorder imposes, as well as the unpredictable nature of the seizures and the associated feelings of helplessness and loss of control over one's life.[8]The present study was conducted to assess profile of epileptic patients.

We found that out of 65 patients, males were 40 and female were 20. A study by Baker GA[9] showed that epileptic patients are more prone to have poorer self-esteem, higher levels of anxiety, and depression. They are more likely to be underemployed and unemployed with lower rates of marriage and greater social isolation.

We found that socio-economic status was upper middle in 12, lower middle in 20, lower in 28 and upper in 15 patients. Type of seizure was generalized

in 45 and focal seizures in 20. Frequency was <1 in 14, 1-4 in 38 and >5 in 13 patients. Antiepileptic drugs used was sodium valproate in 22, carbamazepine in 6 and levetiracetam in 37 patients. Van Blarikom W et al[10], reported that people focuses more or treatment options rather than environmental obstacles for epileptics. Training of appropriate set of skill for these patients are required to fit them for the environment.

A study conducted by Taylor RS[11] reported number of other associations with epileptic patients (e.g. ability to drive, level of health, literacy, sexual functioning) which tend to interfere with quality of life. Panagariya et al[12] assessed clinical profile of epilepsy and response to drug therapy with special reference to study the effect of reduction of dosage of anti-epileptic drug after a seizure-free interval of two years. A total of 904 patients were selected. Of all the cases, sex ratio (male: female) was 2:1. A high proportion of cases (62.83%) were from low socio-economic group, 41.15% had normal EEG, 532 patients had normal CT scan (out of 800 cases). Single drug therapy was instituted in 71.67% cases. Patients went follow-up for 3 years. Most of the cases proved to be seizure-free after 2 years. Average maintenance dosage in patients on monotherapy can be reduced after a seizure-free interval of 2 years.

Babu et al[13]analyzed the various co-morbidities in PWE in comparison with the normal healthy controls.PWE attending neurology outpatient services (n=250) with age ranging from 16 to 60 years (29.66+/-11.31 years; M:F 116:134) were recruited after obtaining informed consent. Healthy matched controls were also recruited.The seizure types were: generalized (62.4%), complex-partial (21.6%), simple-partial (8.8%), and unclassified (7.2%). Sixty-nine percent were on monotherapy, and rest required polytherapy, with 90.8% on adequate dosages of anti-convulsants. About 83.2% were compliant and 70.4% had satisfactory control of seizures. At least 1 co-morbid condition was noted in 152 (60.8%) cases and among them, 62 (24.8%) had > or =2 co-morbidities. Control population was also evaluated for the presence of same co-morbidities and compared with cases. The various significant co-morbidities included: migraine (cases: 25.6% vs. controls: 15.2%; p=0.02), anxiety (cases: 2.4% vs. controls: 0%; p=0.04), depression (case: 5.2% vs. controls: 0.4%; p=0.0009), sleep disturbances (case: 6.8% vs. controls: 0.4%; p=0.0002), neurocysticercosis (cases: 15.6% vs. controls: 0%; p=<0.001), pulmonary tuberculosis (cases: 3.6% vs. controls: 0%; p=0.002) and extra-pulmonary tuberculosis (cases: 2.8% vs. controls: 0.4%; p=0.03). Less common co-morbidities were hypertension, diabetes, osteoarthritis, asthma, hypothyroidism, and acid-peptic disease.

The limitation the study is small sample size.

CONCLUSION

Authors found that most common type of seizure was generalized and patients with lower socio- economic status were commonly involved.

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