

Prescription Pattern and Adverse Drug Reactions of Antiepileptic Drugs in Patients with Epilepsy at a Tertiary Care Hospital

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Abstract:

Background: Epilepsy is a chronic neurological disorder affecting approximately 50 million people worldwide. Appropriate selection of antiepileptic drugs (AEDs) is essential for seizure control, while monitoring for adverse drug reactions (ADRs) is important for safe and effective therapy.

Aim and Objectives: To evaluate the prescription pattern of antiepileptic drugs and assess the adverse drug reactions associated with AED therapy in patients with epilepsy attending a tertiary care hospital.

Materials and Methods: A prospective observational study was conducted among patients with epilepsy attending a tertiary care hospital. Demographic characteristics, seizure type according to the International League Against Epilepsy (ILAE) classification, and prescribed AEDs were recorded. ADRs associated with AED therapy were documented and assessed using standard pharmacovigilance methods. Descriptive statistics were used for data analysis.

Results: A total of 100 prescriptions were evaluated. Males constituted 58% and females 42% of the study population. The mean age of the study participants was 33.8 ± 12.66 years, with a standard error of the mean (SEM) of 1.27 years. Focal seizures were the predominant seizure type (63%), followed by generalized seizures (33%) and unclassified seizures (4%). Among the prescribed AEDs, levetiracetam was the most frequently prescribed drug (34.97%), followed by lacosamide (13.30%). A total of 10 ADRs were identified during the study period. Among the 10 ADRs documented, phenytoin was the most frequently implicated suspected drug.

Conclusion: Levetiracetam was the most frequently prescribed AED, and focal seizures constituted the predominant seizure type in the study population. Identification and assessment of ADRs provide important information for monitoring the safety of AED therapy and may support rational and individualized treatment in patients with epilepsy.