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## Role of Clinical Pharmacist in Management of Seizures in Pediatrics

	
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### ABSTRACT

The prospective observational study was conducted with 80 paediatric patients under the age group 6 years old with a duration of period 3 months in a tertiary care teaching hospital, Kadapa. The main objective of the study was to study the prescribing pattern in paediatric seizures and educate the patient caretaker about the use of drugs in order to improve the quality of life and control seizures. The most commonly observed type of seizure was Febrile seizures (50%) followed by Generalised tonic-clonic seizures (25%), Simple partial seizures (10%), Status epilepticus (10%) and others (5%). Phenytoin (80%) is most commonly prescribed drug followed by diazepam (16%), Sodium valproate (2%) and other drugs with (2%). Monotherapy is most commonly given rather than combination therapy.



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## **INTRODUCTION**

A seizure is defined as a sudden paroxysmal electrical discharge from the central nervous system resulting in involuntary, motor, sensory or autonomic disturbances with or without alteration in sensorium. Febrile seizures are convulsions in infants and children triggered by a fever in the absence of CNS infection. Febrile seizures affect 4-5% of children aged 6 months to 6 years. These occur in association with a high fever, typically above 38.5°C (101.3°F), although some believe the rate of change in body temperature is more provoking than the absolute temperature in febrile seizures. Identification of the underlying seizure etiology helps to identify appropriate treatment options and the prognosis for the child.

## **AIM & OBJECTIVES**

- To study the prescribing pattern of antiepileptic.
- To assess and compare the monotherapy and combination therapy.
- To provide awareness and adherence to the use of anticonvulsants.

## **MATERIALS & METHODS**



### **STUDY ELIGIBILITY (PATIENT ENROLLMENT):**

**Inclusion Criteria** Patient's up to 12 years, patients who are newly diagnosed with seizures and patients who have an established history of seizures with or without neurological deficit.

**Exclusion Criteria** Patients excluded from the study based on patients aged above 12 years.

### **METHOD OF STUDY:**

**STUDY DESIGN:** "Prospective observational study"

**STUDY SITE:** Paediatric Inpatient department at "Rajiv Gandhi Institute of Medical Sciences (RIMS) Hospital", Kadapa a 750 bedded tertiary care teaching Hospital. **STUDY PERIOD:** 3 months study (August' 2012 to October' 2012) **SAMPLE SIZE:** Enrolled 80 patients during this study.

**STUDY PROCEDURE:** On daily basis recruited Inpatient unit in paediatric department. The required data for the present study was collected by “Chart Review Method” and “patient interview” and analysed for the study.

## **RESULTS & DISCUSSION**

Out of 80 patients, 55 (68.75%) were male and 25 (31.25%) were female. A total distribution of age group of children prevalent aged 1-5 years (62.5%) highest no. of patients were found in between age group of <1years (12.5%) and 6-12years(25%).

The most commonly observed type of seizure was Febrile seizures (50%) followed by Generalised tonic clonic seizures (25%), Simple partial seizures (10%), Status epilepticus (10%) and others (5%).

Phenytoin (80%) is most commonly prescribed drug followed by diazepam (16%), Sodium valproate (2%) and other drugs with (2%). Monotherapy 55(68.75%) was found to be more common followed by combination therapy 25, (31.25%). The commonly prescribed drugs were Phenytoin, Sodium valproate, Diazepam alone or combinations of diazepam with Phenytoin are prescribed. In our study, we found out that Phenytoin was prescribed the most in single drug therapy followed by Diazepam and Sodium Valproate. In our study, the single drug therapy dominated over the combination therapy.

Out of 80 patients, almost all the patients were adhered to take the medication due to the counselling provided to the patient caretaker as well as patients.

## **CONCLUSION**

This provides evidence that clinical pharmacists are able to contribute to a process that influences patient’s behaviour towards drug intake and responded positively to the patient counselling and thus capable of promoting quality health care.

## **REFERENCES**

1. A Parthasarathy et.al., IAP Textbook of Paediatrics, 2<sup>nd</sup> edition, page no-284-287.
2. <http://www.icpjonline.com/documents/Vol11Issue10/05.pdf>.