ADHERENCE TO ANTIEPILEPTIC DRUGS AMONG CHILDREN WITH EPILEPSY ATTENDING THE PAEDIATRIC NEUROLOGY CLINIC AT MULAGO HOSPITAL

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ABSTRACT

INTRODUCTION:

Epilepsy is one of the neglected and highly stigmatised diseases, yet it is very common affecting about 50 million people worldwide. In Uganda, the estimated prevalence of epilepsy is 13% with about 156 new cases per 100,000 people per year. Adherence to antiepileptic drugs is crucial in achieving seizure control yet in Uganda, there is lack of information on adherence to antiepileptic drugs among children with epilepsy. In addition the factors that affect adherence and the association between adherence and seizure control are not well documented, yet this information is crucial for improving management of children with epilepsy.

OBJECTIVES:

To determine the level of adherence to antiepileptic drugs and the factors that affect this among children with epilepsy attending the paediatric neurology clinic of Mulago Hospital.

METHODS:

Using a cross sectional study design, 122 children who met the inclusion criteria were enrolled and interviewed using a pretested questionnaire. Assessment of adherence to antiepileptic drugs was done by self report and assay of serum drug levels of the antiepileptic drugs using Florescence immunopolarisation assay method. Focus group discussions were held to further evaluate the factors that affect adherence to antiepileptic drugs.

DATA MANAGEMENT AND ANALYSIS:

Data was entered into Epidata version 3.1 and Stata version 9.0 software used for analysis.

The proportion of children who adhered to their drugs was computed and reported as percentage of children who were adherent and non adherent. Variables with a p value ≤ 0.2 at bivariate analysis were subjected to logistic regression to assess for factors that were independently associated with non-adherence to AEDs. A P-value ≤ 0.05 was considered statistically significant.

Direct quotations from focus group discussions were used in presentation of qualitative data.

RESULTS: A total of 122 children were enrolled, age range 6 month - 16 years with a male to female ratio of 1.3:1 and majority had generalised seizures 76 (62.3%).

Adherence to antiepileptic drugs by self report was 79.5% and 22.1% by drug levels. Majority of the children in both adherent and non adherent groups by self report had inadequate drug doses (95/122).

Children were found to be more non-adherent if the caregiver had an occupation (p-value 0.030, 95%CI 1.18-28.78). The common reasons for missing drugs were: lack of drugs due to their high cost 36 (48.7%) and forgetting 22 (29.7%).

Children who were adherent by self report were more likely to have good seizure control compared to the non adherent (p-value 0.63, 95%CI 0.29-8.78). All children with poor seizure control had poor adherence by drug levels.

CONCLUSIONS:

The level of adherence to antiepileptic drugs was 80% by self report and 22% by drug levels. The caregiver having an occupation was found to increase the likelihood of non adherence in a child.

RECOMMENDATIONS:

Drugs should be availed at the hospital pharmacy to reduce on the missed doses due to high cost of drugs.