A SURVEY OF PEDIATRIC PRESCRIBING ON INJECTABLE ANTIBIOTICS USED IN THIKA LEVEL V HOSPITAL, PEDIATRIC WARD.

A research project submitted to Mount Kenya University in Partial Fulfillment for the award of a Bachelor of Pharmacy Degree.

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ABSTRACT

Errors in calculating drug doses in infants and small children can cause morbidity and mortality, especially with antibiotic agents exhibiting both narrow and wide therapeutic index. The knowledge of calculating pediatric doses is thus very important in determining the correct doses for children. Pediatric drug dosage calculations are the most common type of prescribing errors and they can be demonstrated that mathematical incompetence and deficiencies in decimal point comprehension are significant sources of errors. Children are not miniatures of adults hence their dosages should be adjusted according to their age, weight and even body surface area in certain chemotherapeutic agents.

The main objective of the study was to assess if clinicians use pediatric drug dosage calculations and if weight was used in these calculations to make informed choices in prescribing the correct dose to a pediatric patient. A retrospective study was carried out at Thika Level V Hospital, Pediatric Ward on the inpatient prescription forms of three injectable antibiotics, data collection on the age, weight, dose, duration and frequency of the treatment regimen given to the patients was documented. On analysis, half of the prescription forms analyzed had inaccurate doses while the remaining half had accurate doses. Weight measurements were prioritized as a large percentage of the patients were weighed prior to the drug administration. Although weight was prioritized majority of the inaccurate doses was due to calculation errors hence the need to implement strategies that would help prevent such errors. It can be concluded that the use of pediatric drug calculations is possible, safe and effective which will help promote rational drug use by pediatrics.