ASSESSMENT OF DOSE ADJUSTMENT OF DRUGS FOR CHILDREN UNDER FIVE YEARS OLD IN RWANDA.

Michelle BALINDA [1], MUGANGA Raymond[2]

[1,2]Faculty of Pharmacy, University of Rwanda, Huye, Rwanda

Background adverse drug reactions and medication errors has been found being a cause of children mortality, the occurrence of drug overdose is one of the risks that levels mortality. Children are at high risk of overdose, toxic reactions and death due to immature physiological processes and any error can be can result in serious complications. The study consists of assessing dose adjustment of drugs for children under five years old in Ruhengeri referral hospital.

Methodology: A quantitative retrospective study using a data collection tool was used to collect data for pediatric department in Ruhengeri referral hospital. A sample of 105 files of U5Y children admitted in the hospital in the months January to March, 2017 were selected randomly. The results were statistically analyzed using SPSS v. 16 and results were shown in frequency and percentages.

Results: Females were 43.8%, males 40% while 16% had unidentified sex. Less than 2 years old were predominant at 70.5% of caes. Dose adjustment was rating up to 40% (42 over 105 cases); antibiotics was the class of drugs highly adjusted, at 63%. The most used references or guidelines have been found to be ETAT and PNCTG at 29.5% and 45.7% respectively and both used at the same time to the extent of 20%. Frequency of dosing error from dose adjustment or corrected by dose adjustment was high at 25.7% (27 over 105 cases assessed). Stopping medication has been the measures taken for 66.7% of dosing errors encountered.

Conclusion: Rare studies were done on dose adjustment for children. The body of the child function differently from the adults, hence, children should never be considered as young adults. Regarding infant dose adjustment, antibiotics were found to be the most adjusted class by referring to their weight got the first day of admission at hospital. This was revealed to be the source of errors and a study was needed to confirm it.



Biography

Phn Michel BALINDA MUNYAMPIRWA is Pharmacist professional with expertise in child management and living with passion and mission to improve children's healthcare. He is now working with Zipline Rwanda Ltd, a company which is delivering emergency medical and blood products in remote areas in Rwanda and Ghana where he is in charge of Quality assurance and involving in pediatric products management.