

Background

Neurodevelopment is an important aspect of one's life span which enables an individual to perform the different functions so as to enhance survival and wellbeing.

Objectives

To identify the individual factors associated with neurodevelopment delay, establish the socioeconomic factors associated with neurodevelopment delay and to determine the comorbidities associated with neurodevelopment delay.

Methodology

An analytical retrospective Cohort study involving review of records of the University of Alberta of inhaled nitric oxide as adjunctive therapy of severe malaria on neurodevelopment assessment of children, conducted at Jinja regional referral hospital. A sample of 103 children was randomly selected through systematic random sampling. Data analysis was carried out using SPSS 17. Statistical tests like Fischer's exact test, ANOVA, Mann Whitney test, Kruskal Wallis test and Odds ratio were computed to establish the relationship between the variables.

Results

There was a high prevalence of neurodevelopment delay among the children which was 91.3%. There was a significant relationship between age of the child and neurodevelopment delay ($p=0.011$). A significant relationship was also established between the number of people sharing the same roof with the child and neurodevelopment delay ($p=0.05$). Going to school was also associated with a lower risk of neurodevelopment delay ($p=0.05$). There was no significant relationship between the comorbidities, parental education, income levels, sex, immunization, exclusive breast feeding and neurodevelopment delay.

Conclusion and recommendations

The neurodevelopment delay is unacceptably high implying that a lot has to be done to reverse this trend. Age of the child, number of people in the household and the schooling status of the child were significantly associated with neurodevelopment delay. It is therefore recommended that a universal and comprehensive developmental screening program in all Pediatric units should be put up to enable early detection of developmental delays and exposures among children.

Health care providers should give parents guidance on how to communicate with children and infants

and also ways of how they can stimulate children for better growth. Mothers should consider sparing time for their children so as to freely interact with them instead of solely leaving them in the hands of the nannies and other care takers.