

Epidemiology and clinical characteristics of rotavirus gastroenteritis in children under five years in Kwara, North-Central Nigeria

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Background

Rotavirus remains the leading cause of diarrhoea related hospitalizations and death globally. The aim of the study is to describe the prevalence, seasonal distribution of rotavirus diarrhoea and the clinical characteristics of children with rotavirus gastroenteritis in Kwara, North-Central Nigeria.

Method

The study was conducted at University of Ilorin Teaching Hospital. The study duration was from January 2013 to December 2018. Children aged less than five years hospitalized with diarrhoea were recruited consecutively. Relevant clinical data was collected. Stool samples were collected and tested for rotavirus by ELISA. Data was entered into the WHO Rotavirus surveillance module and analysed using EPI-Info.

Results

903 subjects were recruited over the study period. The prevalence of rotavirus gastroenteritis amongst children under five with diarrhoea was 31.7%. The annual prevalence of rotavirus diarrhoea ranged between a low of 23.4% in 2014 to a high of 56.5% in 2013. All-cause diarrhoea hospitalizations peaked in January, June and July. Similarly, rotavirus diarrhoea hospitalizations peaked in January with a smaller peak in June and July. Peak age group for all-cause and rotavirus diarrhoea hospitalizations was 0-11 month with 413(45.7% of cases) and 181 (63.3%) cases respectively. There was no difference in mean temperature, duration of illness and duration of vomiting between rotavirus positive and negative cases but duration of diarrhoea was significantly shorter amongst subjects with rotavirus diarrhoea ($p=0.024$).

Conclusion

Rotavirus diarrhoea is common in Kwara, North-Central Nigeria and infants carry most of the burden of the disease.