

# **Epidemiology of Rotavirus Gastroenteritis in children 0-59 months with diarrhoea in Zaria, Northwestern Nigeria: A preliminary report**

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## **Introduction**

Rotavirus is a major cause of severe acute gastroenteritis in children under the age of 5 years worldwide and results in about half a million deaths annually. Provision of potable drinking water and improved sanitation do not significantly reduce the burden of the disease and hence, vaccination of children remains the ideal approach as shown in surveillance studies globally. The aim of this study was to determine the epidemiology of rotavirus gastroenteritis among children 0-59 months with diarrhoea in Zaria, Northwestern Nigeria.

## **Materials and Method**

A cross sectional hospital based study was carried out on 405 children aged 0-59 with acute gastroenteritis admitted to the Emergency Paediatric unit or kept in an ORT corner from September, 2017 to February, 2019. Relevant clinical data were obtained using the WHO standardized case report forms. Stool samples were collected and tested for Rotavirus A antigen using the ProsPecT™ Rotavirus Microplate Assay by Thermoscientific Oxoid Microbiology UK.

## **Results**

From a total of 405 samples tested, 94 (23.2%) were positive for rotavirus group A antigen. Majority 62 (66%) of these children were less than 12 months of age. Twenty-two (23.4%) of children with rotavirus diarrhoea had severe dehydration while 59 (63%) had some dehydration. Peak rotavirus season occurred in November of 2017 and October of 2018 respectively. None of the enrolled children had received rotavirus vaccine.

## **Conclusion**

Rotavirus remains an important cause of acute childhood gastroenteritis. Introduction of the vaccine in our routing national immunization program will reduce the burden of gastroenteritis in under-five children.