

## Feasibility Study of a Diarrhea Rota Virus in Pediatric Hospital of Kingasani on the Introduction of the Vaccine in DRC Objective 2017

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### Abstract

- The prevalence of Rotavirus of the children enrolls with the site of Kingasani is 55%;
- The group of exposed age is 0 to 17 months;
- The male sex is most vulnerable than the female sex;
- There is much positive case during the dry season.

**Keywords:** *Diarrhea; Rota Virus; Vaccine*

### Introduction

After malaria, respiratory infections, and meningitis, severe diarrhea is one of the major causes of public health problems worldwide. According to the current statistics of the WHO, the disease causes more than zero at least 483,000 child deaths per year and 59 months in the world. Children with the aforementioned age are permanent victims of this very deadly disease. Note here that the vaccine against rotavirus gastroenteritis is already operational in some developed countries whose main objective remains that of reducing its impact. Moreover, everyone knows that rotavirus diarrhea remains a paramount concern among public health problems in underdeveloped countries and hinders development; it is the case particularly in Latin America and some countries in sub-Saharan Africa.

Now remains strong to pull the alarm to the authorities and health at all political and administrative levels in order to advocate the close of donors for the induction of new rotavirus vaccine especially in countries with a high incidence of this cruel disease (case of the DRC). This itself reduce the incidence [1-8].

### History of site sentinel

3 sites functional sentinels since August 2009 in RDC:

- Paediatric hospital of Kalembelembe with Kinshasa;
- Center Hôpitalier de Kingasani II in Kinshasa;
- Hospital Jason Sendwe In Lubumbashi.

### Objective of the Study

The objectives of our study are as follows:

- To determine the prevalence of Rotavirus premi children of less than 5 years;
- Determine the most exposed age;
- To determine the circulating genotypes;
- To introduce the vaccine.

### Methodology

This is an exploratory study based on semi-structured direct interviews with parents of sick children in our pediatric service. That is to say, we looked at these parents around the inclusion criteria different registered cases. The targets of our monitoring are children aged 0 to 59 months supported during our investigation period Pediatric Hospital Kingasani, whose population of this health area is \$ 236,584 in this children who suffered from rotavirus diarrhea represent 55% of the population.

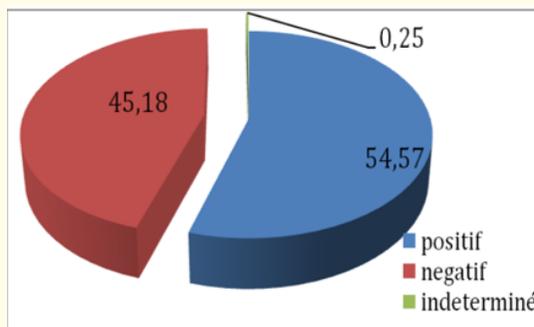
### Result

This is an exploratory study based on semi-structured direct interviews with parents of sick children in our pediatric service. That is to say, we looked at these parents around the inclusion criteria different registered cases. The targets of our monitoring are children aged 0 to 59 months supported during our investigation period Pediatric Hospital Kingasani, whose population of this health area is \$ 236,584 in this children who suffered from rotavirus diarrhea represent 55% of the population.

### Discussion and Conclusion

In our study 55% of children hospitalized for diarrhea to severe rota virus those whose age varies between 0 and 59 months is attributed to rotavirus infection in our sentinel site. The results show the need to introduce the vaccine against rotavirus gastroenteritis in our country to help reduce the high rate of prevalence and mortality of children 0 - 59 months without ignoring the deaths due to the same disease.

Due to the seasonality is high time cases of rotavirus diarrhea, it is possible to introduce the vaccine so that it has full coverage through synchronization throughout the country. This could lead to mastery in record time and allow eradicate the disease on the entire national scope or even throughout the region and in the Central African region. This study is a big step in our activities in our pediatric hospital in Kingasani since a case of an epidemic is now a global threat. To achieve this we will remain wide open through your comments, criticisms and suggestions to improve our future publications. We reaffirm through this article that in the near future, we may already be able to publish another article on pediatric meningitis in children 0-59 months. Knowing that a careful study of metrise and better management.



Figure

## **Bibliography**

1. Evan W, *et al.* "The epidemiology and burden of rotavirus in China: A review of the literature from 1983 to 2005". *Vaccine* 25 (2007): 406-413.
2. Fischer TK and Gentsch JR. "Rotavirus typing methods and algorithms". *Reviews of Medical Virology* 14 (2004): 71-82.
3. Gally A, *et al.* "Épidémiologie des diarrhées virales". *Encycl Med Chir (Elsevier SAS, Paris), Gastro-entérologie* (2003): 9-001-B-60: 7.
4. Genntsch JR., *et al.* "Review of G and P typing results from a global collection of rotavirus strains: implication for vaccine development". *Journal of Infectious Diseases* 174 (1996): S30-S36.
5. Gentsch RJ., *et al.* "Serotype Diversity and Reassortment between Human and Animal Rotavirus Strains: Implications for Rotavirus Vaccine Programs". *Journal of Infectious Diseases* 192 (2005): S146-S159.
6. Glass RI., *et al.* "The epidemiology and estimates of disease burden". *Journal of Infectious Diseases* (1996): 174.
7. Gouvea V., *et al.* "Polymerase chain reaction amplification and typing of rotavirus nucleic acid from stool specimens". *Journal of Clinical Microbiology* 28 (1996): 276-282.
8. Graff WJ., *et al.* "Interferon regulatory factor 3 is a cellular partner of rotavirus NSP1". *Journal of Virology* 76.18 (2002): 9545.

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