

Early data of surveillance of the impact of rotateq in Cote d'Ivoire

FS Zaba¹, C. Boni², A. Mlan^{1,2}, S.Méité^{1,2}, R. Nguessan⁴, H. Koné³, N. Aka³, K.Nzue⁵, J. Mwenda⁶, H. Kette^{1,2}, M. Dosso^{1,2}

¹Department of Bacteriology-Virology, Central Laboratory of the Teaching Hospital of Yopougon, Cote D'Ivoire, ²Department of Bacteriology-Virology, Institut Pasteur, Côte D'Ivoire.

³EPI, Côte D'Ivoire, ⁴Department of Pediatrics, Teaching Hospital of Yopougon, Cote D'Ivoire.

⁵World Health Organisation, Abidjan Côte d'Ivoire, ⁶World Health Organisation, regional office for Africa, Brazzaville, Republic of Congo

Background

Rotavirus is the major viral etiological agent of severe diarrhea in infants and young children under five years of age. In Côte d'Ivoire, to reduce the burden of this disease, the pentavalent rotavirus vaccine (Rotateq) was introduced in March 2017 into the national immunization program. We effectively started the monitoring in September 2017.

This report aims to present data of surveillance of post-vaccine introduction.

Methods

From 2016 to 2019, stool samples were collected from children under five years hospitalized for severe diarrhea in six collected sites. We compared Rotavirus associated hospitalization data during the post-vaccine period (September 2017-February 2019) with the pre-vaccine baseline (one year prior to vaccine introduction: May 2016-March 2017). The diagnosis of Rotavirus infection was performed by ELISA with Rotaclone test.

Results

A total of 334 stool samples were analysed after Rotavirus vaccine introduction in Côte d'Ivoire. A decline of the positivity rate (16%: 54/334) was observed, comparatively to the prevalence of 34% found one year prior to vaccine introduction. Among the 54 positives, children were predominantly male and younger than one year.

52% (174/334) of children under five years received Rotateq vaccine during the study period.

22 children tested positive for Rotavirus infection (16%) had already been vaccinated; this could be attributable to vaccine strains.

Conclusion

After the introduction of Rotavirus vaccination, early results show a significant reduction in under-5-years in Côte d'Ivoire. However, surveillance of the impact of the vaccine must continue to assess the effectiveness of the vaccine. Immunization coverage need to be improved to reduce the incidence of the disease.