

Conference report

Feasibility of using regional sentinel surveillance to monitor the rotavirus vaccine impact, effectiveness and intussusception incidence in the African Region

Inácio Mandomando^{a,b,*}, Goitom Weldegebriel^c, Nilsa de Deus^b, Jason M. Mwenda^d

^a *Centro de Investigação em Saúde de Manhiça (CISM), Maputo, Mozambique*

^b *Instituto Nacional de Saúde (INS), Ministério de Saúde, Maputo, Mozambique*

^c *Intercountry Support Team (IST), World Health Organization (WHO), Harare, Zimbabwe*

^d *World Health Organization (WHO), Regional Office for Africa, Brazzaville, People's Republic of Congo*

ARTICLE INFO

Article history:

Received 14 November 2016

Received in revised form 27 January 2017

Accepted 30 January 2017

Available online 1 March 2017

Keywords:

Rotavirus in Africa

Vaccine impact

Intussusception

Strains circulating

ABSTRACT

The 9th African rotavirus symposium was held in Maputo, Mozambique from the 8th to 10th of December 2015, including a total of 101 delegates from 17 countries, 15 of which were African countries. This forum brought together participants with various expertise including scientists, clinicians, immunization program managers, public health officials and policymakers. By the time of the symposium, 29/47 (61%) of countries in the World Health Organization (WHO) African Region had introduced rotavirus vaccine into their routine immunization program. Countries that had started monitoring impact and effectiveness of the rotavirus vaccines as well as potential adverse events following immunization (AEFI) including intussusception) also participated. Seven Rotarix[®] vaccine-using countries and another four countries that are using the Rotateq[®] vaccine are conducting systematic surveillance on intussusception and report data to the WHO and partners. The symposium concluded that the regional rotavirus surveillance network has played a crucial role in pre-vaccine data through documenting burden and epidemiology of rotavirus diarrhea in Africa, seasonal trends and identifying common rotavirus genotypes. The sentinel surveillance platform is now being used to assess the impact of the vaccines and monitoring adverse events with a focus on intussusception.

1. Introduction

The African Rotavirus Symposium has been conducted on a biannual basis since the year 1998, with the main objective of gathering the leading rotavirus scientists and other stakeholders from across Africa to share on-going research results, to review current global epidemiological trends, share rotavirus vaccine impact data and as a forum to raise awareness of viral diarrhea in children. The symposium is also used to timely track the progress of rotavirus vaccine introduction and assesses the impact of vaccine in selected countries. Because of the acceleration of rotavirus vaccine introduction in the African Region, there was a need to increase the frequency of the symposium to serve as a forum to advocate and accelerate the progress of rotavirus vaccine uptake in

Africa. As part of these efforts, the 9th African Rotavirus Symposium was hosted by the “*Centro de Investigação em Saúde de Manhiça (CISM)*” and “*Instituto Nacional de Saúde (INS)*” in Maputo, Mozambique, between 8th and 10th December 2015 with the theme “Maximizing the benefits of rotavirus vaccination and monitoring of intussusception in the African countries”. The Honorable Vice-Minister of Health of Mozambique, Dr. Mouzinho Saide, officially opened the symposium and addressed a total of 101 delegates from 17 countries (15 of which from Sub-Saharan Africa). This symposium was focused on the impact and effectiveness of rotavirus vaccine and monitoring intussusception in countries that had rotavirus vaccine introduced in national immunization programs.

2. Overview of rotavirus vaccination introduction and rotavirus vaccine coverage in WHO African countries

Since the global recommendation of rotavirus vaccine use in 2009, the first country in Africa to introduce rotavirus vaccine

* Corresponding author at: Centro de Investigação em Saúde de Manhiça (CISM), Rua 12, Cambeve, P.O. Box 1929, Maputo, Mozambique.

E-mail addresses: inacio.mandomando@manhica.net, inacio.mandomando@gmail.com (I. Mandomando).

was South Africa (2009). For the following two years, there was a supply constraint and the next countries to introduce the vaccine could only do so in 2012, with subsequent multiple introductions occurring in 2014. Factors slowing uptake included cold chain issues, the ebola outbreak in Western Africa, and political instability. Plans for introduction through 2017 were discussed and it was noted that countries with high population such as Nigeria or Democratic Republic of Congo (DRC) have yet to define a strategy or an introduction date. By the end of 2015, 29 countries in sub-Saharan Africa had introduced rotavirus vaccines into their national immunization schedule and many of these countries are currently conducting impact and effectiveness evaluations of rotavirus vaccines, with data soon to become available. Fig. 1 shows the countries in WHO AFRO region that introduced rotavirus vaccine by the time of the symposium, in December 2015.

Rotavirus vaccine coverage administrative data reported monthly from countries that introduced vaccine to WHO as well as WHO/UNICEF estimates were presented in the meeting. Discrepancies were noted between WHO/UNICEF estimates and reported administrative data possibly due to reporting differences and data completeness including the issues of denominators and lack of report from lower level as already discussed elsewhere [1]. Overall AFRO coverage for rotavirus vaccine was estimated at around 30% according to WHO/UNICEF reported estimates for the entire region, a figure much lower to the estimated coverage of the pneumococcal conjugate vaccine third dose (PCV3) vaccine (Fig. 2) [2]. The lower coverage may have been influenced by the lack of

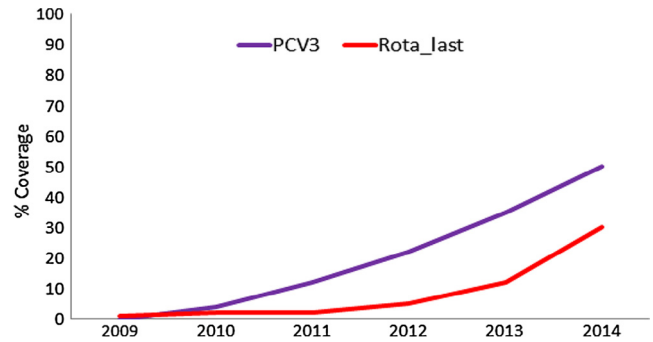


Fig. 2. Pneumococcal conjugate vaccine third dose (PCV3) and Rotavirus vaccine last dose coverage in WHO African region from 2009–2014.

introduction in different countries with large birth cohorts, including Nigeria and the Democratic Republic of Congo. Although the overall coverage as reported in WHO UNICEF estimates for WHO AFRO region is low, administrative coverage data presented from country specific surveillance efforts have shown coverages as high as 85% (Tanzania), 97% (Rwanda), 100% (Burkina Faso) despite the challenges on collection of documented vaccination status through the verification of the vaccination cards. Recommendations were made to continue post vaccine introduction evaluations (PIE) to understand the reason for discrepancies and low vaccine coverage.



Fig. 1. Map of the African continent depicting countries in WHO's AFRO region that have introduced rotavirus vaccine (December 2015).

Download English Version:

<https://daneshyari.com/en/article/5537550>

Download Persian Version:

<https://daneshyari.com/article/5537550>

[Daneshyari.com](https://daneshyari.com)