



Improving access to affordable vaccines for middle-income countries in the african region



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ABSTRACT

Despite the remarkable power of immunization reducing morbidity and mortality due to vaccine preventable diseases, one in five African children still does not receive all the basic, necessary vaccines. This is particularly true of the 10 middle-income countries (MICs) in the WHO African Region, where data demonstrates that immunization coverage is decreasing. These countries are not eligible for Gavi support in accessing new vaccines because of their relatively high per capita income level and will gradually increase with the transitioning of countries out of Gavi support. Thus, WHO was requested to facilitate access to affordable vaccines in relation to middle-income countries and those transitioning out of Gavi support in the near future. With commitment to address the issue, WHO Regional Office for Africa convened a consultative meeting from 09 to 11 April 2018 in Brazzaville, Congo to explore ways of improving access to affordable vaccines for MICs in the Region. The meeting brought together 17 low, middle and upper middle income countries in the African Region. Immunization partners and other WHO Regions also participated in the consultation to share experiences and explore ways of increasing access to affordable vaccines in MICs in the African Region. At the end of the meeting a number of solutions and action points were proposed for implementation in the Region.

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1. Introduction

Immunization with effective vaccines brings immense value to children, families, communities and economies [1–3]. Vaccines are one of the greatest medical advances of modern times [4,5]. Millions of lives have been saved yearly and some of the Region's biggest child killers, ranging from measles and diphtheria to pneumococcal disease and diarrhoea cases due to rotavirus have been drastically reduced [6,7]. The benefits of vaccinating children go beyond saving their lives and extend to protecting their education, returning precious time and money to their families and making critical investments in future prosperity [3]. As reflected in the *WHO Immunization Business Case for the African Continent*, apart from contributing heavily to child mortality, four major vaccine preventable diseases (VPDs), namely pneumococcal diseases, rotavirus, measles and rubella, impose significant economic impacts on

countries estimated at approximately US\$13 billion annually [8]. Thus, the importance of achieving and sustaining immunization targets across all countries in terms of VPD control, elimination and eradication, the successful introduction of new vaccines, attainment of high and equitable levels of coverage, and management of VPD outbreaks cannot be over-emphasized.

While tremendous progress has been made towards reaching every child, a lot remains to be done: the most recent available data demonstrates that immunization coverage in the 10 middle-income countries (MICs) in the WHO African Region is decreasing [9]. The 2017 WHO and UNICEF estimates of national immunization coverage indicates that 527 052 children in these MICs did not receive their 3rd dose of DPT in 2016. This represents one out of four children of their birth cohort and the average coverage dropped from 83% in 2015 to 77% in 2017 [10]. Several of these countries would like to introduce new vaccines, yet they are facing prohibitive prices. Beyond the issues of high vaccine cost, there are also issues with lack of technical capacity on forecasting and planning, unreliability of local vaccine suppliers, limited and unpredictable funding. As new vaccines are becoming available more countries are making efforts to introduce them. However, these

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immunization partners have, till date, struggled to mobilize adequately funding for full-scale implementation.

3. Experiences of countries on accessing affordable vaccines

The countries highlighted a number of challenges they face in accessing affordable vaccines to include unpredictability in timeliness in cash disbursements for procurement; increasing co-financing contribution within a tight resource envelope expected with accelerated transition from Gavi support; inadequate availability of some vaccines in the global market to meet the demand; and inadequate storage capacity for current and planned new vaccines introductions necessitating an average of 180 shipments per annum (see Fig. 2). One concrete example came from Namibia, where the introduction of HPV vaccine was delayed due to funding challenges and cost of the vaccine.

Procurement processes for Namibia and eSwatini were explained, as case in point, focusing on challenges with quantification, tendering process, vendor selection and price of vaccines. This resulted in a downward trend in the coverage with some specific vaccines. Beyond the issues of high vaccine cost, there are also issues with lack of technical capacity on forecasting and planning, unreliability of local vaccine suppliers, as well as absence of vaccine manufacturing entities in those countries. Furthermore, there is a strict requirement of upfront payment for countries to access cost saving benefits in using UNICEF procurement platform. The Namibian presentation also listed issues with distribution of vaccine, using the pooling system and sporadic expiration of vaccine due to overstock in some areas and short shelf-life as well as stock-outs as factors responsible for poor vaccine coverage witnessed in recent years. Key questions, here, were on the sustainability of resource mobilization efforts for immunization: these seem to be ad hoc and not institutionalized. In particular, the issue of immunization legislation and engagement with parliamentarians was discussed.

Participants from Angola highlighted the strategies currently being implemented to ensure immunization targets are attained to include strengthening the cold-chain & logistics system, improving data quality, community engagement, among others. Fig. 3 revealed that coverage is declining both on administrative and WHO UNICEF coverage estimates. Some key challenges faced in the country were listed to include sustaining immunization cover-

age post transition as well as ensuring regular access to vaccines and having a system in place to collect vaccines/immunization data from the private healthcare sector.

4. Experiences from other regions in access to affordable vaccines

The presentations on EURO show that the situation varies from one country to another depending on the level of income as well. Middle income countries account for 68.5 percent of unvaccinated children. The presentation on the situation in the EMRO is characterized by a strong commitment on vaccination. Nevertheless, countries have experienced long delays in the introduction of new vaccines due to high prices and insufficient resources, competing priorities and lack of regulation between the public and the private sector, aside for persistent conflict in several areas. The PAHO focused on the contribution of the Revolving Fund, created since 1977, in ensuring vaccine security. The discussions focused on the solidarity among countries despite their diversity, the harmonization of legislation and regulatory frameworks.

5. Registration, legislation and financing for vaccines in MICs

The concern, here, was on the sustainability of resource mobilization efforts for immunization: these seem to be ad hoc and not institutionalized. Countries seem to miss the necessary processes and tools to regularly engage in lobbying for increasing fiscal space for immunization as well as for expanding the health budget. Industry representatives actively engaged in discussion confirming the increased interest in MICs as the vaccine market for the future and the willingness to engage in discussion; key to this engagement is consolidated, credible and longer term demand.

Other elements discussed were the importance for countries raising concerns on legislative and financing matters in high level, and the importance of peer pressure and high level advocacy efforts to trigger political commitment and financing. On the regulatory and procurement side, issues of internal linkages and coordination across different departments were raised as well as progress on streamlining of regulatory practices, reliance on other stringent regulatory authorities and the creation of regional regulatory networks such as The African Vaccine Regulatory Forum (AVAREF) and Africa Medicines Association (AMA).

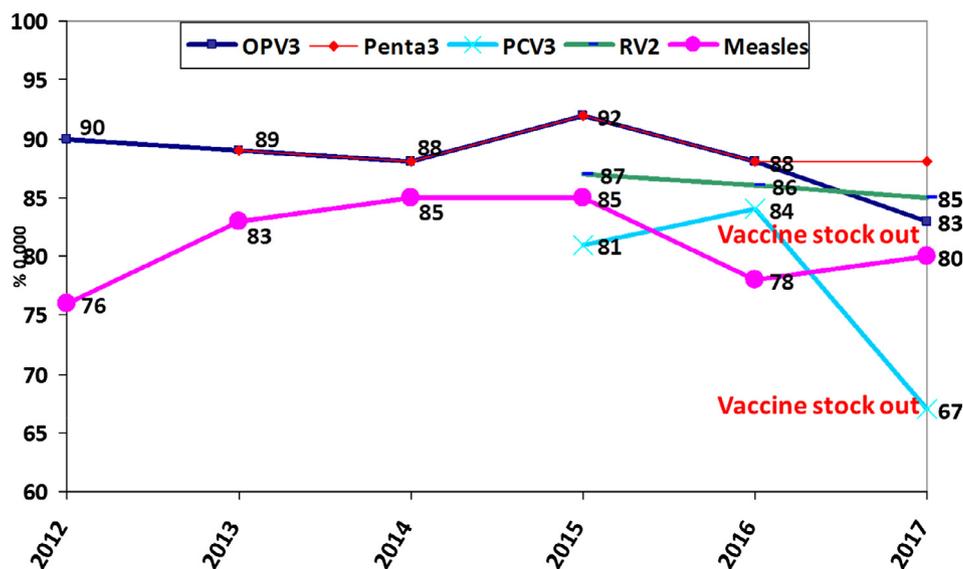


Fig. 2. National trend of OPV3/Penta 3, PCV3, Rota 2 and MCV coverage 2012–2017 in Namibia.

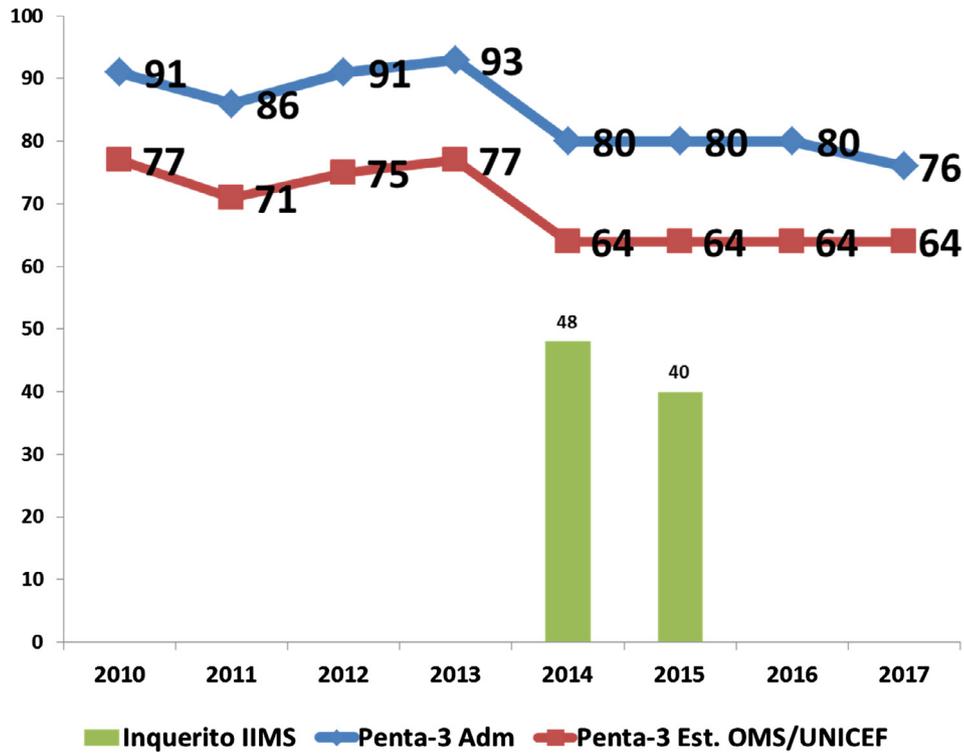


Fig. 3. Fig. 1: Trend in coverage of Penta 3 in Angola (2010–2017).

6. Partners’ contribution to increase access to affordable vaccines for MICs

WHO is supporting MICs to ensure access to vaccines at affordable prices. It has identified the following six key interventions under the MIC strategy, namely: supporting MICs in increasing price/procurement/market information; influencing market dynamics through its fair pricing an access programmes; and increasing procurement skills and knowledge by its affordability and budget impact analysis and negotiating skills training. One hundred and forty-four countries, including 90% of self-procuring MICs) have collaborated with WHO on information sharing to increase price transparency (see Fig. 4). This global initiative

includes information sharing on vaccines (including volumes), suppliers and prices. Furthermore, WHO is enlarging this knowledge hub with additional partner/industry sources of information. WHO prequalification of vaccines is a service provided to UN purchasing agencies by WHO to assess the quality.

Another support available is the Vaccine Independence Initiative (VII) presented by UNICEF, which is used in cases of delayed self-funded country disbursement, or delayed multi-lateral arrangement (e.g., World Bank loan) when retroactivity funding exists or is confirmed. This is a form of financing buffer that allows countries to pay after delivery of vaccines to them. For countries wishing to use the VII platform, an exit plan from VII needs to be devised from the beginning addressing the root causes of funding

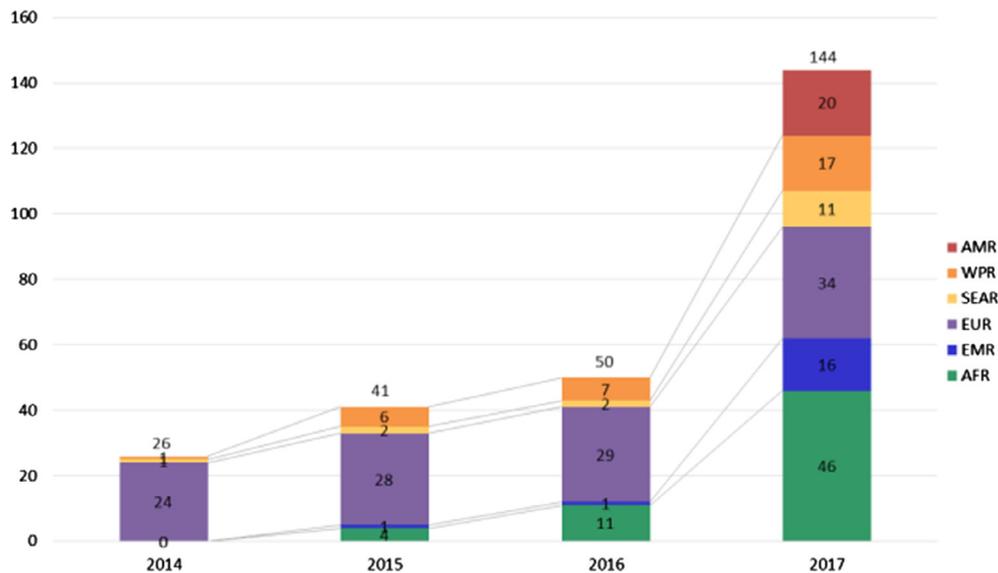


Fig. 4. Number of countries reporting price and procurement data by WHO region over time.

gaps and cash flow timing issues, through enhancing forecasting and other technical work, as well as explore the use of commercial financing instruments.

The Gavi presentation highlighted some of the important lessons learnt to date for a successful transition to include: financial and programmatic sustainability; the importance of early engagement and planning in addressing health systems bottlenecks and institutional constraints; getting the immunization basics right (i.e. planning, budgeting, disbursement and execution); and prioritization of health within the overall health budget.

7. Key recommendations

Following three days of presentations, the meeting came up with the following key recommendations.

Enhance political commitment and national funding for immunization in MICs

- Ensure high level monitoring of implementation of the Addis Declaration on Immunization (ADI) by African ministries, with a dedicated focus on MICs for action towards enhanced and sustainable national funding for immunization
- Leverage available regional cooperation mechanisms (for example Regional Economic Committees) to advance peer collaboration and partner engagement
- Continue to provide technical support to prepare countries to be able to absorb increasing co-financing commitments as they transition out of Gavi support
- Evaluate the quality of MICs decision making processes to understand and act upon key gaps

Enhance procurement and regulatory processes for vaccine availability and affordability in MICs

- Improve use of now largely available price and market information to countries through the Market Information for Access (MI4A) initiative
- Improve procurement skills and knowledge in countries through existing peer platforms, targeted technical assistance, skill transfer by UN agencies (e.g. PAHO RF and UNICEF SD)
- Enhance demand forecasting and consolidation mechanisms among MICs in the region to better influence market dynamics and enhance access to affordable vaccines.
- Explore the opportunity of different African countries coming together through Regional Economic Committees (for example, SADC and Small Island States) to immediately start efforts to strengthen and consolidate access to affordable vaccines.

- Continue investing in regulatory strengthening, coordination and reliance on efforts to ensure timely access to vaccines and strengthen the immunization financing agenda in countries

Conflict of interest

The authors declare that they have no conflict of interest

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