CONDUCTING HOUSE-TO-HOUSE POLIO CAMPAIGNS DURING THE COVID-19 PANDEMIC: A CASE STUDY FROM ANGOLA

Context

Angola is one of 15 countries[1] in the African Region witnessing an extensive outbreak of circulating vaccine-derived polioviruses type 2 (cVDPV2) with the virus circulating in 17 out of 18 provinces since 2019 with a total of 124 cases to date. cVDPV2 is a rare form of the poliovirus that affects unimmunized and under-immunized populations living in areas with low rates of polio immunization and sub-optimal hygienic conditions. The country implemented 30 rounds of campaigns responding to outbreaks in different provinces using monovalent oral polio vaccine type 2 (mOPV2) over the past one year. To date, 6 million children under the age of 5 years in the country have been vaccinated with monovalent oral polio vaccine type 2 (mOPV2) to close immunity gaps and stop continued spread of the virus.

As a result of the responses, there has been a decline in the number of cases and environmental isolates, with only 3 cases reported in 2020, with the most recent case reported on 24 March 2020.

The continued efforts to effectively stop the spread of the cVDPV2 virus in Angola, came to a pause in late March when the ministry announced the country's first two cases of coronavirus (COVID-19). Like many other African countries, this announcement was followed by the implementation of necessary barrier measures to limit COVID-19 transmission. A very difficult decision was made by the country government to suspend all mass vaccination campaigns following the global recommendations for physical distancing. Before this ‘COVID pause’ in activities, Angola had conducted the first of two rounds in the high-risk provinces of Cuando Cubango, Cunene, Namibe, Huila, and Huambo on 28 February 2020. However, due to COVID, the second round was not implemented.

Urgency to Resume Activities

The disruption of immunization activities poses a challenge to the ongoing efforts to stop the spread of the cVDPV2 virus in Angola, with increased risk of exportation of the virus to neighboring countries in the region.

"We cannot wait for the COVID-19 pandemic to be contained to resume immunization activities. If we stop immunization for too long, including for polio, vaccine-preventable diseases will have a detrimental effect on children’s health across the region," said Dr. Matshidiso Moeti, WHO Regional Director for Africa.

Planning to Immunize Angolan Children in the 5 Southern Provinces of Angola

New Guidelines for Front Line Workers

During the ‘COVID Pause’ in April and May, the Global Polio Eradication Initiative (GPEI) partnership, which includes WHO, worked in collaboration with the Africa Rapid Response

[1] Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Côte d'Ivoire, Democratic Republic of the Congo, Ethiopia, Ghana, Mali, Niger, Nigeria, Togo and Zambia

Team based in WHO Brazzaville to develop interim tools and guidance for front line workers on how to safely continue response activities during the COVID-19 pandemic.

The Rapid Response Team trained the country team on the new tools and guidelines emphasizing infection prevention and control measures. The guidelines ensure the protection of the frontline vaccination teams, the children, and their households including frequent hand washing or use of sanitizers, proper vaccination techniques to avoid physical contact, and use of personal protective equipment (PPE).

Preparations Ahead of the Campaign

The multi-agency outbreak response team in the country, including the Ministry of Health, WHO, UNICEF, and other partners, were in consultation with the National Director of Public Health and the Secretary of the State to orient national, provincial, and district teams on the availability and use of PPE during the campaign.

Personal Protective Equipment

Angola's Ministry of Health, through the National COVID-19 Committee, provided all the required PPE with thanks to the World Bank for providing the funding support for this. A microplan for distribution of PPE was developed to ensure each team received adequate masks and hand sanitizers (2 masks and 500ml sanitizer **per day per vaccinator**). Furthermore, the national team supported the transportation of PPE to the provinces. The distribution plan for PPE was thoroughly discussed at planning meetings at provincial and municipal planning meetings. Part of distribution was done from the National level transporting PPE to the 5 provinces implementing the campaigns. From the provinces, PPE was distributed to the Coordinator of the Area of Coordination (sub-district level) to ensure all

Figure 1. Vaccination Teams received their PPEs prior to deployment to the field

vaccination teams received and used the PPE.

Training

Participants in all training and meetings ahead of the campaign were provided for PPE prior to entering meeting venues. Training of trainers at national and provincial levels included demonstrations of proper handwashing techniques and use of hand sanitizers which were cascaded down to teams' level training. Teams were also oriented on how to vaccinate and fingermark children without touching the child.

Figure 2.Finger marking techniques, care giver of the child holding the finger

The trainings were conducted in open spaces (i.e. large halls). However, if these training sessions had to be conducted in smaller spaces, a maximum of 30 participants was allowed to ensure recommended physical distancing measures were observed. Although participants complied with mask requirements, for the most part, there were few reports where some individuals were not using the face mask as recommended in meetings (e.g. by putting it over their neck and chin, leaving the nose and mouth uncovered). The country team used these training sessions as a good opportunity to sensitize vaccination teams on the proper use of face masks.

Figure 3. Training to vaccination team maintaining physical distance

Screening and Testing

All national public health supervisors, national advisors, communications officers, vaccine management focal points, and drivers were tested for COVID-19 three times before the start of the campaign (i.e. 72 hours before they left for the province, on the day they traveled to the province, and 10 days before the start of the campaign). Proper care was given to clean vehicles carrying supervisors from national level. Vaccination team members were not tested or screened as there were no reported COVID cases from the provinces, and they were recruited from the communities in which they would be conducting the campaign.

Moving House to House to Vaccinate Children

To ensure their own safety, vaccinators were required to use PPE throughout the vaccination campaign. There were no reports of any vaccination team member not wearing

masks during the entirety of the campaign. Before vaccinating the children in each household, teams used hand sanitizer and ensured that families and caregivers observed them sanitizing their hands.

Figure 4. Vaccinators sanitizing their hands before vaccinating children

Vaccinators were trained and sensitized to ensure that the dropper did not touch the child's mouth while administering the vaccine. For younger children, vaccinators asked the mother/caregiver to gently squeeze the cheeks of the child to open the child's mouth so mOPV2 drops could be administered without touching the child.

Figure 5. Putting two drops of mOPV2 without touching the child

Older children were asked to open their mouths to receive the vaccine. If the dropper accidentally touched the child's mouth, the dropper was immediately disposed of and replaced.

Figure 6. A mother gently squeezing her child's cheek to hold the mouth open

Figure 7. Finger marking without touching the child

Similarly, the vaccinators finger marked the children as the mother/caregiver held out the finger to be marked without touching the hand of the child.

Additional Best Practices/Lessons Learnt

- The vaccination teams and communities were compliant to use PPE when they received adequate masks, and hand sanitizers from government or partners
- Distribution for PPE worked very well, as the distribution plan was finalized well in advance of the campaign
- Conducting community sensitization meetings with traditional and religious leaders ahead of the campaign was a very effective means of enhancing sensitivity and compliance to COVID guidelines by vaccination teams and the communities
- The strategy of using the same personnel as mobilizers before the campaign **and** vaccinators and recorders during the campaign helped limit the number of participants who come into contact with the community
- In addition to national level supervisors, vaccination team members may be screened for COVID in future campaigns in Angola

Although routine immunization activities continued in health facilities during the COVID-19 pause, there was a reduction in coverage for all routine vaccines in the first and second quarters of this year compared to the same period in 2019. Despite the limitations in movement in the country due to the COVID-19 barrier measures, polio staff remained focused on maintaining critical disease surveillance for polio and other vaccine-preventable diseases and prepared for the resumption of mass polio immunization campaigns.