

Eradicating polio in the times of Covid - PRIP Raja Saboo



October 24 is World Polio Day in the time of the coronavirus pandemic. The anti-polio drive continues to be important because it is directed at children, our future. It was in 1978 that Rotary dreamt of a polio-free world. Thereafter WHO, UNICEF, CDC (Centers for Disease Control and Prevention) of US Administration, joined in the drive. Finally, Bill and Melinda Gates Foundation became a significant partner. Building on decades of experience stopping the polio outbreak, the partners have a critical role to play in protecting communities from the unprecedented pandemic as they did in the past in response to Ebola and Avian flu.

Nigeria became free of polio in August 2020 and with that wild polio virus transmission is at the lowest levels in history with just two cases, one in Pakistan and the other in Afghanistan. It represents a unique opportunity to finish the wild polio virus once for all in this last remaining global bastion of the disease.

After certification of eradication, OPV (Oral Polio Vaccine) was stopped and the IPV (Inactivated Polio Vaccine) has been introduced. OPV is the live vaccine which has the risk of vaccine derived polio while IPV is based on dead virus, and it does not carry any risk. But it's important to understand that Oral Polio Vaccine carried the capacity of herd effectiveness. And without OPV, we could not have attained this immunity. OPV, therefore, is continuing in countries like Pakistan and Afghanistan.

There are three types of wild polio virus. Type 2 wild polio virus was eradicated in September 2015 while Type 3 wild polio virus has not been found since November 2012 and was certified eradicated on 24 October, 2019. This means only type 1 polio virus continues to circulate.

There has been vaccine derived polio virus outbreak in 25 counties worldwide, mostly in Africa but also in some parts of Middle East and Asia. Circulating VDPVs occur when routine or supplementary immunization activities are poorly conducted and enough children are not reached with vaccine to ensure full immunity. The total number of vaccine derived polio virus cases in 2020 was 1123. In 2021, there have been less than 200 cases so far. We have to understand that these cases happen where children miss vaccinations. When children are fully vaccinated, VDPV is not a problem. Last November WHO granted its first ever emergency use listing for a vaccine to the Novel Oral Polio

Vaccine type 2 (nOPV2). This is a vaccine that has been under development for almost 10 years. It is as effective as the existing vaccines and has much greater genetic stability. That makes it less likely to regress to cause paralysis.

Fortunately, India is free of wild polio virus since 2011 and no vaccine derived polio virus. However, India is concerned with polio virus in neighborhood countries Pakistan and Afghanistan. Pakistan is very organized with surveillance for disease detection including laboratory network. It also has a tradition of routine immunization of newborns. For Afghanistan, there has been apprehension about the new Taliban Government. The good news is the new Government is now in favor of polio vaccination. Only today we learnt that the Taliban Government has agreed to restart a door-to-door vaccination program from next month to eradicate polio. We hope polio will finally be eradicated. Once it happens, the world will reap substantial financial, as well as humanitarian, dividends. Recent modelling attests that eradicating polio will generate a cumulative saving of US\$14 billion by 2050. In financial terms, the global effort to eradicate polio has already saved more than US\$27 billion in health costs since 1988.

The plus strategy aims to stop the circulation of all wild and vaccine derived polio virus by no later than 2023, and polio-free certification by 2026. Indeed, the Rotary dream of 1978 will now be realized. The great sportsman Pele had rightly said, “The more difficult the goal , the greater the happiness in winning”.

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