PRESIDENT'S PAGE

"Out of the Dangerous Wild, but not yet out of Woods" – The Polio End Game Strategy

VIJAY N YEWALE
National President, Indian Academy of Pediatrics, 2014
Correspondence to: Dr Yewale Hospital, Plot 6B, Sector 9, Vashi, Navi Mumbai, Maharashtra-400703, India.
vnyewale@gmail.com.

India celebrated its victory over polio on 11th February 2014 after an extraordinary fight against the disease for almost two decades since the introduction of the Global Polio Eradication Initiative (GPEI) in India. The South-East Asia Region of the World Health Organisation (WHO) was certified polio free, on March 27, 2014 by the WHO's Regional Certification Commission for polio eradication certification.

From the billions of ordinary civilians and grassroot workers to the top Government and international agencies, the story speaks about the stupendous success of unified and sustained relentless efforts of all to reach this great milestone, unmatched by any herculean task post India's independence. India could overcome both biological and sociocultural barriers in polio control and *Indian Academy of Pediatrics* (IAP) played its role by supporting and promoting the government initiatives all along.

Margaret Chan, Director General of WHO – while congratulating the country on this achievement – went on record to say, "India has shown the world that there is no such thing as impossible. This is likely the greatest lesson and the greatest inspiration for the rest of the world." We have been fortunate to have Dr. Jacob John whose long standing recommendation to the GPEI – of introducing injectable polio vaccine (IPV) by all oral polio vaccine (OPV)-using countries to complete and conclude polio eradication – was finally reflected in the 2013 end game strategy by the GPEI. The WHO, in its Polio End Game Strategic Plan (2013-2018), has chalked out definite plans for management of risks of poliovirus in the post-eradication era [1]. The first step is to address the risks of circulating vaccine-derived polioviruses (cVDPV) which can be equally catastrophic. This will require stopping all routine immunization with type-2 OPV, and switch from trivalent to bivalent OPV in a globally synchronised manner. This strategy involves the mighty challenges of withdrawing and safely destroying all the trivalent OPV stocks in the field, simultaneously maintaining the population immunity at the highest possible level, lest the cVDPV may occupy the place of the wild virus after stopping OPV.

It is now inevitable for India to introduce IPV in the Universal Immunization Program (UIP), achieve its very high coverage, and thereafter withdraw OPV synchronously [2]. Polio control was achieved by a dedicated structure, but the responsibility of sustaining high polio immunization in the post-elimination phase is a challenging task. The country also needs to gear up for local manufacture of these vaccines to minimize the financial burden. WHO may not allow use of the wild polio virus for manufacturing the IPV by the local manufactures. Apart from the problem of insufficient availability of the vaccine, there are issues of cold chain capacity and health infrastructure for administering an injectable vaccine .

CHANGE IN THE RECOMMENDATION ON POLIO VACCINES BY THE IAP

Previously, the IAP recommended a combined schedule wherein both OPV and IPV were administered simultaneously to maximize the immune response in an individual. It was in accordance with the government policy of using OPV when the wild polio virus circulation was ongoing. However, after controlling the wild virus circulation in 2011, it was felt necessary to focus more on the safety issues of the OPV like vaccine associated paralytic polio (VAPP) and cVDPV. Accordingly, in 2012, the Academy advocated the use of IPV in the primary schedule at 6, 10 and 14 weeks, and use of OPV at birth, 6 months and 9 months [3]. The recommendation of the IAP to adopt sequential IPV-OPV schedule is very much in line with the decision taken by the GPEI of phased withdrawal of the Sabin viruses, beginning with the highest risk Type-2. The IAP has retained the birth dose of oral polio; the high levels of maternally transmitted antibodies should mitigate the risk of VAPP in those receiving OPV at birth. This birth dose, though not highly immunogenic, improves seroconversion of subsequent doses of polio vaccines. OPV with IPV in this sequential schedule

provides the benefit of superior gut immunity as compared to only IPV schedule. IAP is committed to support GPEI activities in the country, and its members are advised to encourage administration of OPV doses during the National Immunization Days (NIDs) and supplementary immunization days (SNIDS) of the Government of India.

At the same time, there is a serious threat of importation of wild viruses from three polio-endemic countries: Afghanistan, Pakistan and Nigeria. This necessitates a continuous vigilance for polio, atleast till the entire world is declared free of polio. With the enemy no more in sight, it will be a more challenging task to remain non-complacent and prevent any resurgence of polio. The Academy lauds the National Polio Surveillance Project for its outstanding services in providing technical and logistic support in the polio eradication drive, and believes that its continued hawk eye vigilance will be able to tackle this threat. It also cautions its members to remain vigilant and continue to report every case of paralysis to the authorities.

Dr Jacob John rightly points out in his article [2] on India's journey to polio free status that "we are not yet out of the woods but at its edge." The polio story is not over until both the wild and vaccine-derived polio get eradicated from the world. IAP is signatory to scientific declaration on polio eradication and support Global Polio Eradication End Game Strategy Plan launched by the GPEI in April 2013. The Academy is deeply committed to polio eradication initiative in the country and pledges its continued support in the post-eradication era. With sustained efforts of both vigilance and tactful post-eradication strategies, this story is bound to have a happy ending.

REFERENCES

1. WHO. Polio endgame Strategic Plan and Legacy Planning Draft-Polio Eradication End Game (2013-2018). Available from: URL: http://www.who.int/immunization/sage/meetings/2012/november/1_DRAFTGPEI_EndgameStrategicPlan23Oct12.pdf. Accessed April 18, 2014.
2. John J, Vashishtha VM. Eradicating poliomyelitis: India's journey from hyperendemic to polio-free status. Indian J Med Res. 2013;137:881-94.
3. Indian Academy of Pediatrics Committee on Immunization (IAPCOI): Consensus Recommendations on Immunization and IAP Immunization Timetable 2012. Indian Pediatr. 2012;49:549-64.