

Celebrating India's Achievements Towards Polio Eradication

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We can look back with great satisfaction the successful elimination of wild polioviruses (WPVs) types 3 and 1 in India, in 2010 and 2011, respectively. That was a major milestone in the global journey for polio eradication. We present this Supplement of Indian Pediatrics to celebrate India's achievement, and to extract many lessons from it.

Smallpox eradication was the prototype for disease eradication, but the effort needed was much less than for polio. Its transmission was slower than that of WPVs. One inoculation of vaccine sufficed – that too only for the contacts of every case of smallpox, in a manner of 'ring vaccination' around the case. A large contingent of public health workers from other countries worked shoulder to shoulder with Indian counterpart to achieve that. Since then India has eliminated Guinea worm disease and yaws in humans, and, rinderpest in cattle, managed fully indigenously. India succeeds when India sets its goal and strives with seriousness of purpose.

Global eradication of polio posed formidable barriers, many of which had been foretold in India, but remained unaccepted by global experts for a long time. Remedial tactics were also designed in India – their belated acceptance and inclusion in the global efforts has helped in overcoming all biological barriers everywhere. WPV type 2 was eradicated in 1999 and certified by the authorized Global Commission. Since November 2012, WPV type 3 has not been detected anywhere in the world, and in all probability it also has been eradicated. Two

nations that have yet to succeed eliminating WPV type 1 have man-made barriers and not biological barriers. Hopefully they will succeed sooner than later.

India has another cause for celebration. Research in India had pinpointed the need to transition from live attenuated oral polio vaccine to the inactivated polio vaccine in order to eliminate all vaccine related polio also. This tenet became globally accepted in 2012 and we in India, along with all other OPV-using countries, are shifting the target and changing the tool for the completion of global polio eradication. The new target of eradication is to create a world with no transmission of polioviruses, wild and vaccine. And the tool to achieve that will be the inactivated vaccine and not the live vaccine which consists of polioviruses that are genetically unstable and also transmissible. This special supplement of the journal highlights these shifts – for pediatricians, policy makers and public health workers to understand why and how.

The saying 'health is wealth' has been taken as a figurative adage, not substantive. Many thought that expenses incurred for polio elimination in India was a huge drain on our economy. On the contrary, the gains through productivity of the hundreds of thousands of young people protected from polio paralysis, have shown polio elimination to have been a national wealth-creating endeavor. This is an important lesson for taking control and elimination of other diseases seriously, not merely as humanitarian do-good effort but also as investment for economic development.