Sir,

The resurgence of diphtheria in Malegaon and Dhule (Maharashtra) was reported by Dravid and Joshi recently\(^1\). The year 2008 marks the 30\(^{th}\) anniversary of the adoption of the Expanded Programme on Immunisation (now Universal Immunisation Programme, UIP) in India. Diphtheria toxoid was included in the programme right from the beginning, in combination with tetanus toxoid and pertussis vaccine (DTP). Among all vaccines, diphtheria toxoid is one of the most effective and safest. India should have controlled diphtheria to such low levels that it should have been rare in this century. Therefore resurgence of diphtheria\(^1\) is quite disturbing.

In another very recent report, Bitragunta and colleagues have shown the persistence and a rising trend of diphtheria in Hyderabad during 2003 to 2006 with rise of annual incidence (per 100,000) from 11 (2003) to 23 (2006)\(^2\). There was failure of UIP to achieve satisfactory vaccine coverage in their respective regions and also some failure of the vaccine to protect children from diphtheria\(^1,2\). In another study published in 2007 on diphtheria in Delhi there were 1118 patients with diphtheria during 1998 to 2004 in Maharishi Valmiki Infectious Diseases Hospital, with an annual average of 159 and peak number in 2003\(^3\). The persistence and resurgence of diphtheria in recent years have also been reported in Mumbai, Rajkot (Gujarat) and Assam\(^4,6\).

These reports represent only the tip of the iceberg. Clinicians who see cases do not report them nor do journals encourage publication of such reports, since there is usually nothing new. In most countries information on the incidence of vaccine-preventable diseases is gathered and disseminated through systematic disease surveillance. There is no such surveillance for diphtheria or any other infectious disease of public health importance in India with the sole exception of poliomyelitis. The government health system has a reporting network that captures statistics on diphtheria mostly from Primary Health Centres (PHCs) - essentially rural cases that come to the attention of PHCs, which would be only a small fraction of the total. Even such statistics are not validated and have poor reliability. The Integrated Disease Surveillance Project (IDSP) that is currently in vogue has no information on diphtheria\(^7\).

Thus diphtheria is widely prevalent but neglected from a public health perspective. Since infection by the causative bacteria is ubiquitous and highly contagious, vaccination is the only method to prevent cases and control outbreaks. Unfortunately vaccination coverage is woefully low in most States in the country\(^8\). That vaccine-failure diphtheria does not get recognized by UIP is another consequence of the lack of case-based reporting. This state of affairs need no longer be accepted in India in the 21\(^{st}\) century.

The need to re-design UIP has been highlighted earlier\(^9\). Case-based disease surveillance has to become a part of modern UIP\(^9-11\). A practical, simple, inexpensive, real-time disease surveillance, using the district as a unit, covering both public and private sector medical care establishments, has been designed and field tested successfully\(^10,11\). It has been endorsed and recommended for nation-wide application by two national committees\(^11\). The advantages of such a system are many. The purpose of immunization is disease prevention and outbreak control, and both need to be monitored in every community. Disease reports can be matched against reported vaccination coverage and thus surveillance can be used to fine tune the monitoring of vaccine coverage in every community. Outbreaks of vaccine-targeted diseases could be recognized very

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early at the signal stage and prompt investigation and appropriate intervention can prevent them from further spread\textsuperscript{10,11}. It is also suitable to detect every case of vaccine failure, so that the quality of vaccines could be kept under watch. In the two reports on diphtheria, cases were recorded in spite of what is considered adequate number of doses of DTP vaccine - this should have, in 'real-time' led to the collection and potency testing of the vaccine lots in contemporary use\textsuperscript{1,2}.

In summary, children of India deserve better service from UIP. India is no longer a "poor" country, but is the fifth largest economy in the world, but it appears to conduct health protection programmes as if it is very poor and cannot afford additional investment. This is false economy in that it neglects to invest in human capital, the best asset in the country. It is bad in ethics after having accepted that health is a human right. The best beginning point may be to establish case-based surveillance for vaccine-targeted diseases - so that the surveillance system can be used to achieve better vaccination coverage where it is needed. It can be expanded later to cover other major infectious diseases that should be targeted for control with appropriate interventions.

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\textbf{References}


