Correspondence

Sir,

We read with great interest the editorial on Polio eradication by Puliyel et al.

The data on acute flaccid paralysis (AFP) cases from Uttar Pradesh (UP) presented are for the year 2005. Through the Right to Information (RTI) Act, we have been able to obtain data collected by the National Polio Surveillance Project (NPSP) for 2006. At 47 wk ending in 2006, of a total of 10,879 cases of AFP, only 2,043 were followed up. Of these, 989 (48.4%) had residual paralysis, which would qualify them to be diagnosed clinically as polio cases, and 244 (11.9%) deaths (Table). If these rates are extrapolated to the total number of reported AFP cases, the total cases with residual paralysis work out to be 5,265 and the number of deaths to be 1,294. These numbers are higher than that presented by Puliyel et al indicating an escalation of the problem from 2005 to 2006. From the rates of death and residual paralysis in the non-polio AFP cases calculated from data at 47 wk, 2006, it appears that children who were identified as AFP cases and classified as non-polio AFP by NPSP, are more than twice at risk of dying than the wild polio virus (WPV) (or vaccine virus cases) and the difference is statistically significant (P<0.001).

NPSP has consistently maintained that the exponential increase in AFP cases since 2004 is the result of “planned programme strategy to increase the sensitivity of wild poliovirus detection…The increased

| Table. Data from the National Polio Surveillance Project (2006) |
|-------------------------|----------------|
|                        | AFP | WPV cases | Vaccine virus cases | Non-polio AFP | Expected cases if all AFP cases had been followed up |
| Total no. of cases      | 10,879 | 434 | 531 |
| No. followed up*        | 2,043 (18.8%) | 434 | 417 (78.5%) | 1,207 (12.2%) |
| No. with residual        | 989 (48.4%) | 266 (61.3%) | 135 (32.3%) | 351 (29.1%) | 5,265 |
| paralysis*              | 244 (11.9%) | 14 (3.2%) | 14 (3.4%) | 94 (7.8)** | 1,294 |

Figures in parenthesis are percentages
* The totals do not add up
** χ² test for deaths in non-polio AFP as compared to that in WPV, P<0.001

AFP, acute flaccid paralysis; WPV, wild polio virus
sensitivity for detection and reporting of AFP cases was achieved by using a more sensitive (even mild weakness of any body part) and less specific case definition for AFP\textsuperscript{3}. The data from UP presented here contradict this view as the reasoning by the NPSP does not provide any rational explanation for the high rate of death among the non-polio AFP cases. Even after repeated requests, NPSP has refrained from making the full database on the entire polio eradication programme available to public scrutiny. We wonder if their non-compliance could have anything to do with such damaging evidence of the negative impact of the polio eradication and specifically following the use of monovalent oral polio vaccine (mOPV1) on the children from UP.

C. Sathyamala  
Council for Social Development  
Sangha Rachana  
53 Lodhi Estate  
New Delhi 110003, India  
e-mail: hlth_report@yahoo.co.in

References

2. Data from NPSP, through the RTI Act.
3. Minutes of meeting held on 11.1.2007 with members of Jan Swasthya Abhiyan on Polio Eradication in India, at Ministry of Health and Family Welfare (MoH & FW), Nirman Bhavan, New Delhi, chaired by Ms S Jalaja, Additional Secretary (Health) MoHFW. Minutes prepared by the MoH & FW and circulated on 22.2.07.

Authors’ Response

Sir,

We thank Dr Lahariya for his interest in our paper\textsuperscript{1}.

I will address his last point first as it comes up in the introductory paragraph as well. We suggested that India set up a body like NICE (UK) to evaluate cost-benefit of public health interventions before they are introduced in the country\textsuperscript{2}. Dr Lahariya says the idea sounds good but wonders how this institution would be better than the existing national and international expert advisory groups.

The distinction from existing advisory groups will be clear. Let me start with the national expert advisory groups. The India Expert Advisory Group (IEAG) on Polio is an example of an existing national expert group. It is interesting to understand how this body functions. This is detailed in a recent article\textsuperscript{3}. A few weeks prior to the IEAG meetings the Ad hoc Advisory Group of Polio Eradication (AAPGE) of WHO meets and actually decides about the plan of action for next 6 months. This is simply adopted by the IEAG as its ‘own’ decision\textsuperscript{3}.

Regarding international advisors, I will illustrate with two instances related to the pressure being brought from overseas to introduce hepatitis B and Hib into the national immunization programme.

Hepatitis B: To get India to accept hepatitis B, Dr M.A. Miller from the Centre for Disease Control (CDC) in Atlanta, authored an article in Health Economics\textsuperscript{4}. He wrote that 189,000 people die each year of hepatitis B in India. He claimed to have used a model ‘stratified by geographic area and income group’ to arrive at his estimate. The ICMR cancer registry using a population - based register, suggests that only 5000 die of hepatocellular carcinoma (HCC) related to hepatitis B. HCC is the major cause of death from the disease and so we wrote to the journal, Health Economics, that the figure of 189,000 deaths was an exaggeration. Dr Miller was asked to publish his model or else retract his paper. Dr Miller wrote the model was “lost”. The paper however, has not been retracted to date although the call for a retraction and his explanation of the model having gone missing were published\textsuperscript{5}.  

696 INDIAN J MED RES, MAY 2007
**H influenza b (Hib):** Paediatricians and pathologists have long known that Hib disease in Asia is very low - about six in 100,000 compared to 109 in 100,000 in the Western Pacific. It is speculated that cross immunity with organisms like *Escherichia coli* may be responsible. Yet the thrust of international research on Hib in India has been to convince health planners that the problem was unrecognized due to poor microbiological facilities and the technical inability to culture the organism. The Invasive Bacterial Infections Surveillance Group (IBIS) conducted a study over 4 years in six large referral hospitals in India using the most sophisticated culture techniques. In the end they detected only 125 isolates. Not convinced, the WHO undertook a large population based study. This reported the incidence of Hib disease at nine per 100,000. Selective publication results in bias in the literature and should not be acceptable for internationally funded research. Yet, although completed in 2002, and the findings were presented at a conference, these results have not been published in the last 5 years.

‘NICE India’ will be able to evaluate the evidence such that the decision making process becomes transparent. If hepatitis B is to be introduced, NICE India will at first publish its intention to evaluate the vaccine. It will invite stakeholders to register their interest. Vaccine manufacturers, the WHO, civil society, patient interest groups, individual researchers and research institutes like the ICMR can all register. The body will then, independently, gather data and information. All stakeholders will contribute the evidence they hold. The mathematical model used to arrive at decisions on cost-effectiveness, cost-utility, affordability, and allocative efficiency described elsewhere can be applied to the data. A draft guideline will be written with these data. The draft and all the calculations will be sent to the registered stakeholders who will be invited to check if the guidelines can be challenged on the basis of evidence. NICE India will revise the draft with their inputs. The final report is sent to an independent review panel that examines if all stakeholder evidence has been taken into account before it is published.

The correspondent asks who the selected experts will be. NICE India must include epidemiologists, health economists, public health specialists and other health professionals and representatives from a citizens’ council. If the process is established and is transparent, it will matter little who is selected as expert. It is the procedures that need to be established and these must be completely transparent.

Other points raised are:

(i) Dr Lahariya feels that, after the WHA passed the resolution to eradicate polio, it is not important that the first initiative was taken by Rotary. We feel differently. Health priorities and health targets should be made on firmer grounds than to coincide with the centenary celebrations of Rotary international.

(ii) We have not rejected or accepted the figure of 350,000 cases of polio in 1988. We only commented on how the figure was arrived at. The number of known cases of ‘acute flaccid paralysis with residual paralysis’ was simply multiplied by a factor of 10. We also commented on the fact that, when this exercise of counting cases of polio was redone in 2000, only stool culture positive cases qualified for inclusion. We agree with the correspondent, the two data are not comparable (Point 3).

Point 2 (continued): We can confirm that the reference is correctly cited for the statement. Dr Jacob John has indeed written in this article that ‘polio eradication was not the priority number one for India’.

(iv) The strategy of ‘name and shame’ is described in the WHO Bulletin. It was not devised by us.
Dr Lahariya says mid-term corrections and adaptation are signs of a mature health programme and this is clearly visible with the polio programme. We admire the adaptations undertaken by the programme and the benefits in terms of surveillance. We cringe at the cost. Not only have we not got rid of polio, the attention given to this one programme has reduced overall immunization and we are seeing more and more cases of vaccine preventable diseases like diphtheria and measles.

The authors are active paediatricians who have deep interest in eradicating polio and who have worked to make the programme a success, but that has not blinded them to the folly of reaching out with more and more doses of a vaccines, where attention to water and sanitation can yield more returns.

Dr Lahariya concludes with the statement that a debate on our idea may be a foundation stone of future public health planning. We sincerely hope so.

Manoj Anand Gupta & Jacob M. Puliyel
Department of Pediatrics
St. Stephens Hospital
Delhi 110054, India
e-mail: puliyel@vsnl.com

References


