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Reply

Measles transmission has been interrupted in most countries of Americas by using a strategy recommended by the Pan American Health Organization (PAHO)(1). PAHO strategy is essentially a three-step immunization strategy beginning with a one-time "catch-up" vaccination of all children 9 months through 14 years of age, irrespective of vaccination status or measles history, to rapidly interrupt the measles transmission, followed by achieving and maintaining high population immunity through routine immunization of children, and supplemented by periodic "follow-up" campaigns among pre-school children whenever the cumulative number of susceptible children below 5 years of age approximate the number of children in one birth cohort. The interval between these campaigns and the specific age group to be immunized depend upon the immunization coverage obtained through routine services since the last campaign. A sensitive surveillance is the other key element of this strategy.

Based on the experiences in the Americas, Mohan and Dabi suggest that mass measles campaign in conjunction with improved routine immunization coverage would be the optimum strategy for elimination of measles from India. Assuming that nationwide mass measles immunization can be effectively delivered with pulse polio campaign and that it will not need to be repeated every 4-5 years, they also estimate that around Rs. 20-30 crores will be required per year to carry out these campaigns.

If we use the PAHO's strategy, we would immunize about 350 million children 9 month through 14 years of age with a dose of measles vaccine in the beginning. The number will be about 220 million if the target age group is 9 months through 9 years, or around 100 million if the target age group is 9 months through 4 years.

In India, under the Pulse Polio Campaign, Oral Polio Vaccine (OPV) is delivered to all the children below 5 years of age in one day. Do we have the infrastructure to deliver an injectable measles vaccine to such a huge number of children, especially in rural areas, in a short period (if not in

one day) without compromising OPV coverage? In addition, a sensitive surveillance system (not in place at present) is necessary to identify areas with poor coverage levels otherwise the follow-up campaigns will be needed early. We are of the opinion that a universal measles mass campaign may not be feasible and cost-effective in a vast country like India.

All the measles immunization strategies (one dose at 9 months of age, two-dose policy, mass campaign) have some limitations. The best will be to utilize them in a balanced way keeping in view the epidemiology of measles. That is what we have proposed in our paper.

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