STRATEGIES TO SUSTAIN IMMUNIZATION COVERAGE IN INDIA

1990 was perhaps the greatest year in history for children the world around. The ratification of the Convention on the Rights of the Child and the World Summit for Children, the largest gathering ever of world leaders, spoke eloquently of the new ethic for child welfare sweeping the globe. Most important of all, however, was the achievement of the global goal of Universal Child Immunization (UCI), with the provision of a full range of primary immunization to more than 80% of the world's infants born that year. The success of this effort was celebrated this month with an official announcement on 8 October at the United Nations Headquarters at New York by the Secretary General, Perez de Cuellar, joined by Dr. Nakajima of WHO, and James Grant of UNICEF. This represented the culmination of a decade and more of effort, and is seen by all as a first and important step in assuring that indeed the world can reach the noble goal of Health For All by the year 2000.

That India made a remarkable contribution to this global miracle for children is now well known. Starting from a level less than 20% coverage in 1980 (measles was introduced only in 1985), the expansion of EPI was accelerated with the Universal Immunization Programme in 1985, and the Immunization Mission under the Prime Minister's office two years later(1). A substantial strengthening of the primary health care infrastructure through the provision of vehicles, cold-chain, sterilization equipment, and vaccine supplies, plus a retraining of tens of thousands of health workers assured an improved and reliable supply of immunizations in the health system(2). But this was by no means enough. The EPI/UIP/Immunization Mission brought a new level of outreach and contact with the community to primary health services in India. This would not have been possible without the extensive mobilization of resources far beyond those of the Ministry of Health and Family Welfare. The Indian Academy of Pediatrics, long a technical guide and supporter of the Government programme, mobilized its membership through meetings and seminars, and expanded its impact through collaboration with the Indian Medical Association, leading to national immunization days in March, October, November, and December of 1990. Innumerable NGOs and social organizations, even those beyond the field of health, most notably Rotary, brought the participation and collaboration of citizens from all walks of life throughout the nation. Expanded use of mass media, involvement of school children, and participation by ministries of all sectors pushed the coverage levels over 80% by the end of the year(3). The achievement of UCI 1990 was truly a national effort.

Most important, the India UCI was not accomplished through vertical programming or once-off campaigns. There was, with the exception of a few senior staff, no

recruitment or fielding of unipurpose EPI workers. The programme built and strengthened the existing health care system and developed a working methodology that offers the prospect of affordable sustainability in the years ahead(2). Most important was the initiation of the monthly immunization contact, the visit, the contact between worker and community to be present one day each month to provide immunization services in a reliable and convenient fashion near each and every home. Were this the only service to be offered, it would indeed be difficult to sustain and to afford. But, as has been mentioned in a previous article by Ghosh(4), it is through adding other services to the EPI that sustainability will be achieved and Health For All become a reality.

During the monthly visit of the worker to each village, other useful interventions are already being added. Many countries have chosen to initiate provision of supplementary liquid vitamin A administered at the same time as each immunization, thereby taking advantage of the dramatic mortality reduction which has been associated with this intervention in a number of studies(5). This is already initiated in parts of India for children six months and above. Consideration of its initiation at even earlier age may contribute to the reduction of infectious disease and improved survival of infants, as well as reduction of blindness. Demonstration and distribution of oral rehydration packets has been done in parts of India and could be enhanced during EPI sessions at little cost and effort. Distribution of ORS packets to community volunteers, or even to mothers could make lifesaving rehydration more available at the community level. A similar approach has begun for ARI using trained community volunteers to recognize and treat rapid respirations, based on the important research studies reported from Ambala(7) and Gadchiroli(8). If trials in the initial 15 districts are successful, this will soon be expanded to the rest of the country, bringing an important relief from the threat of lower respiratory illness and death from pneumonia. In those communities where malaria is found, pregnant women could be provided prophylactic treatment with chloroquine at each monthly immunization session, as well as therapeutic treatment for young children with fever. The provision of chloroquine at the community level will satisfy a felt need and reduce the worse effects of malaria, although its control and eventual eradication will require far more in the field of environmental vector control and radical drug therapy.

The monthly visit to the village provides an opportune occasion to identify women early in pregnancy, and provide them with a month's supply of iron-folic acid tablets, as well as the tetanus-toxoid presently administered. The reduction in iron deficiency anemia will contribute to the well-being of all women and reduce their risk during delivery, as well as improve the birth-weight status of their newborns. Risk screening at this early antenatal contact will enable identification of those who should deliver at an institution, and conversations with their husbands and family members should under-score the importance of an early visit to the nearest maternity service and arrangement of local transportation long before the onset of labor. If this is done in collaboration with village midwife, great improvement in maternal survival can be expected.

The monthly visit of the health worker to the village is an ideal time to offer a range of contraceptive supplies. If family planning is ever to achieve a high degree of

acceptance, convenience, choice, and discretion are critical elements. Were a full range of condoms, pills, and injectables available in the village to supplement the health centre provision of IUD insertion, or sterilization camps, one could expect far greater acceptance and use.

Over the longer run, one would hope this monthly occasion would provide opportunity for more promotive activities in the critical area of nutrition. Regular monitoring and promotion of growth has been found in the ICDS and TINP to be a most useful and effective intervention. Where food supplements are available, and in limited supply, this helps identify those most in need. Attention to early growth faltering at home allows mothers to take effective measures, even before their children become malnourished. With encouragement of exclusive breast feeding and timely introduction of appropriate weaning foods, most children in rural India settings can grow normally and thrive. Periodic deworming and simple medication for bothersome infections such as scabies, would enhance the attraction of these monthly services.

Obviously, an array of health services offered on a regular basis at the village level is a substantial step towards high coverage primary health care. A new Government of India/World Bank project in child survival and safe motherhood incorporates these components and promises a renewed effort in comprehensive maternal and child care. This is, of course, the overall goal of the UIP and the underlying strategy behind the thrust for universal immunization. Always portrayed as a first step towards comprehensive services at the community level, expanding the menu available will increase both the credibility of the worker and the satisfaction of the community. Only by capitalizing on the high coverage of immunization achieved in 1990 through the gradual provision of a broader range of services can India hope to both sustain the excellent immunization protection, as well as provide the broad range of health services necessary to reach the goals enunciated at the World Summit For Children, and ratified by the Indian Government in November 1990. The achievement of UCI 1990 is the promise that these goals will indeed be achieved as a part of Health For All by the Year 2000.

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REFERENCES

1. Sokhey J. The immunization programme in India. Indian J Comm Med 1990, 15: 163-172.
2. Rohde JE. A strategy for strengthening primary health care. Indian J Comm Med 1990, 15: 185-197.
3. EPI Information System, Section 1: Immunization Coverage, World Health Organization. WHO/EPI/CEIS/91.1, April 1991: 15.
4. Ghosh S. A feasible strategy for a health care package. Indian Pediatr 1990, 27: 327-332.
5. Rahmathullah L. Underwood BA, Thulasiraj MBA, *et al.* Reduced mortality among children in southern India receiving small weekly dose of Vitamin A. N Engl Med 1990, 323: 929-935.
6. West KP, Pokhrel RP, Katz J. *et al.* Efficacy of vitamin A in reducing preschool

child mortality in Nepal. Lancet 1991, 338: 67-71.

7. Kumar V, Dutta N. Community based studies on infant mortality in Haryana: Methodological issues relating to reporting and causation. *In:* Infant mortality in India: Differentials and Determinants. Eds Jain AK, Visaria P. New Delhi, Sage Publications, 1988, pp 185-199.

8. Bang AT, Bang RA, Tale O, *et al*. Reduction in pneumonia mortality and total childhood mortality by means of community-based intervention trial in Gadchiroli, India. Lancet 1990, 336: 201-206.

NOTES AND NEWS

PEDIATRICS & NEONATAL EMERGENCIES

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