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BASICS
TRIP REPORT

Evaluation of USAID Grant to PolioPlus/India

BASICS is a USAID-Financed Project Administered by The Partnership for Child Health Care, Inc.:

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USAID

EVALUATION OF USAID GRANT TO POLIOPLUS/INDIA

June 20 - July 1, 1994

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E USAID/BASICS Participation in Polio Eradication - A Draft Issues Paper

I. OBJECTIVES

Measure the progress of PolioPlus India in implementing its program in support for the Government of India's (GOI) Universal Immunization Programme (UIP), as detailed in the 1992-1995 detailed implementation plan.

II. FINDINGS

(see Executive Summary, page 1, of Appendix A)

1. Polio incidence in India has decreased from an estimated 250,000 cases in 1981 to 15,000 (reported 4000+) in 1993, a reduction of 94 percent.

2. India still reports half the world's cases of polio and is the major exporter of the disease.

3. India has an ongoing, sustainable vaccine delivery system achieving, in most states, OPV3 coverage rates of 80 percent.

4. An estimated 20,000 Indian Rotarians and 1000 of 16,000 Rotary Clubs participated in polio activities, primarily supporting GOI/UIP activities in urban slums.

5. India is in the process of program transition from a disease coverage to a disease reduction program. Surveillance is weak and laboratory backup is limited.

6. New Delhi State will carry out "vaccination days" in the Fall of 1994. This is an important programmatic step in the transition from a vaccination program to a disease eradication program.

III. RECOMMENDSTIONS

See pages 2-4 of evaluation report, Appendix A.

IV. OTHER ACTIVITIES

1. Met with Jon Rohde, UNICEF representative, and Deputy Director Gordon Alexander to discuss issues related to child health (immunization, Delhi State Campaign, iodine). Prepared letter on improving immunization (EPI) impact to Jotna Sokhey (Appendix B). Also drafted an evaluation strategy for the Delhi campaign (Appendix C).

2. Met with Sandarsen Agarwal, former Chief Secretary of Upper House, on improving integrated child delivery systems impact.

3. Followed up with the United States Agency for International Development (USAID) and CARE on strengthening the immunization component of integrated child development systems.

4. Met with Rajani Ved, USAID, to discuss opportunities for BASICS support to private voluntary organizations (PVOs).

V. FOLLOW-UP

1. During the World Health Organization/Center for Disease Control and Prevention (WHO/CDC) meeting on polio eradication, July 25-27 1994, follow-up meetings regarding continuing support were held with Rotary (Ted Trainer and Dr. Haran), WHO/SEARO (Jon Andrus), and WHO/Geneva (Nick Ward and Harry Hull).

2. I am screening abstracts and will participate in the PVO evaluation conference to be held in Bangalore in October 1994.

3. Dr. Steve Atwood, formerly with CARE, will be joining UNICEF as a health officer in August 1994. He is an excellent contact.

APPENDIX A

PolioPlus India

Rotary Family At Work
Supporting India's
Universal Immunization Program
Polio Eradication

Midterm Evaluation-USAID PolioPlus Grant
June 19-30, 1994
PolioPlus-India & Rotary International
Revised, Final, July 1, 1994

POLIOPLUS INDIA MID-TERM EVALUATION-JUNE 1994

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Note: Recommendations are in italics, are numbered serially, and are referred to the National Committee for review and action as appropriate.

Acknowledgements

We, the evaluation team, express appreciation to all who have supported this team in its mission. We would especially like to thank District 3060, 3120, 3180, and 3190 Rotarians, Inner Wheel members, and Health Authorities that gave so freely their time and hospitality during our field visits. We were impressed by the effective collaboration between Government Health Authorities, Rotarians, Inner Wheel members, Rotaract, Interact and collaborating community organizations and the progress that is being made to protect India's children from diseases preventable by immunization, the elimination of neonatal tetanus, and the eradication polio.

We would also like to thank the Ministry of Health, UNICEF, WHO, and USAID for their assistance in providing background information and perspective.

Finally, we want to thank the PolioPlus Office and the National Committee for the excellence of the background materials, the oral briefings, and the logistic support.

Great progress has been made in immunization. The challenge ahead will not be easy. The victory will come as children grow up free of polio and better able to learn, play, work and be productive members of society.

Jagvir Singh, NICD, India
Venkateswara Rao, Voluntary Health Services, Madras, India
Prasanna Kumar, National PolioPlus Committee, India
Siddharth Nirupam, UNICEF/Gujarat
Bill Sprague, Rotary International, Grand Rapids, Michigan,USA
Tom Ortiz, Atlanta, Georgia, USA
Usha Goel, PolioPlus Technical Coordinator, India
Anne Statton, Rotary International HQ, Evanston, Illinois, USA
Stan Foster, Emory School of Public Health, Atlanta, GA, USA

EXECUTIVE SUMMARY

1. Poliomyelitis is a major cause of childhood disability and death. Without effective immunization, an estimated 135,000 Indian infants would be paralyzed by polio annually.
2. The Government of India through its Universal Immunization Program (UIP) has established an effective system of immunization. Since its inception in 1978, immunization coverage in the first year of life has increased from 10% to 90% in 1993. Increases in immunization coverage have been accompanied by a decrease in the incidence of the 6 target diseases.
3. In addition to its coverage objectives, the UIP has targeted the elimination of neonatal tetanus by 1995, the eradication of poliomyelitis by the year 2000, and the control of measles.
4. Rotarians around the world have committed themselves to work with national governments and international organizations toward the achievement of polio eradication by the organization's 100th birthday in 2005. Rotarians have collected 240 million dollars (US) toward this goal. Of greater importance is the active participation of Rotarians in support of the UIP.
5. India's 1600 Rotary Clubs, 540 Inner Wheel Clubs, Rotaract, and Interact are actively working with health authorities in supporting India's UIP. Support includes 1) advocacy, 2) social mobilization, 3) financial and logistic support, and 4) active participation in UIP activities as requested by health authorities. An estimated 1000 Rotary Clubs and 20,000 Rotarians participated in one or more PolioPlus activities in 1993.
6. Through a grant from United States Agency for International Development (USAID), a PolioPlus office has been established in New Delhi to provide technical and administrative support to ongoing Rotarian activities.
7. This report summarizes a June 1994 mid-term evaluation of the PolioPlus Grant. The objectives are to document achievements and to identify areas for program strengthening.
8. Significant progress has been made toward the achievement of Polio eradication.
9. Achievement of polio eradication will require a shift from the current coverage driven program to surveillance based disease eradication consisting of the detection, investigation, and control of polio cases and the maintenance of high levels of coverage.
10. Indian Rotarian presence in urban areas, where lack of adequate services for periurban poor have been identified as a major constraint to eradication, has provided a unique opportunity for collaborative support to the Government program. An estimated 1000 Clubs have adopted one or more slum areas for their hands on participation.

RECOMMENDATIONS

Note: Listed below are the recommendations of the evaluation team for review by the national committee. Recommendations are grouped below by the most probable locus for action.

Rotary Clubs

1. *Clubs recognize their important role in making immunization available among the poor. In doing this, priority should be given to matching Rotarian skills and contacts with needs identified collaboratively with health authorities. (Page 14)*
2. *Club responsibility for surveillance should emphasize advocacy for immediate reporting of all new cases of lameness among children under five years of age. (Page 14)*

Inner Wheel Clubs

3. *Inner Wheel members utilize their immunization contacts in supporting the development of women's groups in slum areas. (Page 14)*

Zonal Coordinators

4. *Zonal coordinators are urged to make monthly contact with each club. This should include during the year two zonal meetings and two visits to each club. (Page 15)*

District PolioPlus Chairmen

5. *DPPCs explore needs for district level projects for PolioPlus funding such as printing of local language educational materials or support for surveillance. (Page 16)*
6. *DPPC identify characteristics of good Zonal Coordinators to facilitate future selection. (Page 16)*

Multiple Levels

7. *District and Zonal leaders continue to stress the importance of UIP to the health and welfare of Indian children. (Page 19)*
8. *PolioPlus at all levels regularly meet with Government counterparts to review progress in disease surveillance and response. Rotarians should be continually alert to opportunities where Rotarian expertise and resources can play a critical role in improving surveillance. Also, the addition of the Technical Coordinator B should yield further training and education materials and strategies for Rotarians in surveillance strategies and opportunities. (Page 19)*
9. *Monetary rewards not be used as an incentive for reporting. Opportunities for rehabilitation be explored. (Page 20)*

9

National Committee

10. *National Committee review these recommendations and for those found valid set responsibility and time targets for achievement. Progress should be reviewed at quarterly meetings.*
11. *National Committee transmit a summary of this evaluation to all Rotarian organizations with recognition of their contributions to PolioPlus.*
12. *National Committee formally commend the Child Survival and Safe Motherhood (CSSM) program in the Ministry of Health for its leadership of the UIP.*
13. *National Committee members personally contact each District Governor to inform them on the status of PolioPlus and to solicit their advocacy for support at the District and Club levels.*
14. *National Committee and the PolioPlus Office continue recognition and awards to Clubs and District that are doing outstanding work in support of PolioPlus objectives. (Page 17)*
15. *National Committee adopt a revised reporting system where clubs report quarterly to Zonal Coordinators with copies to the DPPC. Zonal Coordinators submit every January a spreadsheet of key indicators (selected from those used in annual review) on each of his/her clubs to the DPPC. DPPC report quarterly to PolioPlus Office on the following: July-September (District and Zonal Meetings and Plans for SSDs); October-December (Reports of SSD Activities), January-March (Annual Report of Surveillance and Coverage) and April-June (Annual Summary with suggestions for next District Chairman). Transmission of data to PolioPlus Office be limited to the District PolioPlus Quarterly report; the December report include attached copies of the Zonal Reports. Such reports be used in the Annual Review which should be scheduled for February, 1995. (Page 20)*
16. *Committee leadership meet monthly with Project Director and Technical Coordinators to share information, monitor progress in implementation, and to identify and solve problems. This team building approach will capitalize on the experience and skills of the committee leadership, and of the professional staff. (Page 17)*
17. *National Committee promote decentralization and skill-building at Club, Zonal, and District levels. (Page 20)*
18. *National Committee consider developing a mechanism for providing ("granting") funds to the District PolioPlus Chairman for the conduct of innovative efforts in their area. This could be in lieu of or as a complement to the matching grants to clubs. (Page 18)*
19. *National Committee develop a strategy, with a consultant if necessary, for helping Club, Zonal, and District level Rotarians mobilize the private sector. (Page 20)*
20. *National Committee request a one year no-cost extension to the current grant. (Page 17)*

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PolioPlus Office

21. *PolioPlus Office ensure that operations provide the maximum opportunity for information sharing. Meetings of professional staff be held at least monthly. These meetings should be considered as an opportunity to have the "brain trust" surface up creative and visionary solutions to the complex problems that arise in a changing environment. (Page 18)*
22. *The vacant position for Technical Coordinator (B) be filled as soon as possible. These skills (Epidemiology, Management Information Systems) would help organize the work and provide direction to the Clubs in a more persuasive and technologically appropriate manner. Access to the Ministry of Health and to the other partners with Rotary (WHO, UNICEF, etc.) would also be enhanced. (Page 18)*
23. *All the Field Programme Officer positions, particularly the one in Uttar Pradesh, be filled as soon as possible. A major role for the Field Programme Officer would be to visit clubs that are in critical polio eradication areas (determined in conjunction with the Technical coordinators and the Ministry of Health) and assist them with the planning and implementation of strategies supportive of the governments efforts. Field Programme Officers be responsible to the Technical Officers. Technical Officers recommend staff selections and be responsible for personnel evaluations. (Page 18)*
24. *Site visits by PolioPlus Office staff and the Field Programme Officers be preferentially directed to the districts with low coverage and high polio incidence. These visits will complement and reinforce the national and district meetings now being held. (Page 18)*
25. *Carry out a Training Needs Assessment of DPPC and Zonal Coordinators activities. Utilize findings in planning the 1995 DPPC course. Use of an experienced facilitator for that course is suggested. (Page 19)*
26. *Training needs of professional staff in communications, surveillance, and MIS should be identified and be met through a scheduled program of continuing education (staff development). (Page 18)*
27. *PolioPlus Office continue to have frequent contact with their partners in the India polio eradication effort. These partners include not only the Ministry of Health but also the Indian Medical Association, WHO, UNICEF etc. As the program becomes more technical, the leadership of the office needs to become increasingly more technical. (Page 18)*
28. *PolioPlus Office is operating without full information on project accounts. The local office needs to be apprised of its allotted budget, be authorized to expend funds within this budget, and be held responsible for expenditures. Consolidation of in-country accounts is recommended. (Page 18)*

I. BACKGROUND AND OBJECTIVES

Rotary International Support for Polio Eradication

In 1989, Rotary International, its 25,000 clubs in over 160 countries, and its 1.1 million members made an unprecedented global commitment toward the achievement of polio eradication by 2005 (the 100th anniversary of Rotary). Toward this goal, Rotarians have collected over US $240 million dollars and are working hand-in-hand with government authorities in supporting immunization and eradication activities.

Rotary India

In India, Rotary is made up of 1600 Clubs and 540 Inner Wheel Groups divided into 28 districts. Through USAID grant, a PolioPlus Office has been created to provide administrative and technical backstopping to the 1600 Rotary Clubs in their support for the Government's Universal Immunization Program.

Government of India Universal Immunization Program (UIP)

The UIP has as its goal the universal coverage of infants with BCG, DPT3, OPV3, and measles vaccines; the elimination of neonatal tetanus by 1995; 95% reduction in measles morbidity and 90% reduction in measles mortality by 1995; and the eradication of poliomyelitis by 2000. Over the last decade, the Government of India has achieved marked success in the establishment of immunization systems including the training of personnel, the development of a cold chain, and the establishment of a Management Information System (MIS). Reported immunization coverage has increased from less than 10% in 1981 to 7% in 1992. This has been associated with a decline in the reported incidence of the 6 target diseases.

Rotary's PolioPlus Initiative

PolioPlus has as its goal the support of two Ministry UIP objectives: 1) increasing immunization coverage, and 2) the eradication of poliomyelitis.

USAID Grant to PolioPlus

The United States Agency for International Development (USAID), through its Office of Private and Voluntary Cooperation has provided two grants to PolioPlus India: Grant I ($1.2 million - 1987-1992) and Grant II ($1 million - 1992-1995). The objective of these grants is to support three priority activities 1) social mobilization efforts toward increasing awareness for immunization, 2) promoting political and programmatic commitment for the eradication of poliomyelitis, and 3) Rotary Club adoption of one or more designated (high risk) urban areas for sustained support of PolioPlus activities. As a condition of the grant, a mid-term evaluation is required to document progress and identify opportunities for program improvement.

Evaluation Objectives

The objectives of this evaluation are to assess the progress of PolioPlus India in implementing its program as detailed in the Detailed Implementation Program, 1992-1995; to identify constraints to this implementation; and to make recommendations for program strengthening.

II. METHODS

Evaluation Team

The evaluation team includes Dr. Jagvir Singh, GOI NICD; Dr. Venkateswara Rao, Voluntary Health Services, Madras; Dr. Bill Sprague, Rotary International, Grand Rapids, Michigan; Mr.Tom Ortiz, private consultant, Atlanta, Georgia; Dr. Stan Foster, Emory University School of Public Health, Atlanta, Georgia; Dr. Siddharth Nirupam, UNICEF/Gujarat, Dr. Prasanna Kumar, National PolioPlus Committee Member, Karnataka; Ms. Usha Goel, PolioPlus Technical Officer; & Ms. Anne Statton, Rotary International, Evanston, Illinois.

Delhi Briefings

Briefings were provided by GOI CSSM Program (Dr. Jotna Sokhey), UNICEF (Dr. Jon Rohde, Gordon Alexander, Dr. K. Suresh), WHO (Dr. Anton Fric), USAID (John Dumm, Rekha Masilamani), PolioPlus (PRID Sudarshan Agarwal, 93-94 Chair; PDG Lalit Mehra, 93-94 ViceChair; Trustee OP Vaish, 94-95 Chair; Dr. Prasanna Kumar, National Committee; LtGen A. Manglik, Director; Usha Goel, Technical Coordinator, Dr. EGP Haran Regional Advisor; Ms. Anne Statton, RI.

Annual Review

An internal annual PolioPlus review was carried out in January 1994 to assess the status of program implementation (the current MIS is significantly underestimating the level of Rotarian involvement). Seven Rotary Districts were randomly selected from three areas sequentially slated for special polio elimination activities (three sites were allocated to the more populated area). In each district, 2-4 zones were randomly selected. Seven to ten clubs were selected from each zone. Clubs not available were replaced. Data were entered in EpiInfo 5 and further analyzed. As there were no significant differences between the random and non random clubs, the results were pooled for use in this analysis. Future surveys should seek statistical assistance in sample design.

Field Visits

Field visits were carried out to four Rotary Districts in three states (Gujarat, Karnataka, and Uttar Pradesh) from June 23-27, 1994 by three person teams. Each team included a national, an international, and a Rotary representative. Using amended forms used in the Annual Review, the field protocol called for contact with Health Authorities, District Governor, District PolioPlus Committee Chairman, Zonal Coordinators, Rotarians, and Inner Wheel Members. Contacts are summarized in the table below.

PolioPlus India MidTerm Evaluation - Field Visits

District	District Governor	District PP Chair	Zonal Coord	Club Pres	Club PP Chair	Inner Wheel	Rotary Members	State/Dis Health	PHC Health
3060	1	0	4/9	9/14	7/14	3	22	1	2
3180	1	1	4/11					2	1
3190	1	1	6/6		6/6	8	60	3	3
3120	1	1	1/7	7/9	1/9	1	35	2	1

Debriefing

On June 28 and 29, a draft report was prepared. Results were presented to PolioPlus Officers and Staff and Cooperating Agencies on June 30. The report was finalized for distribution on July 1.

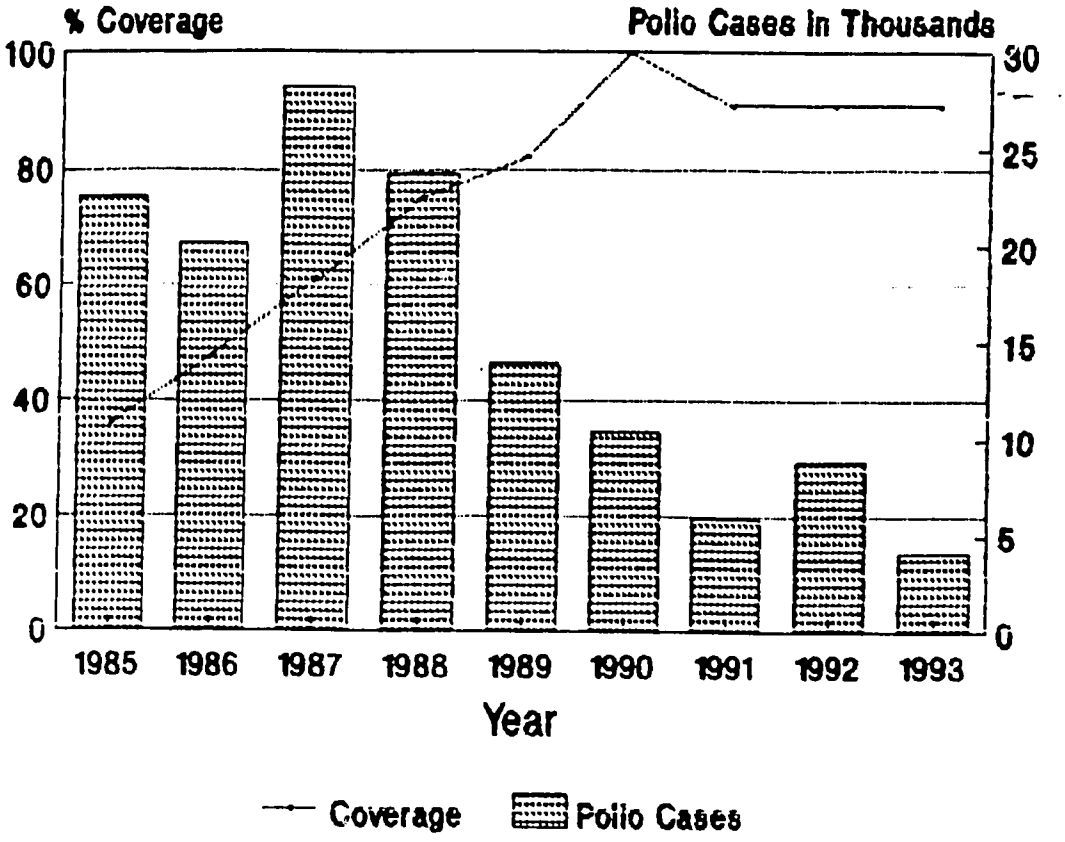
III POLIO AND POLIOPLUS IN INDIA

Epidemiology of Poliomyelitis in India

Poliomyelitis, transmitted by the fecal-oral route, is an endemic disease and a public health problem in India. The control of poliomyelitis was taken up as a major challenge under the Expanded Programme on Immunization started in India in 1978. OPV was included in the national immunization programme in 1979-80. The programme gained momentum in 1985 under the UIP when additional inputs were provided to all districts in a phased manner. Prior to 1987, overall immunization coverage levels with 3 doses of OPV was reported to be less than 50% in children below one year of age. The reported coverage levels increased to 75% in 1989, when a national review of the immunization programme was undertaken in conjunction with above mentioned lameness survey. The reported levels of coverage increased to more than 90% in 1990. The 1992 ten-district 5 state review (states were selected to be representative of the entire country) documented that 83% of infants had been immunized with 3 doses of OPV. The figure on the next page shows the reported OPV3 coverage for 1985-1993.

14

Reported Coverage (OPV3) and Polio Cases In India during 1985-1993

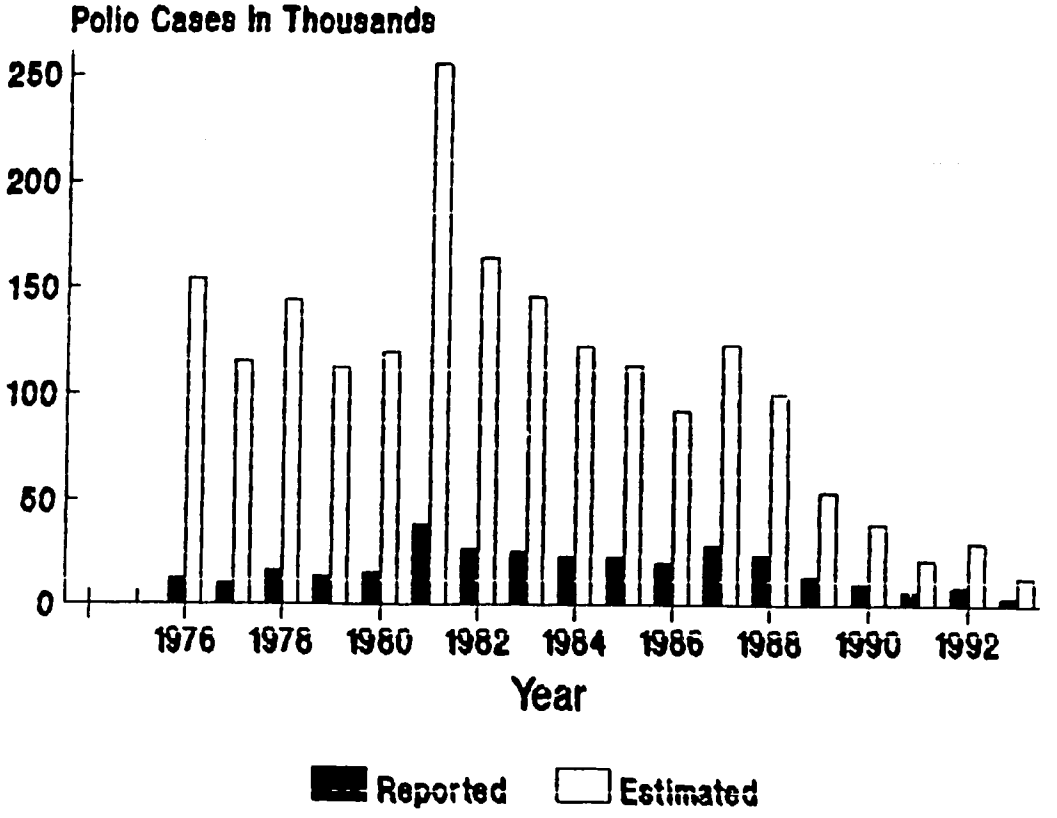


Source: Central Bureau of Health Intelligence, Government of India Ministry of Health - 1994

Despite the marked decrease in polio cases shown in the above figure, India accounted for 60% of the reported global cases of polio in 1992 and 42% in 1993. There are wide variations in both polio incidence and OPV coverage between the states and UTs and also among different districts of a state.

Reported data on polio cases underestimate the actual number of cases because of incomplete detection and reporting. Actual incidence can be estimated through surveys of children for polio-caused lameness meeting specific clinical criteria. Three such surveys have been carried out in India: 1981 (national-ages 5-9), 1989 (national, under 5), and 1992 (10 districts in 5 states, under 5). Assuming that each of these surveys estimates the efficiency of reporting of polio cases for India, the reported and estimated number of polio cases per year from 1976-1993 are summarized on the following page. The gap between estimated and reported cases has decreased. These data suggest that 31% to 45% of polio cases were reported in 1993. These rates compare to 9%, 17%, and 29% for the lameness surveys carried out in 1981, 1989, and 1992 respectively. With the current improvements in surveillance, it is possible that current percentage of reporting is greater than had been estimated.

Reported & Estimated Polio Cases-India
1976-1993



Cases were estimated using data from GOI Lameness Surveys in 1981, 1989 and 1992.

India has developed a phased plan to accelerate polio elimination activities starting with the southern states where OPV coverage is high, polio incidence is falling, and where polio surveillance is improving. While it is unlikely that the interruption of transmission in the 11 states/UTs will be achieved by the 1994 target, the eventual achievement of the goal will provide a major boost to polio eradication in India, Asia, and the world. The other two groups of states and UTs have targets of eradication by 1996 and 1997. To achieve these targets, increased priority is being given to Acute Flaccid paralysis (AFP) surveillance to strengthen the detection, investigation, and control of polio [illegible]. Simultaneous efforts are being made to maintain high levels of coverage with supplemental vaccination targeted at high risk groups defined as children less than 3 years of age.

With poor community sanitation and personal hygiene, almost all persons encounter the poliovirus infection by 10 year of age. Almost 90% of polio cases occur in children below 3 years of age and the median age at infection continues to be less than 2 years.

Polio cases occur throughout the year. Peaks are observed usually in the third quarter of the year, while November to April (especially Dec.-Feb.) are the low transmission months. There is less seasonal variation in South India.

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PolioPlus India

The success of smallpox eradication program in the early seventies conclusively established the role of vaccines in controlling infectious diseases. In 1966, it was estimated that smallpox was taking a toll of 2.5 million Indian lives annually. In just over ten years eradication was achieved. One of the major benefits of the smallpox eradication programme was its role in encouraging health planners and managers to use the powerful tool of immunization more extensively. This facilitated the launching of EPI by WHO in 1974. The Government of India adopted EPI in 1978, subsequently called the Universal Immunization Programme (UIP), to provide vaccination services in every corner of the country.

In 1987, Rotary International awarded a grant of US$20 million to India. The grant provided US$19 million for the purchase of polio vaccine through UNICEF. It also provided support (US$1 million) for mobilization activities through the Rotary Clubs of India. The Rotary family (Rotary Clubs, InnerWheel, Rotaract, Interact and Rotary Village Corps) serve as a valuable resource of approximately 100,000 persons. The type of support being provided to the Ministry of Health has progressed from its original concept of "organizing immunization camps", primarily aimed at raising coverage, to a much expanded comprehensive agenda of advocacy, community health education, support to immunization in high risk urban slums, and improved reporting of polio case. The process of program evolution is displayed in the figure below.

EVOLUTION OF POLIOPLUS STRATEGIES IN INDIA

```
87   88   89   90   91   92   93   94
National Committee ***********************************************
    National Review and Planning Meeting ************************
        District Planning Meetings ****************************
            Zonal Coordinator Strategy ************************
            Shishu Surakasa Diwas (Catch-up Days)*************
                Development & Use of Mobilization Materials**
                Committee Members Assigned District Support**
                    Clubs Adopt Underserved Areas ************
                        Increased Priority on Surveillance**
                            Field Program Officers ********
```

Source: PolioPlus India

Through a variety of activities including outreach through schools, rallies and parades, Rotarians have helped to create an awareness of the need for vaccination in their communities. However, awareness of the need for vaccination is not enough. The message needs to reach those 'hardest to reach' populations. In India, the health services provide reasonable coverage to the rural populations. The children in the urban slums are, however, generally less well served by the government health services. The presence of Rotary in these areas provides an important resource for a government identified need and more importantly, a human need.

In 1990, the Shishu Suraksha Diwas (SSD or Baby Protection Days) program was launched by the Government as "catch-up" rounds aimed at the children who did not complete the recommended vaccination schedule. Rotarians took up the charge and, in coordination with their local health authorities, organized special immunization camps to help boost coverage of all vaccines.

In order to coordinate Rotary's activity on a national scale, national, Rotary district, zonal and club leadership was designated and trained annually. Through the life of the project, several manuals and other educational material have been designed in consultation with the GOI and their partners (UNICEF, WHO, IMA) by the PolioPlus India office to help direct and strengthen Rotary club efforts.

Since the "workshop" phase, the project has been focusing on the SSD strategy of boosting immunization coverage. Last year, a new focus began to develop which was based on the growing global trend toward aggressive strategies aimed at polio eradication. A manual, specifically designed for clinicians, was developed to help communicate the message to private practitioners about the importance of surveillance and the criteria for diagnosing polio. Surveillance is the "key" for polio eradication: just as the "key" must be turned to open a door, the PolioPlus focus must now be turned towards surveillance to ensure the eradication of polio in India.

IV FINDINGS AND RECOMMENDATIONS

Annual Review - JANUARY 1994

Tabulations of the Annual Review Data collected from a sample of 92 clubs in 7 Rotary Districts are summarized on the next page. (See methods section sampling and assumptions)

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Annual Review of 92 Rotary Clubs in 7 Districts - January 1994

Variable	Sample N=55		Non Sample N=37		Total N=92	
	#	%	#	%	#	%
PolioPlus Committee	45	82	33	89	78	85
Health Authority Coordination	44	80	29	78	73	79
Developed Action Plan	16	29	15	41	31	34
Adopted Underserved Area	48	87	33	89	81	88
Involve Other Rotary Groups	19	35	21	57	40	44
Involve Other Community Groups	17	31	22	60	39	42
Involve Corporate Sector	11	20	10	27	21	23
Involve General Practitioners	27	49	14	38	41	45
Support Routine Immunization	28	50	13	35	41	45
Enumerate Underserved Area	31	56	18	49	49	53
Support SSD "Catch-Up" Rounds	40	73	25	68	65	71
Advocate Lay Reporting of Polio	13	24	11	30	24	26
Purchase/Repair ColdChain Equip	13	24	7	19	20	22
Donate In-Kind Services/Support	31	56	20	54	51	55
Estimated Cash Contribution = 0	19	35	15	41	34	37
1-1,000 Rupees	0	0	4	11	4	4
1,001-5,000 Rupees	11	20	7	19	18	20
5,001-10,000 Rupees	13	24	4	11	17	19
10,001=20,000 Rupees	5	9	4	11	9	10
20,001 + Rupees	7	13	3	8	10	11
Club Membership	2042		1707		3749	
Club Member Participation	657	37	469	31	1126	35

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Rotary Clubs

Most clubs interviewed during field visits had a PolioPlus Committee. The number of members on each committee varied from 3-13. Frequency of meetings varied from weekly during SSD periods to every six months. Meetings usually focused on planning, accomplishments, and difficulties.

During the field visits, the teams visited both Rotarians and health authorities, occasionally in joint session. With few exceptions, collaboration was good to excellent. Over time there has been growth in mutual respect and trust and an increasing openness to share ideas, identify problems and solve problems.

The largest gap identified at the grass roots Rotary Club level is that of surveillance. Most Rotarians feel that surveillance is a government responsibility or that they simply lack an understanding of how they can assist in supporting this essential activity. Guidelines need to be developed to identify the unique opportunities for Rotarians to support the government on this critical issue.

As management and leadership are skills frequently found among Rotarians, Club support to UIP has been effective in mobilizing community groups (Rotaract, Interact, NCC, NSS etc.)to assist in immunization activities. A large proportion of clubs (39 of 92, 42% in the 1994 Annual Review) are involving community groups in UIP activities.

All clubs surveyed in Gujarat and Karnataka and 60% of the clubs surveyed in UP supported SSD activities including enumeration, site management, logistics, transportation, or snacks. Twenty-six clubs had a defined area of operation, 19 of which were urban. Populations served varied from one area of 10,000 to larger or multiple areas containing 50,000 population. Migration, especially in urban slums, was an identified challenge.

Access to health education materials was variable. The Mother Teresa poster was clearly the most popular. Banners, videotapes, and posters were identified as helpful.

Many clubs have not utilized matching grants, feeling that resources can be mobilized locally. They also felt that the reimbursement sum (Rs 2,500) was not worth the effort. These findings indicate sustainability. Clubs have been effective in mobilizing support from members and corporate contacts.

Clubs reported a need for more interclub and interdistrict coordination. This will become increasingly important as progress is made in freeing contiguous areas of polio.

Public recognition of good performance (district and national awards) is important for sustained motivation and involvement. Less well recognized are the major and important contributions of Inner Wheel, Rotaract and Interact members in field activities such as house-to-house enumeration and motivation.

SSDs, monthly campaigns, rallies, dramas, marches, tree plantings, and puppet shows have all been useful in publicizing the importance of immunization. Rotarians reported that PolioPlus has enhanced the image of Rotary.

Constraints identified by the clubs included: the challenges of poverty, illiteracy, and language to effectively communicate the importance of immunization; suboptimal coordination with health officials; lack of sustained involvement of club members; competing opportunities for Rotarian community service, migratory populations, and shortages of vaccine (noted in UP).

Recommendation 1: Clubs recognize their important role in making immunization available among the poor. In doing this, priority should be given to matching Rotarian skills and contacts with needs identified collaboratively with health authorities.

Recommendation 2: Club responsibility for surveillance should emphasize advocacy for immediate reporting of all new cases of lameness among children under five years of age.

Inner Wheel

Inner Wheel members (spouses of Rotarians) are making major contributions to this project. As women, many of whom have had personal experience with immunization with their own children, Inner Wheel members have proven to be effective role models, communicators, and motivators. Involvement in high risk adopted areas is opening up other areas of community service including income generation, education and family planning.

In view of Inner Wheel interest and potential, allocation of resources to more actively support Inner Wheel activities in the adopted areas should be considered.

Recommendation 3: Inner Wheel members utilize their immunization contacts in supporting the development of women's groups in slum areas.

Zonal Level

Zonal Coordinators are a key link in PolioPlus leadership. They support the Club PolioPlus Chairman in the planning and reporting of activities. The Coordinators are trained at District Planning Meetings and then carry out Zonal Planning Meetings. Follow up is variable and ranges from letters, to phone calls, to club visits.

Only one third of clubs reported having a formal plan of action. Presence of a plan of action did not correlate with the level of PolioPlus activities.

Many Zonal Coordinators are committed and hard working. Involvement of District Chairmen, support from National Committee members, the PolioPlus Office, and awards were identified as important to maintaining interest and enthusiasm. Improved

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methods of reporting were also requested ("too much paperwork").

Zonal coordinators reported good support from the PolioPlus Office with the exception of shortages of certain publications, e.g., the clinicians guide.

Constraints identified focused on support from key officials, the District governors and the Club Presidents. Confusion on technical issues, excess personal expenses, lack of materials in local languages, and lack of responsiveness from the PolioPlus Office were also cited as problems. In UP there is confusion on zonal areas of responsibility.

Recommendation 4: Zonal coordinators are urged to make monthly contact with each club. This should include during the year two zonal meetings and two visits to each club.

District Level

District leadership, in terms of the commitment of the District Governor, the leadership of the District Coordinator, and the guidance and support to clubs from the Zonal Coordinators, is key to effective program implementation. Attendance at the District 3180 PolioPlus planning workshop, for example, emphasized the importance of well-planned well-run workshops. The meeting was attended by the District Governor, the outgoing and incoming DPPCs, Zonal Coordinators (6), Inner Wheel (10), Government Health Officials (5), Rotarians (40), and a National Committee member. A schedule for the years activity was presented (see Attachment III).

Increased funding to the district level was identified as a promising opportunity for program strengthening. Reimbursable funding of 10,000 to 25,000 Rupees for projects approved in advance (14 day turn around time) should be considered.

In addition to the difficulties cited above, District Chairmen emphasized the time constraints of busy Rotarians, the need for continued information and motivation, and the inadequacy of health education materials in the local language. They also expressed concern about the continued program emphasis on coverage and the lack of activity in the area of surveillance.

Recommendation 5: DPPCs explore needs for district level projects for PolioPlus funding such as printing of local language educational materials or support for surveillance.

Recommendation 6: DPPC identify characteristics of good Zonal Coordinators to facilitate future selection.

National PolioPlus Committee

The National Immunization Committee and Chairman for the PolioPlus Project (National Committee) in India is appointed by the President of Rotary International for a three-year term. In addition to the 12 members, the RI Director and the TRF Trustee from India also serve as ex-officio members. Among the responsibilities of the National Committee are:

* Maintain close liaison with state governments and representatives of UIP support agencies;

* Maintain contact with key political, business and community leaders to advocate for polio eradication objectives;

* Coordinate PolioPlus planning and review meeting at inter-district/district level;

* Support District Governors and District PolioPlus Chairmen in preparing a comprehensive plan for the social mobilization activities in the Districts assigned to them;

* Attend National Committee meetings, provide an update on the progress of the program, and provide feedback to the District Governors and District PolioPlus Chairmen in their Districts;

* Review performance of Clubs, Zones and Districts for recognition and awards.

PolioPlus Office

The PolioPlus Office acts as Secretariat for the National Committee, and provides technical and administrative backstopping to the project. Among the other duties of the PolioPlus India Office are:

* Develop, conceive and implement activities to promote PolioPlus in accordance with policies of the GOI, the World Health Organization, and the Project Detailed Implementation Plan (DIP);

* Carry out liaison with and work in close collaboration with the Ministry of Health, UNICEF, USAID, WHO and other national and international organizations on matters relating to Polio eradication.

The current staff of the PolioPlus India Office consists of the Project Director, a Technical Coordinator (A), and two support staff. An additional position for a Technical Coordinator (B) is vacant at this time. There are also five Field Program Officer positions to be stationed outside of Delhi; only two of these important positions are currently filled.

The Regional Advisor (Asia) for Rotary International is also located in the same office, although not part of the PolioPlus India Office. In the absence of the Technical Coordinator (B), the Regional Advisor has been assisting in the provision of technical assistance to the extent possible.

Budget

The budget available for the PolioPlus Project (excluding vaccine) is US $1 million for the three year period October 1992-September 1995. The non-vaccine funds are provided through a grant from USAID. These funds support the work of the National Committee, training for District and Zonal Rotarians that are engaged in PolioPlus, the activities of the PolioPlus India Office (salaries, equipment, travel, supplies, printing, etc.), and for reimbursement for some of the expenses incurred by the Clubs ("matching grants").

Three factors have led to the accrual of substantial savings to date:

- No-cost extension of Grant I from USAID overlapped with Grant II (current) Approximately US $120,000 was utilized to fund the first nine months of the current project;
- Personnel vacancies have resulted in savings in salaries, as well as associated costs such as travel;
- The fiscally conservative National Committee has also contributed to the savings.

It is estimated that US $180,000 has been expended from the funds available for the current three-year period versus an expected US$ 400,000. This accrual provides an opportunity to consider at this time a one year no-cost extension for the current grant. This would continue to provide the benefits of this collaboration with the government's UIP during a critical period.

Recommendation 20: The National Committee request a one year no-cost extension to the current grant.

Recommendations

14. ***National Committee and the PolioPlus Office need to continue recognition and awards to Clubs and District that are doing outstanding work in support of PolioPlus objectives.***

16. ***Committee leadership meet monthly with Project Director and Technical Coordinators to share information, monitor progress in implementation, and to identify and solve problems. This team building approach will capitalize on the experience and skills of the committee leadership, and of the professional staff.***

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18. *National Committee consider developing a mechanism for providing ("granting") funds to the District PolioPlus Chairman for the conduct of innovative efforts in their area. This could be in lieu of or as a complement to the matching grants to clubs.*

21. *PolioPlus Office ensure that operations provide the maximum opportunity for information sharing. Meetings of professional staff be held at least monthly. These meetings should be considered as an opportunity to have the "brain trust" surface up creative and visionary solutions to the complex problems that arise in a changing environment.*

22. *The vacant position for Technical Coordinator (B) be filled as soon as possible. These skills (Epidemiology, Management Information Systems) would help organize the work and provide direction to the clubs in a more persuasive and technologically appropriate manner. Access to the Ministry of Health and to the other partners with Rotary (WHO, UNICEF, etc.) would also be enhanced.*

23. *All the Field Programme Officer positions, particularly the one in Uttar Pradesh, be filled as soon as possible. A major role for the Field Programme Officer would be to visit clubs that are in critical polio eradication areas (determined in conjunction with the Technical coordinators and the Ministry of Health) and assist them with the planning and implementation of strategies supportive of the governments efforts. Field Programme Officers be responsible to the Technical Officers. Technical Officers recommend staff selections and be responsible for personnel evaluation.*

24. *Site visits by PolioPlus Office staff and the Field Programme Officers be preferentially directed to the districts with low coverage and high polio incidence. These visits will complement and reinforce the national and district meetings now being held.*

26. *Training needs of professional staff in communications, surveillance, and MIS should be identified and met through a scheduled program of continuing education (staff development).*

27. *PolioPlus Office staff continue to have frequent contact with their partners in the India polio eradication. These partners include not only the Ministry of Health but also the Indian Medical Association, WHO, UNICEF etc. As the program becomes more technical, the leadership of the office needs to become increasingly more technical.*

28. *PolioPlus Office is operating without full information on project accounts. The local office needs to be apprised of its allotted budget, be authorized to expend funds within this budget, and be held responsible for expenditures. Consolidation of in-country accounts is recommended.*

Cross Cutting Issues

Several issues involved the interaction between levels of leadership. A few of the most important are discussed below.

PolioPlus

PolioPlus represents a collective commitment to the Indian UIP. Thus participation in the identification and vaccination of unvaccinated high risk children during SSD and Measles days are an integral component of PolioPlus and important to improving the survival, health, and quality of life of Indian Children.

Recommendation 7: District and Zonal leaders continue to stress the importance of UIP to the health and welfare of Indian children.

Decentralization

Maximum Rotary support requires decentralization of direction and monitoring to the district level. District PolioPlus Chairman and Zonal Coordinators are critical to effective program implementation. As the program evolves, DPPC will require new skills. It is suggested that a Training Needs Assessment be carried out and the results be used in planning the 1995 DPPC training course.

Recommendation 25: Carry out a Training Needs Assessment of DPPC and Zonal Coordinators activities. Utilize findings in planning the 1995 DPPC course. Use of an experienced facilitator for that course is suggested.

Polic Surveillance

At this time in the project evolution, polio and AFP surveillance are critical to program implementation, especially in high coverage low incidence areas. While continued high levels of coverage are required, the timely detection, investigation, and response to acute cases of flaccid paralysis is the prime method of interrupting residual chains of transmission. [Note: R.I.'s recent grant of US$500,000 for improved surveillance in India will be developed in collaboration with WHO's SEARO office in Delhi and will also focus on involving Rotary.]

Recommendation 8: PolioPlus at all levels regularly meet with Government counterparts to review progress in disease surveillance and response. Rotarians should be continually alert to opportunities where Rotarian expertise and resources can play a critical role in improving surveillance. Also, the addition of the Technical Coordinator B should yield further training and education materials and strategies for Rotarians in surveillance strategies and opportunities.

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Rewards

Monetary rewards were used effectively during the last stages of smallpox eradication. It is natural to consider this option to improve surveillance. The Ministry of Health is not in favor of monetary rewards at this time. They recommend that Clubs explore with local health officials other incentives for reporting including provision of rehabilitation and job opportunities.

Recommendation 9: Monetary rewards not be used as an incentive for reporting. Opportunities for rehabilitation be explored.

Reporting

Rotarians are much more eager to work than report. Currently only 10-20% of expected reports are received from Clubs and Zonal Coordinators. Considering three principles of effective MIS : 1) information is primarily useful to the level of collection and its immediate supervisor; 2) transmission to higher levels should be limited to that which is needed for action and used; and 3) all reports received merit reading and response. A simplification and decentralization of reporting is recommended.

Recommendation 15: National Committee adopt a revised reporting system where clubs report quarterly to Zonal Coordinators with copies to the DPPC. Zonal Coordinators submit every January a spreadsheet of key indicators (selected from those used in annual review) on each of his/her clubs to the DPPC. DPPC report quarterly to PolioPlus Office on the following: July-September (District and Zonal Meetings and Plans for SSDs); October-December (Reports of SSD Activities), January-March (Annual Report of Surveillance and Coverage) and April-June (Annual Summary with suggestions for next District Chairman). Transmission of data to PolioPlus Office be limited to the District PolioPlus Quarterly report; the December report include attached copies of the Zonal Reports. Such reports be used in the Annual Review which should be scheduled for February, 1995.

Advocacy to the Private Sector

Data from the 1994 Annual Review document the effectiveness of some Rotarians in advocating for polio in the private sector and in obtaining private sector support for PolioPlus activities. This support skill is still lacking in many areas.

Recommendation 19: National Committee develop a strategy, with a consultant if necessary, for helping Club, Zonal, and District level Rotarians mobilize the private sector.

Sustainability

While in many respects there is no need for an eradication program to be sustainable, many elements of PolioPlus are good prognosticators for sustainable development. These include decentralization, the use of volunteers, the mobilization of the private sector, and the face to face contact with communities, and Rotary's inherent permanence in the community.

Recommendation 17: National Committee promote decentralization and skill-building at Club, Zonal and District levels.

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V. PROGRESS TOWARD POLIOPLUS GRANT OBJECTIVES

ACTIVITY/OUTPUTS	TARGET	ACHIEVEMENTS	CONSTRAINTS
Number of high performing states and UTs having developed & implemented well defined action plans	5	Guidelines for polio eradication circulated to all state & district officers by MOH	n/a
OPV required for GOI's polio immunization needs will be fully met through in-country sources by project end	70% self-sufficient	68% R.I. additional grant of US$5 million for self-sufficiency	n/a
Every Rotary club will have a PolioPlus committee	100% of clubs	84.8%	Club are autonomous. Intensive training and leadership has brought project this far. (100% is probably unrealistic)
Every club contributed to or actively involved in a PolioPlus activity (eg. SSD, mobilization, PHC adoption)	100% of clubs	An estimated 90% of active clubs are involved with one or more PolioPlus activities	same as above
25% of clubs each year will have adopted a specific area & participated in SSDs or special immunization activity	40% of clubs	88% clubs have adopted an area, 70% have participated in SSDs	This strategy has caught on quicker than estimated. Challenge will be to maintain and strengthen actual grassroots inputs.

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ACTIVITY/OUTPUTS	TARGET	ACHIEVEMENTS	CONSTRAINTS
Number of reported cases of polio to show a declining trend	None given - GOI	13,915 cases reported in 1989 -- 4,077 reported in 1993	Data suggest a 30-50% surveillance efficiency
Expansion of "polio-free" zones, number of districts reporting zero cases	none given - GOI	Zone strategy not yet fully implemented	n/a
Number of Rotary clubs promoting surveillance and lay reporting	300 clubs	416 clubs (26% based on annual review)	Potential is much greater than initially estimated. Project to focus more on surveillance strategies
In low performing states, achievement of 85% coverage	none given - GOI	Bihar is lowest at 60.4%, Orissa reports 92.8%	Reaching slum pockets in poorer states is still a challenge
Number of private practitioners reached through communication materials	35,000	50,000 through distribution of "Role of Clinicians" guidebook	Need for advocacy to strengthen GOI policies for reporting
Amount of reported contributions to PolioPlus activities	$35,000 US	Average of US$400/club estimated (US$40,435 total estimated contributions for the 92 clubs surveyed in 1994 annual review)	This activity is not actively promoted, this type of support is a natural function of Rotary to become financially involved

VI CHALLENGES AND OPPORTUNITIES

Challenge to Rotary and Inner Wheel

An estimated 1100 Rotary Clubs, approximately 20,000 Rotarians, and a large proportion of the estimated 12,000 Inner Wheel members are involved in PolioPlus Activities. Rotarians are providing key leadership in: 1) establishing effective working links with health authorities; 2) promoting immunization and polio eradication activities; 3) providing cash and in kind support (pamphlets, loud speakers, snacks, transport) for special immunization days; 4) mobilizing voluntary groups including Rotaract, Interact, NSS, NCC, and IMA to assist in immunization activities, and 5) working at immunzation sessions, and 6) working to expand lay reporting of AFP. Global Polio Eradication will not be easy. Continued interest, creativity, support, and enthusiasm will be needed in the years ahead to ensure a world free of polio.

Why Rotary Involvement?

The Government of India has a good system for the provision of rural immunization services, especially in Integrated Child Development Systems (ICDS) blocks. However in urban areas, especially the rapidly growing periurban areas, immunization is trailing because of a lack of services and difficulty in communicating to the heterogeneous populations dwelling in slum areas. These areas have been identified as a need by the Ministry of Health. Involvement of Rotarians and Inner Wheel members in immunization programs supports Ministry efforts to increase coverage in these high risk urban slums. As 42% of the world's polio currently is in India, Rotarians and their Inner Wheel partners have a unique opportunity to make a difference in the world now and for future generations.

How Polio Eradication?

Polio is a formidable opponent; victory will not be easy. It is, however, possible where governments, voluntary organizations, and international organizations join together in the war to free the world of polio. The journey from the 1980s, when the world had almost a million polio cases, to a world free of polio can be best understood as a railroad track stretching from a "station (world)" full of polio cases to "station (world)" free of polio. Along the route are a number of stations which must be passed enroute to the final destination. The "Polio Zero Express" is under the command of the Ministry of Health, and the two tracks represent the community who needs the service and the cooperating partners such as Rotary who share a part of the load. Listed below are the stations enroute to Polio Zero.

1. One of every 200 children born paralyzed with polio (1970s).
2. Development of an immunization policy, strategy, and delivery system (1982).
3. Expansion of immunization to all districts in India (1985).
4. Intensified efforts to identify and immunize those missed in routine vaccination (1988 continuing).
5. The systematic vaccination of those at risk (0-36 months) in high risk areas (urban slums and areas of low coverage) ("mop-up" vaccination) (1992 continuing).
6. Increased emphasis of the identification and reporting of polio cases to enable 1) the polio cases to be provided rehabilitation and 2) the identification of polio foci for control ("ring vaccination"). (When a house is on fire, one directs ones efforts to extinguish the source and spread; similarly, polio cases signal a foci of infection, whose control can decrease the risk of dissemination and further polio cases.) (1993 continuing).
7. Identification, investigation, and control of all cases of Acute Flaccid Paralysis (some of the cases will not be polio) within 48 hours. AFP surveillance allows for the identification and control of the few remaining foci of polio infection (1994 continuing).
8. An India free of Polio (Vaccination and surveillance need to be continued for 3 years or until the world is free of polio).
9. A world free of polio and polio vaccination discontinued.

How Can Rotary and Inner Wheel Help?

Rotary is contributing to the UIP through its partnerships with the Ministry of Health and the People of India. An estimated 1000 clubs are participating in polio immunization and surveillance activities. The addition of the remaining 600 clubs would provide additional impetus to the program. Concerned clubs need to first recognize the vision and importance of the task. They also need to realize this is an unusual community service project in that it represents a long term commitment of RI to the health of children now and the future. Success will come as Rotarians and Inner Wheel members donate their time, resources and talents to meet essential needs identified by Ministry of Health partners. Priority should be given to utilization of the professional skills of Rotary members in meeting the needs. Current examples include:

* Adopt one or more high risk areas (20,000-50,000 population) as identified by local health authorities to assist MOH in assuring complete vaccination of all infants (against 6 diseases) through enumeration and vaccination and through targeted immunization sessions for all children under three years of age.

* Assist MOH in educating communities on the need to

immediately report all cases of floppy limbs (flaccid paralysis) to the health authorities within 48 hours. This assistance can take many forms such as notifying care providers (physicians, ayuvedic, and traditional); utilizing their professional colleagues to spread the word to their own communities; developing effective messages for the mass media; educating the adopted community on the need for immediate reporting.

* Make a commitment to the rehabilitation of polio cases. Such a commitment would not only represent the ultimate in "Being a Friend" (the 1994-1995 Rotary International theme) but would also provide a powerful incentive for disease reporting to the community. This commitment might include physical therapy and corrective surgery (one physician in Gujarat has donated his services for 50 children); ensure the transport and access of patient to government facility; and/or the provision of calipers, crutches, wheelchairs or even a job opportunity to a family member.

* Respond to mutually agreed upon requests from the Ministry of Health for specific needs such as cold chain repair, publicity, logistic support or health worker incentives.

Appendix I

Acronyms

AFP	Acute Flaccid Paralysis
BCG	Bacille Calmette et Guerin
CSSM	Child Survival and Safe Motherhood
DIP	Detailed Implementation Plan
DPPC	District PolioPlus Chairman
DPT	Diphtheria Pertussis Tetanus
EPI	Expanded Programme on Immunization
FHA/PVC	Food and Health Assistance/Private Voluntary Cooperation
GOI	Government of India
ICDS	Integrated Child Development Scheme
IMA	Indian Medical Association
MIS	Management Information System
MOH	Ministry of Health
NCC	National Cadet Corps
NSS	National Service Scheme
OPV	Oral Polio Vaccine
PDG	Past District Governor
PHC	Primary Health Care
PP	PolioPlus
RI	Rotary International
SEARO	South East Asia Regional Office (WHO)
SSD	Shishu Suraksha Diwas
TRF	The Rotary Foundation
UIP	Universal Immunization Programme
UNICEF	United Nations Childrens Fund
UP	Uttar Pradesh
USAID	United States Agency for International Development
UT	Union Territory
WER	Weekly Epidemiological Record
WHO	World Health Organization

Appendix II

Reference Documents

1. Review of the UIP, 9/92
2. CSSM Review 93-94
3. Poliomyelitis Surveillance in India - Sokhey 1992)
4. WHO (Progress toward Polio Eradication - 3/94
5. Acute Flaccid Paralysis - 1993, Responding to a Suspected Polio Outbreak -1991, Poliomyelitis in 1993 WER 6/94
6. PolioPlus (Detailed Implementation Plan 3/93
7. PolioPlus Updates 93-94
8. Annual Review of PolioPlus Programme 1/94
9. Operations Manual 93-94,94-95
10. Quarterly Progress Report 3/94
11. Responsibilities of National Polioplus Committee
12. Rotary International (Basic Principles for Rotary's Future PolioPlus Strategies 1992-1995, 1992)
13. PolioPlus AID (Detailed Implementation Plan 10/92, 1994 FHA/PVC Child Survival Mid-Term Evaluation Guidelines - 1994, Grant I Midterm and Final Evaluations - 1988 and 1991)
14. Prevalence of Poliomyelitis in India, Basu & Sokhey 1984
15. Magnitude of Problem of Poliomyelitis in India, 1981
16. National Child Survival and Safe Motherhood Programme, Government of India, January 1994

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APPENDIX B

Stanley O. Foster

Emory University School of Public Health

H elping
I mprove
P lanning
P romotion
O perations
S urveillance

Jotna Sokhey MBBS
Deputy Commissioner MCH
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New Delhi 110001
India

Dear Dr. Sokhey,

First, I want to thank you for your excellent briefing to the Rotary Evaluation Team. Your presentation, perspectives, and data provided us a good understanding of the Indian Universal Immunization Program. You have, I believe, received a copy of the evaluation report. It portrays, strong evidence of NGO support to the Indian program. Thanks also for the copies of the CSSM Review. I have read them cover to cover and find them to be among the best field feedbacks I have ever seen. Congratulations!

During the past month, I have been privileged to participate in two evaluations in India: 1) CARE support for ICDS, and 2) Rotary support for UIP. While both evaluations were directed at assessing support to government programs, the time in the field did allow me an opportunity to see the UIP in action and the support, actual and potential, of the partner agencies. Field time was spent in Bihar (3 districts and 8 Anganwadi Centers), Maharastra (3 districts and 12 Aganwadi Centers), and Karnataka (2 districts).

Compared to my previous visits to Kerala and Punjab, the progress of UIP in India has been nothing less than spectacular. The progress has been impressive and is attributable, in large part, to your leadership.

Visiting Professor of International Health
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During my debriefings, I commented on the great progress made in UIP. I also spoke of the progress that lies ahead. Two participants, Sandarsen Agarwal and Jon Rohde, asked me to elaborate in writing my suggestions for increasing impact. Recognizing that such a request was somewhat beyond my terms of reference, I felt it appropriate to direct the suggestions to you with copies to the two initiators of the request. Based on my "booster" exposure to EPI in India some 10 years from the primary exposure, I am excited about what has been achieved and what can be achieved in the future. The following, based on my knowledge of EPI, are ideas that deserve consideration as you and your colleagues further develop the UIP. .

1. The UIP has achieved, in large part, its coverage objectives. Recognizing that each year coverage starts at zero, the system is largely in place to, with continued political commitment, maintain current levels of coverage.

2. Increased participation of Child Welfare (Aganwadi Workers) in mobilizing for and monitoring immunization could increase coverage to nearly 100% in ICDS areas. This would require a joint directive from the Ministries of Health and Child Welfare asking Aganwadi Workers (AWW) to list all the newborns identified in their enumerations and house visits in the immunization register at the time of identification. The directive would also formalize a joint quarterly AWW and ANM review of the records to ensure that all eligible target age children were completely vaccinated. In many ICDS areas, eligibles are not listed until they show up for vaccination (first contact), allowing some, usually high risk, children to miss identification and vaccination.

3 UPI is still understood at the field level as a coverage program. Achievement of disease reduction objectives will require a paradigm shift in which health staff at all levels recognize that disease incidence is the measure by which programs are judged. The practice of not reporting imported cases needs to be addressed. Timely feedback of interpreted surveillance data, especially that in the line listings, will move this toward reality. The proposed Rotary Grant for Surveillance could possibly be helpful here.

4. As reported to me in the field, measles "catch-up" is carried out in March and is targeted at 9-11 month old infants.. Such a strategy will lead to an accumulation of susceptibles and the emergence over the next few years of large focal outbreaks of measles. The probability of these large outbreaks could be reduced by two policy changes: 1) expanding the target age for measles catch-up to 9-23 months, and 2) shifting the date of measles immunization to the low measles transmission season (November), when the chains of transmission are fewest , the probability of breaking chains of transmission the greatest, and the timing optimum to reduce the pool of susceptibles. (Enclosed is a Chapter I co-authored on Measles for the recent World Bank Monograph on *Health Priorities for Developing Countries).*

5. As East Asia makes progress toward polio eradication, increasing attention will focus on India. Based on my recent experience, a few thoughts for your consideration. With the increasing rates of coverage, the yield of SSD days are decreasing; one Rotary Club estimated 1000RP per new vaccinee. Inclusion of mass vaccination of 0-3s during SSD days, as already discussed by you, is a logical next step. The Delhi campaign is important. It needs to be evaluated objectively. What are the basic essentials and what are the extras? Is enumeration essential for a mass campaign? Could vaccine be delivered door to door? Most states will not have access to the resources available in Delhi. Basic costs need to be identified. Hopefully, improvements in surveillance (timely detection, investigation, laboratory analysis, and control) will enable decision makers to identify the appropriate time for area wide (multiple state) strategies (possibly November 1994 and January 1995).

I am impressed with the progress that immunization is making in India. I will watch with interest and expectation as you lead the UIP beyond coverage to surveillance and disease control.

Sincerely yours,

Stanley O. Foster MD, MPH

cc Sudarshan Agarwal
Jon Rohde

APPENDIX C

Stanley O. Foster
BASICS Project
Emory University School of Public Health

H elping
I mprove
P lanning
P romotion
O perations
S urveillance

Jon E Rohde M.D.
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India

Dear Jon,

As requested, I have done some thinking on evaluating the scheduled vaccination campaigns in New Delhi. As we discussed, an evaluation of the New Delhi campaign is extremely important in laying the foundation for future state campaigns.

As the New Delhi campaigns have political as well as a health objectives, resources available will be greater than in most other states. Therefore, it is important to separate the essentials from the extras.

Maximum impact will be achieved through involvement from the beginning of all involved parties. While this will create some difficulties up front, the benefits in the long run are worth the effort. At a minimum, New Delhi State MOH, Federal Ministry of Health, NICD, WHO, UNICEF, and Rotary should be involved. Participation of representatives of the southern (Phase 1) states in the planning and the debriefing should be considered. The attached suggestions represent limited exposure to the Indian program and so should be considered a think piece. Clearly, John Andrus at WHO will be key to the process and his inputs will be needed.

It was great to see you in Delhi and see, for once, the best qualified person in the most needed position.

With best wishes,

Stanley O. Foster MD, MPH

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Thought on Evaluating the 1994 Vaccination Days in Delhi

Stanley O. Foster MD, MPH
BASICS Project and Emory University School of Public Health

Background

Over the last 7 years, the Indian Universal Immunization Program, UIP, has made progress in developing a sustainable vaccination system, increasing coverage, and reducing disease incidence. From the perspective of poliomyelitis, OPV3 coverage has increased from under 40% in 1985 to nearly 90% for the years 1990-1993. More importantly, the number of reported poliomyelitis cases has been reduced from a high of 38,091 in 1981 to 4,077 cases in 1993. While disease reporting has improved substantially, disease reporting is still not complete. Utilizing results of lameness surveys carried out in 1981, 1989, and 1992; completeness of reporting is estimated at 9, 17, and 29% respectively. Current reporting is estimated at between 31 and 45% (estimated actual cases in 1993 - 9,000 to 15,000 cases). Using the higher figure, 15,000, this would represent a 94% decline from the estimated 250,000 cases that occurred in 1981 (reported corrected by lameness survey data).

Based on data presented in the June 10, 1994, Weekly Epidemiologic Record 69:169-175, the 4,077 cases reported in India represents 42% of that reported globally. With India's vaccination system in place and coverage rates in most states in excess of 80%, the time is approaching when biannual vaccination days scheduled during the period of low virus carriage will have the greatest possibility of interrupting wild virus transmission. This will be done sequentially (in three phases) starting in the areas of lowest incidence (the southern states). Based on experience in the Americas, a combined strategy of high coverage, vaccination days, surveillance and investigation of cases of acute onset flaccid paralysis, and outbreak control will be required to achieve eradication.

New Delhi and surrounding areas of Uttar Pradesh and Haryana will be carrying out two mass vaccination programs in the fourth quarter of 1994. An independent evaluation of this program is essential to assist in planning future state and national campaigns.

Objectives

Evaluations measure the achievement of objectives. Therefore, a first step is to be sure that there is a clear understanding of the objectives. Those responsible for the campaign may identify objectives at several levels. (see table below)

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Immunization Days Objectives (Examples)		
TYPE	TARGET	METHOD
Availability	Planning will ensure sufficient personnel, vaccine, and supplies	Supervisory assessment as to availability of personnel, vaccine, and supplies to meet all needs
Access	All resident of the target area have access to a vaccine delivery site within _____ meters	Map of vaccination delivery sites
Social Mobilization	__% of households know of the special days, the target age to be vaccinated, and the location of the nearest vaccination site	Household survey stratified to include sample of high risk areas
Utilization	_____ children will receive 2 doses of OPV	Tally sheets from vaccination posts
Quality	All vaccines will be potent at time of delivery and administered in the correct dosage safely	Supervisor assessment using standard check list, ???? vaccine monitoring
Coverage	_____% of children ___ to ___ months of age will be immunized	Coverage surveys stratified to include sample of high risk populations
Disease Reduction	Incidence of polio will be decreased from ____ in 1993, to _____ in 1994, to _____ in 1995.	Passive and active surveillance, case investigation and follow-up

Priorities

The prime objective of vaccination days is to reduce polio incidence to a point that surveillance, investigation, and control can interrupt wild virus transmission. Vaccination alone is not sufficient, Campaigns, if they are to be successful, require concomitant surveillance, investigation, and control.

Disease Surveillance

1. Records of reported polio cases 1983-1994 should be reviewed and mined for all available information utilizing standard WHO case investigation format(age, sex, date of onset, vaccination status, residence location, reporting site)
2. List should be prepared of all potential reporting sites (hospitals, physiotherapy units, out-patient departments, health centers (public and private), and physicians. (This will serve as a basic list for promoting active surveillance)
3. Sample a subset of major potential reporting units (hospitals admitting pediatric patients and physiotherapy units) to assess completeness of identified cases in reported cases.
4. Prepare an epidemiologic summary of poliomyelitis in the New Delhi and surrounding areas.
5. Develop a plan for active surveillance for acute flaccid paralysis in the vaccination area. This should include a single control point staffed 24 hours a day with capacity to investigate immediately all reported cases. (As follow up of addresses (sometimes fictitious) is difficult to impossible in urban slums, cases must be identified at site of diagnosis and accompanied back to their home of residence.) All potential reporting sites identified in 2 should be alerted to the importance of and the method of immediate reporting of acute case of AFP/
6. Adapt WHO recommended procedures for case investigation, specimen collection, area vaccination, and follow-up for investigation of all reported cases of AFP during the next three years.
7. **CAUTION: Many cases identified post-campaign will be imported. These must be reported, investigated, and controlled. The temptation not to report imported cases must be avoided.**
8. Convene on a monthly basis a special working group to review both the process of surveillance and the results obtained.

Technical Surveillance

Certain areas of evaluation can only be carried out by those responsible for campaign management. These responsibilities include:

1. The development of a timetable (logistics, publicity, operations, evaluation).
2. The identification of needs (personnel, transport, cold chain, vaccine, supplies, tally sheets. The timely mobilization of resources.
3. The selection, approval, and preparation of vaccination sites (mapped to provide access to all populations within a given distance)
4. A needs assessment of basic skills by all (professionals and volunteers) required by the campaign (task analysis)
5. The development of single sheet training guidelines that can be used to orient and upgrade skills of each individual recruited to participate in campaign (enumerators, logistic support, crowd control, vaccinators, recorders).
6. The development of a short check list to be used by supervisors of vaccinations posts (maximum 1 page). Priority needs to be given to logistics and quality (are vaccines being administered in the correct dose, safely, to the right people).
7. Supervisory meetings need to be scheduled prior to, during, and after campaign to identify and solve problems, document successes, and provide regular feedback to all involved in campaign operations.
8. Project management needs to keep a log of all project activities and prepare a final report outlining timetable, activities, achievements, problems and solutions, and recommendations.

Community Surveillance

While the prime measure of program success will be the reduction in poliomyelitis incidence, evaluation also requires an assessment of intermediate process indicators involving knowledge, practices, and coverage. While one could draw a single statistical sample providing valid estimates for the area, such a survey will not be as programmatically useful as data collected on high risk areas. Consideration should be given to dividing the program areas into three areas according to risk (low, moderate, and high). Low risk would consist of upper socio-economic areas with good sanitation. Moderate risk would be stable lower-socio-economic areas with reasonable access to water. High risk areas would involve slum areas especially those involving recent migrants.

Two rounds of surveys are recommended. The first would be carried out 1-2 weeks after the first round of vaccination days. It would have the dual purpose of documenting the results of the first round, but more importantly identify deficiencies that need to be addressed in round two planning.

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Surveys should be carried out by an organization not involved in program operations (independence); experienced in survey design, training, and analysis; and capable of providing a final report within 2 weeks of survey completion. Questionnaire should be designed and pretested to address some of the following issues: 1) knowledge of polio, 2) knowledge of the campaign day, 3) knowledge of site where vaccine available, 4) knowledge of date and time of vaccination, 4) enumeration of eligibles (0-36 months), 5) previous vaccination coverage (card only, card plus history separately), 6) participation of individuals in campaign, 7) reasons for participation, 8) reasons for non-participation, 9) suggestions for improvement, 10) source of care (if your child developed a weakness in leg - where would you go for care). **Note: The above list are items that should be considered in formulating the questionnaire. Actual items should be limited to a short list of items that provide "need to Know" versus "nice to know data"**. Coverage data should be analyzed using standard WHO coverage assessment software (COSAS).

Why Evaluation?

Evaluations are not academic exercises. They are used not only to document achievements but more importantly to identify problems. The Public Health programs that succeed are those that "learn from their failures" rather than those that "brag about their successes".

Stanley O. Foster MD, MPH

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APPENDIX D

Stanley O. Foster

Emory University School of Public Health

H elping
I mprove
P lanning
P romotion
O perations
S urveillance

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Dear OPV,

As you and the National PolioPlus Committee convene this weekend, I want to send my greetings and extend my best wishes for a productive meeting. Please convey my best wishes to the members of the committee, commend them for accepting such an important responsibility, and challenge them to their opportunity to make a difference for the children of India and the world. Please pass on my special greetings to Dr. C. Prasanna Kumar, with whom I had the privilege of working during my participation in the recently completed evaluation.

As I reflect on the evaluation, I was impressed by the commitment, dedication, and hard work of the estimated 20,000 India Rotarians who contributed to PolioPlus during last year. Rotarians here in the United States with whom I have shared the findings were impressed and awed by your efforts. Yesterday, I was reporting on the work of the Rotarians in India to a global meeting on Polio Eradication. Unbeknownst to me, the incoming Rotary International President had just entered the room. He reports that he will be visiting India in December.

At this weeks WHO consultation on Polio Eradication, we were treated to excellent reports on the progress toward polio eradication in China, Vietnam, and Philippines. India can be very proud of the estimated 90% decrease in the amount of polio over the last decade. Yet, half the world's polio is still occurring in Indians. No single group of Rotarians has as great a challenge and as great an opportunity as you and your fellow Rotarians. Going from where we are now to zero will require vision, advocacy, creativity, mobilization, and hard work.

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Hopefully, the committee will find the evaluation useful. While all the recommendations may not be appropriate, those adopted need to allocated a time frame for action and a person or persons responsible for action. Monitoring of each approved item on a quarterly basis will be informative.

Please convey to your wife my appreciation for the information on the mobile creches. I will follow up with a letter soon.

With OPV at the helm, polio will be looking for places to hide. Finding those places will require creativity, persistence, surveillance, and surveillance.

With best wishes

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cc
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APPENDIX E

USAID/BASICS PARTICIPATION IN POLIO ERADICATION
A DRAFT ISSUES PAPER - 7/29/94

STANLEY O. FOSTER MD,MPH
EMORY UNIVERSITY AND THE BASICS PROJECT

Background

1. WHO, UNICEF, and The World Summit for Children have targeted Polio Eradication for the Year 2000.
2. Rotarians around the world have raised over 240 million dollars to support eradication. Equally important is the participation of Rotarians in the endemic countries. During a June 1993 evaluation of USAID's Grant to PolioPlus India, and estimated 1/3 of Indian Rotarians (20,000) participated in one or more polio activities in 1993.
3. Japan is making increasing financial commitments to support bilateral activities through provision of vaccines, vaccine production capacity, equipment, and to a limited extent technical assistance.
4. Global polio incidence has decreased from 34,762 cases in 1988 to 9,665 cases in 1993 (decline of 70%). As surveillance efficiency has increased from an estimated 10% to 30%, the magnitude of this drop is even greater. However, with a surveillance efficiency of 30%, and estimated 30,000 paralytic cases occurred in 1993.
5. Of great significance is the interruption of virus transmission in the western hemisphere in August 1991.
6. The eradication strategy utilizes a combination of vaccination days, Acute Flaccid Paralysis (AFP) surveillance, laboratory confirmation including molecular epidemiology, and rapid response to all reported cases (within 48 hours)
7. The experience in the Americas is being utilized in the Western Pacific with excellent progress in Philippines and China (100 million vaccinated last winter)

Concerns about Polio Eradication

1. With an assessment of development needs and more specifically the health priorities of maternal health and child survival, development managers question the allocation of resources to a single disease control program, especially one whose disease burden in terms of mortality is limited.
2. Specifically, there is questions as to the opportunity cost of giving political, programmatic, and resource priority to one program, polio eradication.
3. Other developmental planners question the appropriateness of global goals, in an era where decentralization and local decentralization is being advanced as a strategy for effective implementation and sustainability.

Factors Supporting Involvement in Polio Eradication

1. Polio eradication has been effective in changing the mind set of program implementers from process to impact driven programs.
2. Polio mass campaigns have provided a mechanism for cost effectively addressing priority health issues such as neonatal tetanus, Vitamin A deficiency, and measles (recent campaigns in Philippines)
3. The requirements of polio eradication (surveillance and action within 48 hours) has created new standards of performance by which reporting of adverse health events and their response are monitored on a regular basis (number of outbreaks reported within 48 hours, number of reported outbreaks investigated within 48 hours, and number of cases in which 2 stools are collected within two weeks).
4. Polio program is strengthening the integration of program delivery, surveillance and response, and laboratory support.
5. A recent study, chaired by Professor Carl Taylor of Hopkins, has assessed the system building impact of the polio program in the Americas. This report needs to be studied carefully.

Why US Involvement in Polio Eradication

1. When global eradication is achieved, the costs of polio immunization, polio paralysis from vaccine (vaccine associated), and surveillance costs will no longer be required. Studies by Deb McFarland BASICS, and Ken Bart (OIH) have documented the cost effectiveness of global polio eradication.
2. With the clear-cut domestic economic benefits of polio eradication, it is not only appropriate but ethically correct to use domestic health funds to support global polio eradication. This is being done.
3. As one of the major resources of epidemiologic, logistic, communications, and research expertise; US involvement in polio eradication is needed and may be essential.

Why USAID/BASICS Involvement in Polio Eradication

1. Polio eradication contributes to system development (see above)
2. USAID through its bilateral missions are, in some countries, uniquely positioned to coordinate partner support for national programs.
3. USAID can provide a key role in providing technical assistance especially where it is most needed, the least developed countries especially Africa.
4. With appropriate USAID involvement, the probability of successful global polio eradication will be increased.
5. Polio eradication may be the most demonstrable well publicized health success of the next decade; participation in that success provides a strong base for continued advocacy for health support.