

Immunization

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“PolioPlus”, a booster shot

Rotary International, a voluntary service organization, is making a major financial and practical contribution to the task of immunizing children in Third World countries against poliomyelitis and other diseases.

Rotary International, founded in 1905 in Chicago, provides community service and international scholarships. It has over a million members in 25 300 clubs and is active in 172 countries or regions. Many of its projects involve health-related activities such as the purchase of emergency medical equipment and the raising of funds so that needy children can obtain special treatment. In 1947, Rotarians began sponsoring international educational scholarships to promote improved understanding among the peoples of the world. The involvement of Rotarians in a major programme for assisting with the immunization of children is a comparatively recent commitment.

A new departure

Immunization against certain preventable childhood diseases is one of the most important and cost-effective health measures. Vaccines against diphtheria, tetanus and pertussis have been used routinely in most industrialized countries since the 1930s; polio vaccines became available in the late 1950s and measles vaccines in the 1960s. In developing countries, however, only about 5% of children were receiving these vaccines by the mid-1970s; in most parts of the world, children were continuing to be disabled and killed by readily preventable diseases. It was estimated that over 500 000 children a year were affected by paralytic poliomyelitis and that five million died from the six vaccine-preventable diseases: poliomyelitis, measles, diphtheria, tetanus, whooping cough and tuberculosis.

In 1979, Rotary International adopted a proposal to collaborate with WHO (the

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Expanded Programme on Immunization) and other organizations in a programme to immunize children throughout the world and to concentrate initially on polio immunization because of the ease of administration and low cost of the vaccine (1). During the same year a request for polio vaccine was made by the Philippines. The vaccine was provided along with 683 000 doses of tetanus toxoid supplied by a private donor in Canada. Two airlines carried four tons of the vaccines free of charge. Local Rotarians assisted in the immunization campaign.

In 1980 Rotarians in Canada and India proposed a measles immunization project in South India. With a grant of US\$ 101 000 from Rotary International and \$ 304 000 from the Canadian International Development Agency, over three million children were immunized and the feasibility was thus demonstrated of carrying out a large-scale immunization project in this region.

In 1982, Rotary International adopted the new goal of helping to immunize all the world's children by the organization's centenary in 2005, in cooperation with international, national and local health agencies. In 1984 it was again proposed that Rotary International should concentrate on providing polio vaccine in developing countries. The following year, WHO recognized Rotary International as a nongovernmental organization working in the field of international health. The organization then devised a programme of worldwide immunization activities and fund-raising called "PolioPlus".

Cash, vaccines and human resources

Initially the programme offered assistance to any country by:

- providing free polio vaccine over five years for all young children at risk;
- providing experts to assist in developing plans for nationwide immunization and social mobilization;
- involving local Rotarians in immunization activities.

"PolioPlus" works in close collaboration with local government, health agencies, and international organizations.

Grants for polio vaccine were awarded in response to applications from ministries of health through Rotary Clubs. Each application was reviewed to ensure that the country in question had a WHO-approved plan for immunization and that an agreement was available freeing Rotary International from legal responsibility for

Fig. 1. Rotary International provides training manuals for local Rotarians

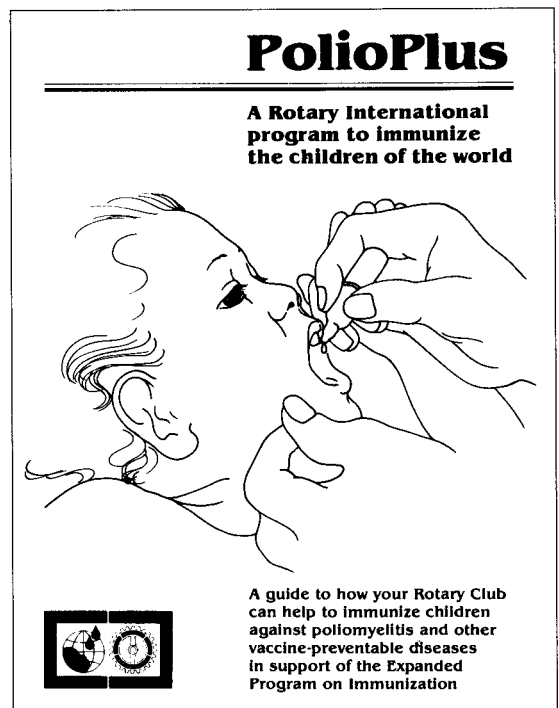


Fig. 2. Children help to promote an immunization programme



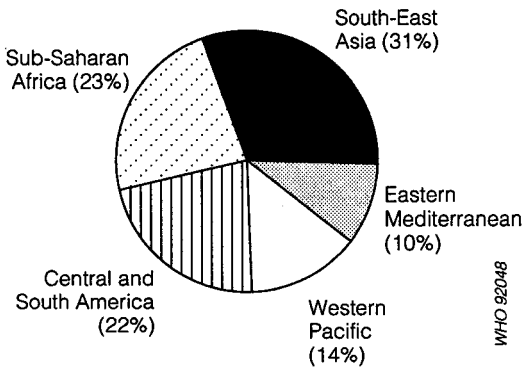
problems that may arise. Estimates were made of the amounts of vaccine needed and of the costs of vaccine and social mobilization. In most cases a visit was made by a representative of Rotary International to verify the commitment of the government to the programme and the maintenance of universal immunization. Local Rotary Club leaders were contacted to ensure their interest in the participation of local Rotarians. If satisfaction was obtained on all of these points, a grant was awarded.

Vaccine was usually ordered through WHO or UNICEF and contacts were made with voluntary agencies to coordinate support from government and the international bodies for the national effort. In some programmes, experienced volunteers or staff from Rotary International were asked to assist in detailed planning. Usually the

Rotary International advisers and Rotarians from other countries work with local Rotarians to organize social mobilization. Training manuals were provided for local Rotarians (Fig. 1). Practical training increasingly involved international voluntary exchanges. The manuals gave the basic information necessary to create a demand for vaccine, organize a delivery system, and train teams to assist with immunization and monitor outcomes. Rotarians were encouraged to assist in extending immunization services and creating public interest in them. Continuing monitoring and supervision of social mobilization were provided by Rotary International staff and Rotarian volunteers from the project countries.

In some areas, Rotarians have assisted in advertising immunization programmes by

Fig. 3. Grant commitments by geographical region, mid-1990 (total \$ 144 million)



providing posters, banners, and radio and television announcements, and by organizing children's demonstrations (Fig. 2). Some Rotary Clubs have produced leaflets and equipped vehicles with public address systems so as to disseminate messages on immunization programmes. Rotarians have frequently participated in the delivery of vaccine by providing refrigerated vehicles, and have worked with health officials in immunization centres. Rotarians participated in the tasks of house-to-house censuses, sponsored workshops for medical practitioners, and organized public recognition events. An analysis of Rotarian social mobilization efforts in 12 project countries during 1988-89 showed that local grant funds amounting to about \$ 90 000 generated approximately \$ 191 000 in locally donated goods and services to meet immunization needs. By mid-1990, grants totalling \$ 144 million had been approved for 95 countries (Fig. 3), providing funds for vaccine purchases and social mobilization. The costs and quantities of vaccine purchased up to 1989-90 are shown in Fig. 4. Grants were originally made for five years. However, the early programmes were frequently slow to advance and most of them continued longer than this. In January 1989 it was estimated that Rotary

International was purchasing 80% of the polio vaccine sent by the Pan American Health Organization and UNICEF to the developing world.

The percentage of children immunized against polio worldwide increased from 5% in 1974 to 67% in 1988 (Fig. 5). There was a decrease in estimated polio cases from about 500 000 to 250 000 a year during the same period. The true reduction was probably greater, however, since the reporting of cases has probably been more complete in recent years than formerly. In 1988 it was estimated that immunization prevented approximately 355 000 cases of polio in developing countries (1).

In November 1988, Rotary International made a grant of \$ 1 264 960 to the Pan American Health Organization for the provision of staff who would train health professionals in vaccine programmes and assess effectiveness through field studies. It was also agreed to contribute further towards the WHO goal of worldwide eradication of polio by the year 2000. Rotary

Fig. 4. Costs and quantities of oral polio vaccine, June 1979 to June 1990

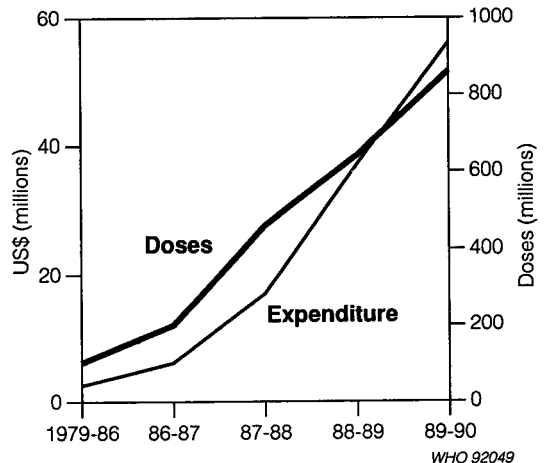
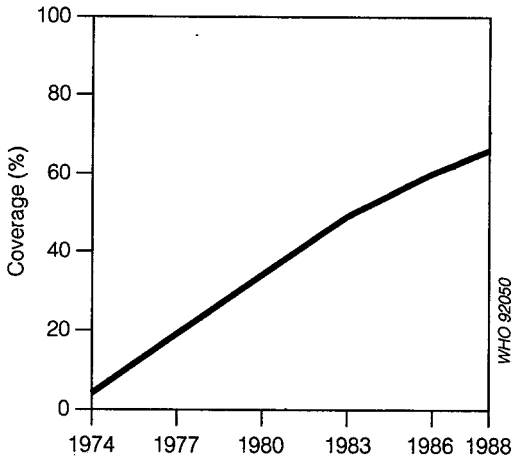


Fig. 5. Global polio immunization coverage (oral polio vaccine, three doses, children 0–11 months)



International appropriated \$ 5 331 000 from the “PolioPlus” fund to provide additional staff for WHO to assess the status of national immunization programmes, assist the planning, monitoring and evaluating of immunization efforts, develop prototype training materials, and develop and apply a computerized management information system. Additional support will be provided for monitoring and surveillance, training courses, the establishment of polio reference laboratories, research on improved laboratory tests for polio, and the evaluation of improved vaccines.

In 1985 it was estimated that, in order to provide vaccine over five years for all children in the developing world,

\$ 120 million would be required. This was based on projected figures of 100 million newborns annually, six doses of vaccine (two a year for children aged up to 36 months), \$ 0.04 per dose of vaccine and, of course, five years.

A well-designed fund-raising campaign began in 1986. Consultants recommended changing the name of the effort from “Polio 2005” to “PolioPlus” so as to clarify the commitment to the control of polio as well as to that of the other five target diseases. During 1986, efforts were concentrated on securing staff and materials for the campaign. Rotary Clubs throughout the world were divided into 44 regions, each with a chairman. In 1987, special attention was given to soliciting major gifts from individual donors and corporations. In 1988 the campaign was opened to all Rotarians and the general public, and fund-raising continued in 1989.

By mid-1990 over \$ 210 million had been received in cash and \$ 20 million more had been promised. The funds are invested and distributed as needed for vaccine programmes. Interest is expected to bring the total available to over \$ 300 million. The campaign should therefore be able to provide additional support for the new polio eradication initiative. □

Reference

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