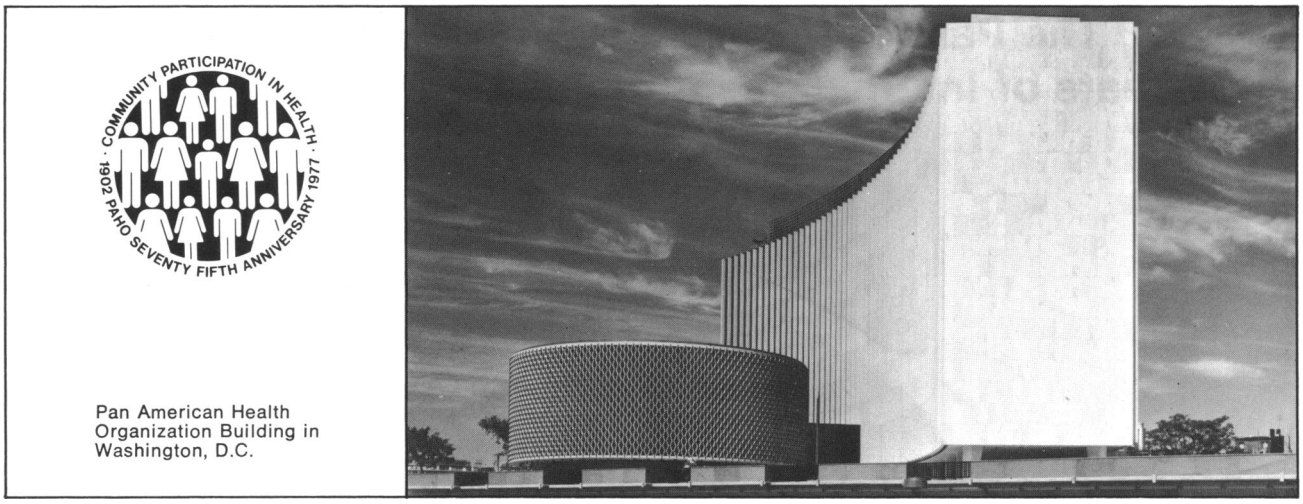
The Pan American Health Organization—75 Years of International Cooperation in Public Health

HÉCTOR R. ACUÑA, MD, MPH

PUBLIC HEALTH WORKERS TODAY unanimously recognize the need for international cooperation to combat disease and malnutrition. This recognition has evolved from awareness that poor health in one part of the globe ultimately affects the entire world through the social, economic, and biological ties that draw all people together.

A variety of international organizations, such as the World Health Organization (WHO), the Food and Agriculture Organization (FAO), and the International Labor Organization (ILO) have acknowledged the interdependence of nations by their efforts to expand scientific exchanges and cooperation. The oldest of these international organizations is the Pan American Health Organization (PAHO), which now

☐ *Dr. Acuña is Director of the Pan American Health Organization. Tearsheet requests to the Public Information Office, 525 23d St., NW., Washington, D.C. 20037.*



Pan American Health Organization Building in Washington, D.C.

also functions as the Regional Office for the Americas of the World Health Organization. This year, PAHO is celebrating its 75th anniversary.

PAHO has grown over the years from a small information center operated in the premises of the Pan American Union, with personnel supplied by the U.S. Public Health Service, to a major health agency. Today, PAHO employs some 1,500 health workers throughout the hemisphere, with headquarters in Washington, D.C. Thirty-two member and participating countries contribute funds for the operation of the organization; the total budget this year will reach $70 million.

Throughout its history, PAHO has taken an active role in the control and eradication of communicable disease—such as smallpox, malaria, and yellow fever—and has made great strides in the improvement of nutrition and sanitation services. Recently, PAHO focused its efforts on the task of improving health care delivery to the estimated 120 million people in Latin America and the Caribbean who are without access to basic health services.

Early Years

The organization that grew into the present-day PAHO, was formed at a time of intense interest and optimism in the field of public health.

In the 1890s, researchers such as Dr. Walter Reed and Dr. Joseph Kinyoun were using the findings of Koch and Pasteur to trace the origins of diseases then prevalent in the Americas. Yellow fever, malaria, and tuberculosis were among the several unchecked diseases that claimed millions of lives each year.

What interested Dr. Walter Wyman, then Surgeon General of the U.S. Marine Hospital Service (later the U.S. Public Health Service), was the connection between diseases and commerce. Quarantine regulations at the time were a sundry mix of sound medical knowledge and obsolete practices. Local customs authorities resisted the concept of uniform regulations imposed by the national governments. As such, lax procedures in infested seaports often caused havoc in ports free of the most serious communicable diseases.

In 1890, the American Republics convened the First International Conference of American States (now the Organization of American States) and formed a special committee to study sanitary policy in the hemisphere. The committee did not present its report until 1902 when the Second Conference met in Mexico City. Their report called for the meeting of an International Sanitary Conference to agree on uniform sanitary regulations.

In December 1902, representatives of the American Republics met in Washington, D.C., to set up guidelines for each country to follow. This convention established an organization to coordinate sanitary activities and to provide technical assistance as requested. The organization was called the International Sanitary Bureau (ISB) and was the forerunner of PAHO. Dr. Wyman, who supported the establishment of such a Bureau in the U.S. Congress, was elected its first chairman.

The first responsibilities of the ISB were to request each country to transmit data on its health conditons and to make a scientific study of any disease outbreaks. The Bureau also was to encourage the improvement of sanitation in seaports. Finally, the convention charged the Bureau "to offer its aid and experience in the promotion and protection of the health of each of the countries in order that disease

may be eliminated and commerce expedited among the nations." The governments of the American Republics contributed to a total budget of $5,000 for the Bureau's first year of operation.

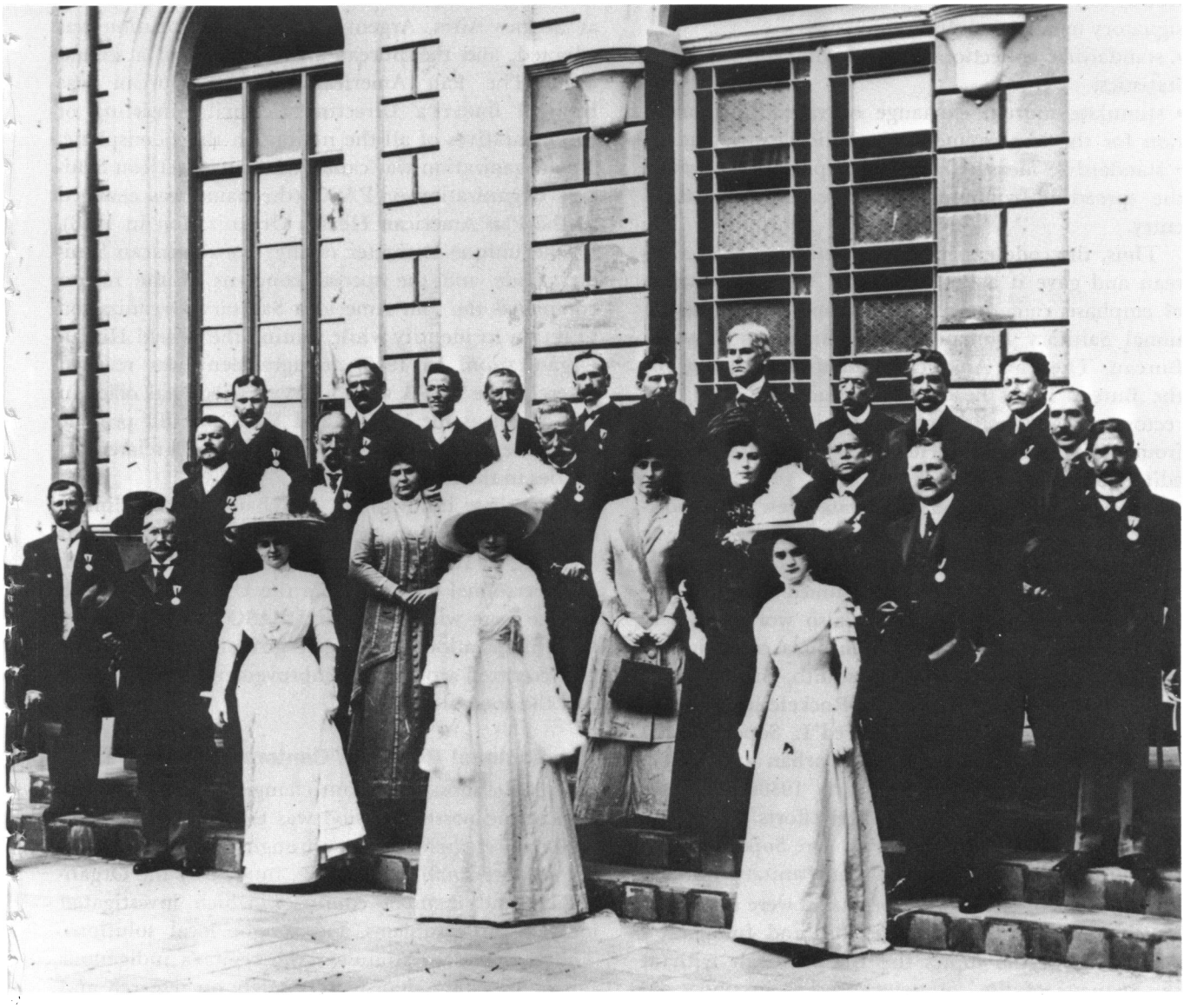
In the following years, public health in the Americas advanced rapidly. This was the period of Dr. William Gorgas' fight against yellow fever in the Panama Canal, the Reed Commission, Dr. Carlos Finlay, Dr. Oswaldo Cruz, and Dr. Carlos Chagas. In Europe, the *Office International d'Hygiène Publique* was established in Paris to further exchanges of information. The ISB oversaw the formation of sanitary committees in each nation to gain support for better health conditions.

The Pan American Sanitary Code

Just as momentum in disease study and health organization was increasing, the First World War intervened. During that era, the International Sanitary Conference which had guided the work of the Bureau was suspended and its activities were halted. After the war, however, support for the Bureau resurfaced.

In 1920, Dr. Hugh S. Cumming, Surgeon General of the U.S. Public Health Service, reinstituted the sanitary conferences and resumed the work of the Bureau. The 1920 conference called for the reorganization of the Bureau to enhance the flow of information. Related to this was the founding of a

Delegates at the Fourth International Sanitary Conference, held in San Jose, Costa Rica, in 1910



new journal to increase the flow of information to health workers in the Americas. The *Boletín de la Oficina Sanitaria Panamericana* began publication in 1922 and still provides health workers in the Americas with scientific information on broad public health topics.

The newly reorganized Bureau also supported the concept of uniform sanitary regulations for the entire hemisphere. To this end, the Pan American Sanitary Code was approved by the Pan American Sanitary Conference in 1924. One by one, the American Republics ratified the code, and by 1936 it was in force throughout the Americas.

In ratifying the code, the American Republics agreed to:

- prevent the international spread of diseases;
- promote cooperative measures to prevent the introduction into and the spread of disease from the signatory member countries;
- standardize collection of morbidity and mortality statistics;
- stimulate mutual exchange of valuable information for the improvement of public health; and
- standardize measures related to protection against the spread of communicable diseases at ports of entry.

Thus, the code expanded the activities of the Bureau and gave it a broader focus. With the change of emphasis came a change of name, from International Sanitary Bureau to Pan American Sanitary Bureau. The Pan American Union found space for the Bureau in its headquarters building, and a director and a traveling representative were detailed from the U.S. Public Health Service. A technical editor took charge of the *Boletín*.

Preventing the spread of disease grew in importance as the activities of the Bureau progressed over the next two decades. Control of yellow fever, malaria, and tuberculosis still consumed much of the Bureau's energies. The Bureau also worked closely with the Rockefeller Foundation on a campaign to eradicate the *Aedes aegypti* mosquito, the vector of urban yellow fever. One of the Rockefeller Foundation's famous researchers, Dr. Fred L. Soper, discovered the distinction between the urban and jungle forms of yellow fever in the early 1930s and redirected the emphasis of eradication efforts. Later, following the Second World War, Dr. Soper became the Director of the Pan American Sanitary Bureau.

Exchanges of technical information were increased. Vaccinations, sanitary engineering, and fumigation were some of the topics the Bureau dealt with at the requests of the countries. Studies in nutrition, cancer, and plague were also undertaken. Outbreaks of brucellosis, onchocerciasis, and typhus were monitored. The Bureau also collaborated with other international health bodies to create an international information network. As responsibilities increased, so did the staff. Dr. Cumming eventually retired from the U.S. Public Health Service to work full time for the Bureau.

Post-War Reorganization

During and after the Second World War, the character and purpose of public health and international cooperation changed considerably. The creation of the United Nations set the stage for worldwide cooperation, which eventually led to the formation of the World Health Organization.

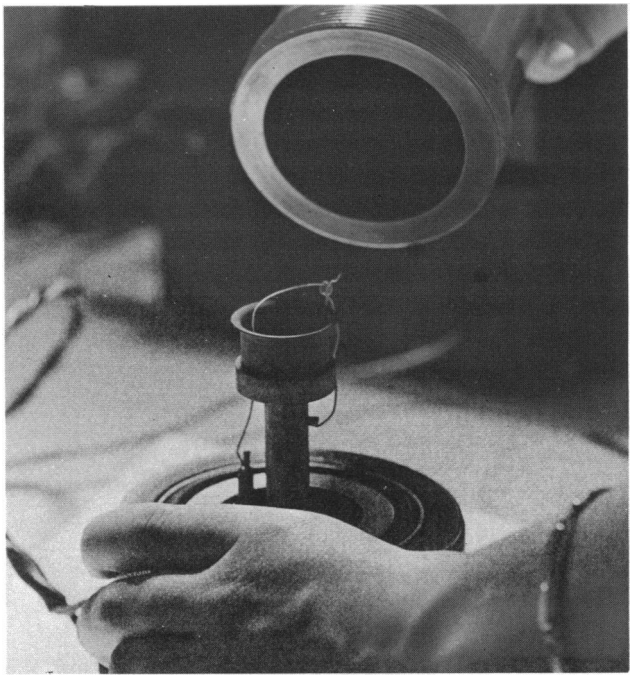
In 1947, governments of the Americas saw the need to enlarge the activities of the Bureau. In that year, at Buenos Aires, Argentina, a new constitution was adopted, and the Bureau was reorganized a second time. The Pan American Sanitary Bureau was brought under a Directing Council consisting of representatives of all the nations in this hemisphere. The organization was called the Pan American Sanitary Organization or PASO (the name was changed to the Pan American Health Organization in 1958).

The unique character of the Pan American Sanitary Code and the special concerns of the region compelled the Pan American Sanitary Organization to retain its identity while joining the World Health Organization. In 1949, an agreement was reached whereby the PASB would serve as regional office in the Americas for WHO, and WHO would provide supplementary funding to expand health-related activities in the hemisphere.

With these innovations, the character and climate of the Organization changed. PASO moved into its building in Washington, D.C., and increased its staff. The personnel detailed from the U.S. Public Health Service were withdrawn, and PASO began to hire a more international staff. The goals of the Organization centered around the improvement of health, not just the control of disease.

The Regional Research Centers

One of the most important changes in the Organization in the postwar period was the establishment of regional research centers throughout the Americas. These were small institutions, funded by the Organization and member countries, which investigated local health problems and sought local solutions. The idea was to stimulate the region's indigenous capacities rather than to rely solely on research and



The value of food as fuel for the human body is measured by means of a calorie burner

development originating in the developed countries. PAHO now operates eight regional research centers, each concerned with a special aspect of health.

The first of these centers was INCAP, the Institute of Nutrition of Central America and Panama established in 1946 at Guatemala City. INCAP was charged with developing better nutritional practices, better nutrition information, and better-trained nutritionists. In the early 1950s, the Center developed Incaparina, a food supplement made entirely from locally grown produce. Today, similar locally adapted supplements are in use, not only in Central America but throughout the region and the world. INCAP recently developed an economical method of fortifying sugar with vitamin A to counter the extensive deficiency of that vitamin in the region.

A second research center, founded on the same principles as INCAP, was started in 1951. In 1950, epidemics of foot-and-mouth disease had spread that affliction into several countries previously free of it, including Mexico and Venezuela. The governments of the region then established the Pan American Foot-and-Mouth Disease Center to carry out research, conduct epidemiologic surveys, train personnel, and cooperate in disease control projects. The Center, located in Brazil, now performs diagnostic tests for countries affected by the disease and manufactures biologicals for testing and vaccination. A new oil-adjuvant vaccine developed by researchers there is capable of immunizing animals for an entire year after vaccination, three times longer than the immune period for previous foot-and-mouth vaccines.

In 1956, the governments called on the Organization to cooperate in the founding of another Center, the Pan American Zoonoses Center in Buenos Aires, to offer technical services to countries concerned with such diseases as rabies, brucellosis, hydatidosis, bovine tuberculosis, and leptospirosis. From its laboratories in Argentina, the Center continues to provide both assistance and training, and it has standardized methods for reporting and diagnosing zoonoses. New disinfectants for the treatment of animal-bite wounds have been developed there. The Center's research on brucellosis immunization has led to development of a simple vaccine useful in controlling the prevailing strains of biotypes in Latin America.

INCAP's great successes led to the formation in 1966 of the Caribbean Food and Nutrition Institute (CFNI), in Jamaica, to serve the English-speaking countries of that area. CFNI's emphasis has been on the practical aspects of formulating food and nutrition plans for the Caribbean countries. Following the world food crisis of 1973–74, three nations—Jamaica, Guyana, and St. Lucia—cooperated with CFNI to draft national food plans using data collected earlier by the Institute. The Caribbean countries have asked the Institute to develop a food plan for the entire region. Research activities at the Institute have included an investigation into the effectiveness of using mass media to promote breast feeding and the effectiveness of supplementary feeding programs.

In 1969, responding to the special needs of infant and maternal care, PAHO helped establish the Latin American Center for Perinatology and Human Development, in Montevideo, Uruguay. This Center has focused its research activities on the health of the fetus and the physiology of labor. Simplified tests to determine the health of the fetus have also been developed at the center.

In 1968, PAHO opened the Pan American Center for Sanitary Engineering and Environmental Sciences (CEPIS, *Centro Panamericano de Ingeniería Sanitaria*) in Lima, Peru. It has stepped far beyond the boundaries of early efforts to provide safe drinking water for the people of Latin America. The Center now has programs in air and water pollution, occupational health, and appropriate technology. The REDPANAIRE system operated by the Center coordinates about 100 air sampling stations throughout the region. Analyses of industrial discharges and trace elements in soil and water constitute another important part of the Center's activities. Researchers there have analyzed exposure levels and contaminants to establish occupational health standards. Cur-

A Colombian health worker gives a nutrition lesson to a mother

rently, the Center is devising an occupational health plan for the Andean countries. Like the other PAHO research centers, CEPIS has tried to find simpler, cheaper technologies appropriate for the needs of developing countries. The use of natural polymers as flocculation adjuvants in wastewater treatment is an example of this type of work. Since 1975, the Center has been coordinating the Regional Program for Analytical Laboratory Quality Control of Water and Wastewater, designed to promote standardized methods of sampling, analysis, calibration of instruments, personnel training, and records in all laboratories in the region.

Recently, PAHO added two new research centers to its system. In Trinidad, the Caribbean Epidemiology Center was opened to increase surveillance activities and to foster better communication and diagnosis. In Mexico City, PAHO established the Pan American Center for Human Ecology and Health, which has been assisting governments in the formulation of environmental impact statements and proposing standards for the control of environmental pollutants.

The Charter of Punta del Este

While PAHO's activities were undergoing rapid expansion in the 1950s, public health workers were also seeking a new concept of health. Rather than define health as the absence of disease, health workers began to seek a more positive definition. In addition, health workers saw the need to link the goals of development with the goals of better health. A more productive economy, they felt, could only come about in a healthy environment.

In 1960 this effort culminated in the signing of the Charter of Punta del Este, Uruguay. The health ministers of the Americas gave their support to a Ten-Year Health Plan which set specific goals for health in the next decade. These goals included the provision of safe drinking water to most residents, control of communicable diseases, and reduction of infant mortality.

The Charter of Punta del Este officially recognized what many public health officials have always stressed: that health does not exist in a vacuum, but is closely tied to economic, social, and political development. In 1972, the health ministers of the Americas met in Santiago, Chile, and adopted a second, stronger Ten-Year Health Plan for the seventies. In this plan, the ministers asserted that health "is an end, an object of continuing individual concern, because it enables each person to realize its own potential. . . Health is a manifestation of the innate and acquired capacity of each person."

Extending Health Care to the Community

The Ten-Year Health Plan for the Americas provides the focus for PAHO's activities today. Central to the plan is the concept of extending health care coverage to the 120 million people lacking such services in Latin America and the Caribbean. PAHO has been cooperating with governments to draft national health plans that provide for the extension of health services to the rural areas and urban fringes where shortages are most pronounced. Twenty-two nations in the hemisphere have already completed their revised plans incorporating the extension of health services.

PAHO now stresses that national health plans should use the community as the basic unit of health care delivery. As the Ten-Year Health Plan states, "Community organization will be the decisive factor in exploiting the inexhaustible potential of the people, channeling their concern in the direction of genuine social service activities for the betterment of the environment." This year, the theme chosen for the 75th anniversary is "Community Participation in Health."

Community participation programs throughout Latin America and the Caribbean have been sponsored by PAHO as a means of extending health care by bringing appropriate, affordable services. In Honduras, for example, PAHO has cooperated with the government to train *guardianes de salud* who can treat the majority of ailments present in rural communities. Like paramedics and health auxiliaries in other countries, these *guardianes* are members of the community, aware of the community's health needs. The Honduras plan also envisages a national network of these *guardianes* capable of maintaining health at a fraction of the cost of fully trained physicians, and all would be linked to the national health system. Paramedics in other countries, Guatemala for example, have gone beyond primary health care treatment as far as the prevention of disease through agricultural and sanitary projects. Elsewhere, traditional medicine men and village healers have been integrated into the national health systems.

The reorganization of the health infrastructure, in all areas, is of vital importance. For instance, PAHO has been working with its Member Governments to improve and simplify their health statistics systems in order to make better analyses of disease control

and to improve health manpower planning. Training of personnel, including nurses, midwives, and laboratory researchers has assumed greater importance as new technologies have been developed.

The Organization has also worked to improve information systems in the region. PAHO's Regional Library of Medicine in Sao Paulo, Brazil, recently expanded its library loan services to include the computerized MEDLINE service, listing titles, authors, and subjects from journals both in and outside the region. Operated in cooperation with the Government of Brazil, the MEDLINE system is now expanding into other countries and increasing its services. The Latin American Cancer Research Information Project, working out of the Regional Library of Medicine, recently sought to collect all journal articles and works-in-progress for its CANCERLINE system.

Disease control is still an important activity of PAHO. Its staff still answers many requests from Member Governments to work with them in disease surveillance and prevention, and some successes can be claimed. Smallpox, for example, has been eradicated in the Western Hemisphere. In almost half of the malaria areas of the Americas, the disease is under control. PAHO frequently calls together expert researchers to revise and update control measures for leprosy, yaws, dengue fever, Chagas disease, and other diseases. The widespread problem of gastroenteritis has been receiving increased attention. One curative technique currently in use is oral rehydration.

The expanded program of immunization, now taking shape under PAHO's auspices, aims to reverse the decline in the use of vaccinations. A recent task force report estimated that less than 10 percent of the children born in the developing world are vaccinated against whooping cough, diphtheria, tetanus, or poliomyelitis; even fewer receive tuberculosis or measles vaccine. PAHO now seeks to increase the proportion of those immunized to 80 percent.

Future Prospects

As the people and living conditions of the Americas change, so do the problems of health and the strategies used to solve them. As in the United States and Canada, the developing areas of the hemisphere currently are undergoing tremendous urban growth while rural populations remain relatively constant. Migration to the cities and industrialization have led to new health problems; chronic diseases, especially cancer; occupational diseases and injuries; air and water pollution; and substandard housing. Many of PAHO's programs already mentioned have responded to these needs.

Now, the special needs of the expanding young population of Latin America and the Caribbean are receiving attention. Health programs related to youth are being developed in the areas of alcohol and drug abuse, family planning, injuries, and accidents.

In addition to responding to change, an agency such as the Pan American Health Organization must also promote changes in philosophy and strategy.

Technology transfer is an example of an approach to solving the problems of developing countries that, for the most part, did not result in a truly national development that improved the welfare of the general population. The simple importation of sophisticated new equipment and methods from the developed to developing countries, at best, only benefits small groups. As a result, in a movement that will surely gather force in the coming years, the Pan American Health Organization has been working to stimulate the development of so-called "appropriate technology;" that is, technology designed solely to respond to the needs of the people. For example, rather than encouraging the construction of an elaborate hospital, PAHO will encourage a government to use functional but less-sophisticated equipment and qualified but less-highly trained personnel to penetrate into the countryside and thereby extend health services to as many people as possible.

Another concept that PAHO will increasingly emphasize is that of technical cooperation. The normal flow of technology and research has been from the developed to the developing countries, but this practice has ignored the customs, traditions, and most importantly, the needs of the people. Lacking a firm base in the realities of the situation, such practice would have little impact on a nation's economic and social situation.

Among the family of international organizations, PAHO is a recognized pioneer and leader in technical cooperation. A prime example is the network of regional centers, described here, which search for solutions within the developing countries and which are largely staffed by nations of developing countries.

Although the Pan American Health Organization is the oldest intergovernmental health agency, it maintains a youthful spirit. As the needs of its Member Governments change, PAHO responds. When new approaches are needed, the Organization will seek their implementation and continue to work closely with its Member Governments. It is a role far different from that which PAHO's founders envisioned.