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INTENSIFICATION OF HEALTH PROGRAMS - REPORT ON THE MINISTERS OF HEALTH MEETING AND ACTION REQUIRED FOR IMPLEMENTATION

The Director has the honor to transmit to the Directing Council the Final Report of the Special Meeting of Ministers of Health of the Americas which, in accordance with Resolution XXXVII of the XVII Directing Council, met in Buenos Aires, Argentina, on 14 - 18 October 1968.

During the five days of the Meeting the Ministers of Health reviewed in detail the health problems of the Continent, noting the progress achieved since the last Meeting of Ministers of Health in 1963. They place special stress on the efforts that the countries must still make to attain the objectives that that Meeting had laid down, while at the same time defining the methods by which they could be attained.

This important report undoubtedly represents a highly significant step forward in health and a valuable contribution to the economic and social development of the Continent. The Director accordingly ventures to request the Directing Council to incorporate it in the general policy of the Pan American Health Organization, with a view to its serving as a base for the Organization's future health programs, carried out in cooperation with the countries.

Annex

PAN AMERICAN HEALTH ORGANIZATION

SPECIAL MEETING OF MINISTERS OF HEALTH OF THE AMERICAS

WORLD HEALTH ORGANIZATION

BUENOS AIRES, ARGENTINA, 14-18 OCTOBER 1968

REMSA/19, Rev. 2 (Eng.)

ORIGINAL: SPANISH

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I. ANOTHER PHASE IN THE HISTORY OF HEALTH IN THE AMERICAS IS DRAWING TO A CLOSE - SOME BACKGROUND INFORMATION OF INTEREST

The Task Force on Health, composed of the Ministers of Health of the signatory countries of the Charter of Punta del Este, or their representatives, met in Washington, D.C., from 15 to 20 April 1963. It held eight plenary sessions, four sessions of Committee I, and three sessions of Committee II.

The topics discussed and the general and specific considerations which, together with a summary of each problem, served as a frame of reference for, and a justification of, the recommendations approved were dealt with in a special publication, Official Document No. 51, issued in English and Spanish.[+]

The significant views it contained on the role of health activities in economic and social development in the Americas, on the principal health problems of the Americas, and on the criteria for establishing priorities in health problems; its objective analysis of present and future prospects; and the Final Declaration have not lost their topicality. On the contrary, later important events have endowed them with a permanence and validity implicit in their origin and development.

Since the signature of the International Sanitary Convention in December 1902, the date of the establishment of the Pan American Sanitary Bureau, the meeting of the Task Force was the first occasion in this century on which the highest health authorities had come together to discuss purely technical matters of major importance. Perhaps at no other time has the significance of man, as the synthesis of all the efforts of society, been more remarkable demonstrated. Those who could speak with authority emphasized the humanitarian purpose of economics as a science at the service of man.

Nor had there been, either in America or in this century, a more appropriate occasion for giving expression to a sense of national purpose by recognizing health activities as a fundamental component of progress and economic development.[+]

In his preface to the Final Report the Director of the Pan American Sanitary Bureau was right in describing it as historic. He was also right when, in commenting on and quoting a paragraph from the Final Declaration, he referred to it as not merely an expression of faith but also the answer to the basic question which the Task Force had met to dealt with, namely, could the Ten-Year Public Health Program of the Alliance for Progress be put into practice?

[+]PAN AMERICAN HEALTH ORGANIZATION, Task Force on Health at the Ministerial Level. Official Document No. 51, April 1964.

> "From this analysis, we have concluded that the Ten-Year Public Health Program of the Alliance for Progress can be carried out, provided its objectives are integrated in a rational way with the other goals that our countries propose to reach and the potential resources of each and every one of our countries, and our wills, are mobilized to the full in the service of a higher ideal: the attainment of well-being for the benefit of all the people of America.
>
> "This noble task must be accomplished for the sake of the dignity of the people of America, in whom resides the destiny of the Hemisphere at this singular hour in history".+

From 12 to 14 April 1967 most of the Presidents of the American States and the Prime Minister of Trinidad and Tobago met in Punta del Este (Uruguay) for the express purpose of giving more dynamic and concrete expression to the ideals of Latin American unity and of solidarity among the peoples of America which inspired the founders of their countries.

The auspicious outcome of their common and fraternal effort was the proclamation of their decision to achieve to the fullest measure the social order demanded by the peoples of the Hemisphere; to create a common market; to increase foreign trade earnings; to modernize the living conditions of their rural populations, raise agricultural productivity and increase food production for the benefit of both Latin America and the rest of the world; to vigorously promote education for development; to harness science and technology for the service of their peoples; and to expand programs for improving the health of the American people.

Chapter V, part C, of the Declaration entitled "Educational, Technological, and Scientific Development, and Intensification of Health Programs", recognizes that improvement of health conditions is fundamental to the economic and social development of Latin America; reaffirms once more the principles of the Charter of Punta del Este and gives implicit and full support to the recommendations of the Task Force on Health at the Ministerial Level.++

Commenting on this Declaration at the Fifth Annual Meetings of the Inter-American Economic and Social Council (Viña del Mar, Chile, 15-26 June 1967) the Director of the Pan American Sanitary Bureau rightly said:

> "In their important Declaration the Chiefs of State recognized the fundamental role of health activities in the economic and social development of Latin America.

+Ibid, p. v.

++ORGANIZATION OF AMERICAN STATES. Declaration of the Presidents of America. Facsimile, 1967.

"While reaffirming the goals of the Charter of Punta del Este (1961) and also the contribution of the Meeting of the Task Force on Health at the Ministerial Level (1963) the Chiefs of State spelled out a series of specific objectives and called upon the Pan American Health Organization to cooperate with the Governments in the preparation of specific programs relating to those objectives."+

In view of this, the XVII Meeting of the Directing Council of the Pan American Health Organization, at its seventeenth plenary session held on 12 October 1967, adopted Resolution XXXVII, which commended the Ministers of Health and the Director for the steps taken to comply with the instructions given them by the XVII Pan American Sanitary Conference; expressed its satisfaction with the full recognition given the health sector in the Declaration of the American Presidents; resolved to incorporate into the policy of the Organization the proposals in that document that were directly or indirectly related to health; and accepted with deep gratitude the task entrusted to the Organization of collaborating with the Governments in preparing specific programs relating to the health objectives set forth in point C of the Action Program approved by the American Chiefs of State.

The Council also decided to express its thanks to the Government of Argentina for its kind offer to be host to a special meeting of Ministers of Health of the Hemisphere to be convened immediately prior to the XVIII Meeting of the Directing Council for the purpose of discussing and drawing up a plan of operations for implementing the decisions adopted by the American Chiefs of State; recommended to the Ministers of Health that they invite representatives of other health institutions in their countries to attend the above-mentioned meeting; and authorized the Director of the Pan American Sanitary Bureau to take the pertinent steps to convene and organize the above-mentioned meeting of Ministers of Health and to keep the Ministry of Health of Argentina duly informed.++

The Ministers of Health of the Americas, or their representatives, held a special meeting in the Edificio de Congresos, Teatro San Martín, Buenos Aires, Argentina, from 14 to 18 October 1968. The Special Meeting held six plenary sessions, eight sessions of Committee I and eight sessions of Committee II, and considered the items contained in the Agenda approved at the first plenary session (Annex).

+HORWITZ, ABRAHAM. La Salud en la Declaración de los Presidentes de América. Boletín de la Oficina Sanitaria Panamericana, Vol. LXIII, No. 2, August 1967.

++PAN AMERICAN HEALTH ORGANIZATION, Official Document No. 82, 1968, p. 45: Resolution XXXVII: Intensification of Health Programs - Decisions taken at the Meeting of the American Chiefs of State.

II. AN OVERVIEW OF HEALTH ACTIVITIES IN THE LAST DECADES OF THE CENTURY

Health problems in the Americas - Generalities

After a full discussion of the principal health problems of the Americas at their Meeting in April 1963 the Ministers of Health declared:

> "We have interpreted the purposes of the Charter of Punta del Este as a cooperative effort to stimulate the social progress of Latin America concurrently with, and as the outcome of, a sustained growth of the economy. As to health problems as such, we conceive of them as the aggregate of factors that condition diseases and their distribution in each society. These are factors of a biological, economic, historical, and cultural nature. Available data show that Latin America is beset by infectious diseases, undernourishment, poor sanitation, unhealthful housing and working conditions, illiteracy, lack of proper clothing, and a low per capita real income. These factors together produce a high general mortality as well as a high mortality in children, especially those under 5 years of age (more than 40 per cent of all deaths), and accidents of pregnancy and motherhood which limit life expectancy at birth; they are also responsible for the poor scholastic performance of many schoolchildren, for low productivity, not to mention a pessimistic outlook on life. The distribution of these problems among the countries varies, as it does in parts of the same country and between the cities and rural areas.
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> "It is a well-known fact that qualified professional and auxiliary personnel are insufficient in quantity and quality. The funds available for the material resources required to promote and protect health are also insufficient. Priorities must be established to ensure that investments in health give the best possible returns and benefit as many people as possible."[+]

The data available[++], which have improved both in quality and in quantity in the last five years, show that the above-mentioned problems still persist, although there is a clear tendency for their frequency and seriousness to diminish. The variations within each country and between countries also persist.

No significant changes have occurred in the technologically advanced countries in the incidence of common communicable diseases other than that of measles, which is declining wherever systematic immunization programs have been instituted. On the other hand, there is an upward trend in the incidence of chronic respiratory and industrial diseases and new diseases due to the introduction of chemical processes in industrialization have appeared, as have iatrogenic diseases.

[+]PAN AMERICAN HEALTH ORGANIZATION, Task Force on Health at the Ministerial Level. Official Document No. 51, April 1964, p. 6.

[++]PAN AMERICAN HEALTH ORGANIZATION - Facts on Health Progress. Scientific Publication No. 166, September 1968.

Accelerated migration from the countryside to the cities - which in some countries involves 5 per cent of the total population - has led to the mushrooming of shanty towns around the large cities with serious concomitant health problems. These shanty towns are veritable foci of social unrest, and have come to be called foci of the "ruralization" of the urban environment. To a large extent they are the most visible negative expression of the serious imbalance between needs and resources that is the hallmark of large towns. The same phenomenon has also been occurring with comparable intensity in the technologically more advanced countries and areas of the Continent. The most serious social conflicts are frequently occurring in the shanty towns as well as in the rural areas.

However, the five years since the last meeting of the Ministers of Health have witnessed the burgeoning in the Americas of a spirit that is breathing new life into old patterns and obsolete structures; an increasing willingness to meet social aspirations; a recognition - not only in words but also in the law and its application - of the right of every human being to a minimum degree of well-being, regardless of his social class, religion, or genetic origin. Life has quickened its pace and become more demanding, and demands far exceed the resources and the capacity of institutions to satisfy them.

Population Dynamics

The study of the most varied problems has brought to the fore the question of population growth in relation to economic growth and to services for satisfying vital needs.

One of the distinctive features of the period under review is the debate on population dynamics and its consequences for well-being. Latin America and the Caribbean Region have the highest annual rate of population growth in the world. It ranges from 3 to 3.5 per cent per annum in most countries.

In view of the importance of the question the diversity of views on how to solve it is only to be expected. In any event the discussion has been very valuable in clarifying concepts and suggesting courses of action, that is to say in developing a "policy".

There are individuals who, from religious or scientific conviction or because of a policy decision taken at the highest level, do not accept any deliberate interference with the size and normal structure of the population. They insist that the number of children in a family is the exclusive decision and responsibility of the parents.

Nevertheless, they accept various types of legal measures designed to encourage genuine responsible parenthood; this step must help bring about a positive change in the structure of society whereby income and services are geared to the social nature of the population, whose basic unit is the family.

At the opposite extreme are those who believe that it is urgently necessary to moderate the accelerated growth of the population in order to bring it into line with the growth of resources, to lighten the burden of the present generation and to guarantee the future of generations yet unborn. For them family planning is an end in itself, and the quicker it comes into general use the better the outlook for society; to spur on economic development it is first necessary to limit the unrestricted growth of the population.

For the eclectics there is no antinomy between population growth and development. On the contrary, population growth and development complement each other. The essential thing is to stimulate development and well-being by all the means available to science, technology, and economics, and thus satisfy social aspirations. From the standpoint of health, family planning is one means, among others, of solving problems such as induced abortion or of aiding in the treatment of certain chronic diseases. Furthermore, if the population policy so provides, it may be included among the means for solving problems of social importance.

At sessions of the World Health Assembly and in the meetings of the Governing Bodies of the Pan American Health Organization, the Governments have established the principles and guidelines of that policy.+

Their basis is respect for the decision of parents arrived at without coercion or influence. It is the exclusive right of every couple to decide how many children they want. Therefore, if parenthood is to be responsible, the education of parents must be strengthened. In order to make such a decision, each couple is entitled to be fully informed of what it entails. It is up to the State to decide how it will provide that information and what measures it will take to enable each couple to make its decision.

As will be seen, some Governments of the Americas have established their own policy and have applied it either in demonstration projects or throughout the country. Others have not yet taken a decision on the matter, although they recognize that among the questions that have characterized the period that has elapsed since the signature of the Charter of Punta del Este, this is a fundamental issue.

Health Activities and Development

The highest political authorities of the Continent have recognized that health activities are essential to economic and social development in the Americas. By so doing they wished to emphasize the importance of health activities for production and productivity and for reducing

+WORLD HEALTH ORGANIZATION. Program of Activities which can be developed by WHO on health aspects of world population: Resolutions WHA18.49; 19.43; 20.41; 21.43.
PAN AMERICAN HEALTH ORGANIZATION. Aspects of health related to population dynamics. Directing Council, XVI Meeting, Resolution IX, Official Document No. 66, 1966, p. 15; XVII Pan American Sanitary Conference, Item 38, Official Document No. 77, 1967, pp. 193 and 280.

environmental hazards and promoting the exploitation of natural resources. This interpretation in no way detracts from the moral significance of individual and collective health as a good for each person and society. On the contrary, this spiritual conception draws strength from the recognition of the importance of health activities for development, in that they contribute to life in common and to the orderly functioning of communities.

It therefore follows that national and regional health programs should be incorporated into general development plans, as early as the pre-investment phase. This is a reasonable proposition, and its implementation, although complex, is feasible, and, what is more, unavoidable. Since the political emancipation of the countries, progress has been made up and down rather than across the Continent. Possibly, such factors as geography and geopolitics have contributed to the enormous disparity in development between the countries of North America and those of Latin America and the Caribbean Region and to their isolationism.

In recent years proposals have been made for concerted action which would not only respect national sovereignty and national interests but also provide each country with a share in the benefits that can derive from regional and multi-national programs. Examples are infrastructure projects that have facilitated an increasing exchange of ideas, persons, and goods throughout the length and breadth of the Americas; such are the highways traversing several countries; the development of river basins; hydro-electric projects; and telecommunication systems. Some are being constructed; others are in an advanced stage of planning. A conspicuous example of the first is the Jungle Highway which will extend through Peru, Ecuador, Bolivia, Colombia, and Paraguay; and of the second, the program for the overall development of the River Plate Basin, in which the Governments of Argentina, Bolivia, Brazil, Paraguay, and Uruguay are taking part. Regardless of their nature, they all are multi-disciplinary projects in the sense that they call for very varied experience which must be integrated from the preliminary studies for formulating the project, during its execution, and, subsequently, in its maintenance. Each of these undertakings shows how necessary it is for a scientific and intellectual community to be established before hand in the Americas and to serve as support to the economic community. We therefore need a development university that will produce not technocrats but cultivated men of vision.

As has been said, the prevention and early treatment of diseases must be part of any development project as early as the pre-investment phase. They should also be part of it throughout its course and should be adapted to its changing circumstances and conditions. The problems inherent in the magnitude and consequences of such projects must be recognized, and those that may arise as activities advance and progress is made must be foreseen. There are unexplored areas in the Americas whose present or potential ecology must be determined, for in due course they will be included in some facet of this great enterprise of cultural and economic rapprochement to which the Governments of the Continent have pledged themselves. It is up to public health workers, in close cooperation with all other persons having definite responsibilities in each program, to avert the risks of disease and death

either by direct action, according to the nature of the problem, or by indirect action, by modifying unfavorable environmental conditions. Simultaneously, it is necessary to define the reciprocal influences within each project for the benefit of individual and collective health. We must recognize that our experience in multi-disciplinary projects of this type is still very limited. Nevertheless it behooves us to acquire it because of the importance of the ends in view.

Intra-regional Trade

Measures for improving Latin American intra-regional trade have been defined. They are of great importance for health protection, promotion, and restoration activities. They are important, of course, because they lead to an increase in national wealth for proportionate distribution among activities which are the responsibility of the State, including health activities. They are also important because they lead to an increase in the power to purchase goods and services. Of equal importance are their direct consequences for the relationship between economic and health activities. Health activities are so diversified that they enter into virtually all major development investments, as is shown by programs for the construction of health facilities; for the provision of increasingly complex and costly equipment; for the feeding of the sick and the population at large, in particular children; for the supply of drugs and medicaments; for the transportation of men and materials; for the training of professional, technical, and auxiliary personnel. Taken together they represent in terms of public and private investment a significant proportion of the economy of a country.

In the matter of increasing intra-regional trade, special reference must be made to the quality control of drugs and of reagents, of processed foods or foodstuffs for export, of a whole series of products for use in hospitals and other establishments. It is urgently necessary to set up quality control procedures both in the exporting countries and in the importing countries. They must be based not only on an analysis of the composition of samples of each substance or preparation but also on a detailed knowledge of the process of industrial production. With respect to drugs and medicaments it is essential to speed up the implementation of the resolutions of the World Health Assembly and the Directing Council of the Pan American Health Organization,+ which recommend the establishment of international centers for the training of technicians and for research on methods of analysis. Both measures represent a rational approach to the problem.

+WORLD HEALTH ORGANIZATION. Drug quality control. Resolution WHA21.37, 1968.

PAN AMERICAN HEALTH ORGANIZATION. Quality testing of pharmaceutical preparations. XVII Pan American Sanitary Conference, Item 36, Official Document No. 77, 1967, p. 295.

Common Market in Latin America

It has been decided to establish a Latin American Common Market and to set up the necessary institutional framework for it. It is clear that, as progress is made towards the economic interdependence of countries, industrialization and intra-regional trade will increase; modern technology will lead to more diversified production; progress will be made in the development of geo-political regions; the need for more and better professional workers will be felt; and it will be possible to spell out the health activities for dealing with regional problems.

It will be for the Governing Bodies of the Pan American Health Organization to study, decide, and approve in due course the technical, legal, and other instruments that will make the above-mentioned activities possible.

External Capital

Another distinctive feature of the period since the Meeting of the Task Force on Health at the Ministerial Level in 1963 has been the decision of the Governments to seek external loans with which to supplement domestic funds and thereby accelerate the solution of certain health problems. Those problems affect a large number of people or are prevalent in areas essential to national development. These loans, in addition to stimulating development, help to improve health and living conditions. The Inter-American Development Bank has established a health loan policy; it defines the programs for which loans can be made from the Special Operations Fund.[+] With the consent of the President of the Inter-American Development Bank, PAHO sent a statement of that policy to the Ministers of Health. It reflects the experience of the Bank, which envisions the development of the Americas as a harmonious process of economic growth and social welfare. Its work has been outstanding and, in so far as it has established a health loan policy, completely original. Outstanding among its social investments among others, are those for water supply and sewage disposal programs; medical and health education; the construction of university hospitals; and the control of foot-and-mouth disease to prevent the loss of proteins essential to children.

Funds for the construction and equipment of hospitals have been provided by certain European countries; for water supply services by Canada; and for the eradication of malaria, sanitation services, rural health units, to cite only the most important, by the United States of America.

We hope that this trend will continue and grow stronger, for the work accomplished has awakened the desire of communities with similar problems, and they are now ready to contribute manpower, money, and materials. The Governments of the Americas are aware of the urgent need to satisfy the basic needs of the population, in tune with the cultural and natural resources of

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+INTER-AMERICAN DEVELOPMENT BANK: Health Policy, Working Document, 1968.

each country and of the Continent as a whole. Development must be rationally planned, and it must be achieved without delaying the fulfilment of the aspirations of the people; for the end in view is true distributive justice.

By and large, present investments are not commensurate with the magnitude of health problems. Because of this, some countries are seeking new sources of financing from domestic sources. In any event, they are aware that there are considerable possibilities of treating a large number of the sick and of providing more persons with health care if the resources available are rationally used. In each country there are suggestive differences in the cost of the same service depending on whether it is provided by public, private, or independent institutions. This fact points to the clear need for the instilled capacity to be used more efficiently. Nevertheless, the growing social need and the justice of the demand of the population for health services is spurring the authorities to increase investments.

Production of Foodstuffs

There are clear possibilities in the Americas for increasing the production of foodstuffs to satisfy the growing needs of its peoples and those of other regions of the world. At present, production is insufficient both in quantity and quality. There is no correlation between the needs of the inhabitants and the needs of the economy nor between food exports and food imports. Furthermore, there is much food wastage, due to inefficient storage, destruction by rodents and insects and a number of preventable animal diseases, some of which are actually zoonoses. In addition there are difficulties in the timely distribution of foodstuffs because of lack of roads and means of transportation. Finally, mention must be made of the low purchasing power of certain segments of the population and of harmful food habits that are part of their culture.

This statement of the most important factors involved in the food and nutrition problem in any society reveals the complexity of the problem; the inevitably multi-disciplinary nature of the solution; and the importance of the functions to be undertaken by health services. It is urgently necessary for all the countries of the Americas to delineate an agricultural policy which provides for the systematic solution of the above-mentioned problems so as to guarantee their population an adequate level of nutrition and, at the same time, satisfy the needs of economic development. Unless that is done, it will be very difficult for health workers to fulfill their mission, that is, to prevent nutritional diseases, to provide the sick with early treatment, to promote the physical and mental growth of children and the productivity of adults. As a result of scientific research, progress has clearly been made in the diagnosis and treatment of nutritional diseases. But no such progress has been made in preventive activities, because of lack of knowledge of the availability of protective and energizing foodstuffs with which to satisfy the vital needs of each population. This ignorance is related to the lack of an agricultural policy guiding national production in which proper consideration is given to the foodstuffs for consumption, for export, and for import.

Nothing reflects the urgency and the seriousness of the problem better than infant mortality and the mortality in children in the age group 1-4, which continues to be high in the less developed areas of all the countries in the Americas. Available information shows that if the average mortality rate in Latin America and the Caribbean Area was the same as that in the United States of America and Canada, 741,000 fewer children would die each year in those two regions. A high proportion of those children die as a result of protein caloric malnutrition, on which are imposed infectious diseases, illiteracy, insanitary conditions, and lack of medical services. Some of these shortcomings and environmental hazards can be better withstood by well-nourished children. The possibilities of social and economic progress depend not only on the number of children that are spared a premature death but also on those who are capable of becoming members of the active population.

It would appear that there is a correlation between living conditions and the mortality of pre-school age children, for when the former are improved, the latter diminishes. However, there is some evidence that, as social and economic conditions improve, the risk will be shifted to younger age groups, the result inter alia, of urbanization, working mothers, the decline in breast feeding, and earlier age of weaning.

Recent research points to a possible direct link between malnutrition and mental retardation. If it is confirmed, the problem will assume unusual gravity and require absolute priority. Mention must be made of the studies on this problem being carried out by the Institute of Nutrition of Central America and Panama (INCAP). Furthermore, the influence of chronic malnutrition on the output of physical and mental workers and on feelings of pessimism and hostility should not be overlooked. In the near future, perhaps the objective of nutrition programs will be the achievement of an optimum nutritional status for the largest possible number of children and thus the realization of all the genetic potentialities, both physical and mental, of the individual.

Because of their importance for health, for the economy, and for development in general, certain animal diseases must be mentioned, which may or may not affect man, but which substantially reduce the availability of essential proteins. This explains why the problems they involve make close collaboration essential between Ministries of Health, of Agriculture, and of Finance. Those problems which are biological in nature, influence agricultural policy, and require for their solution the mobilization of a great deal of national resources and the aid of external capital.

Because of their high incidence in Latin America, we will cite foot-and-mouth disease, bovine tuberculosis, rabies, brucellosis, and parasitic diseases of animals. Procedures for the control of each of these diseases are available, and although they are not completely effective they do make it possible to reduce the incidence of the disease and to prevent the loss of protein. Programs for the control of animal diseases are based on the same principles as programs for the control of human diseases. In the present situation in Latin America such programs could possibly become self-financing.

It is the policy of both the Inter-American Development Bank and the World Bank to grant loans, under certain conditions, for animal disease control programs.

These circumstances have given a new dimension to the work of the Pan American Foot-and-Mouth Disease Center and the Pan American Zoonoses Center in rendering advisory services to Governments, training specialists, and undertaking research on diagnostic methods and prevention.

Life in the Rural Environment

A further distinctive feature of this period has been the growth of awareness of the rural environment, in which more than 100 million persons live in the Americas. It has been recognized that for generations rural dwellers have remained outside the mainstream of progress. They have been nurtured on an alternating diet of promises and disillusionment. Their spiritual resources have been unappreciated, and they have been stigmatized as lacking in initiative, as irresponsible, and as dependent on state aid. Fortunately, that accusation has been disproved by the facts. Where rural dwellers have been motivated to carry out community works, their responsibility and disinterested collaboration have exceeded by far what was expected. They draw upon their ancient tradition of cooperative work and effectively contribute to the well-being of others. That has been clearly demonstrated in rural sanitation programs which, with others, are the best reply to those who have voiced negative opinions. But the work already done is only a small part of what must be done by those who still expect and call for equal benefits.

For that reason the decision to modernize rural life is a wise one, and its gradual implementation is essential. It is enough to point out that mortality rates are three or more times higher in the countryside than in the towns.

It is considered by some that migration from the countryside to the city is an inevitable phenomenon based on historical observation of the development of industrialized countries. But the countryside is changing and one might question what proportion of country dwellers that migrate to the city in developing countries would abandon the countryside if their needs had been satisfied and if their agricultural vocation were respected. We recognize that industrialization is advancing in Latin America and in many other regions of the Continent. We further recognize that, in the developed world, advances in agricultural technology have reduced the size of the labor force required. However, in every society part of the population must devote itself to agriculture and the Americas are no exception to this rule. We believe that agriculture will remain a major sector in the economy of the Americas until the end of this century. It is therefore essential to accelerate the modernization of rural life, including the health services that are essential to it.

Planning

In the Charter of Punta del Este, the signatory Governments agreed that planning was an instrument for establishing priorities in an objective manner, for increasing the output of available resources, and for making investments to achieve measurable objectives. The World Health Assembly, the Directing Council, and the Pan American Sanitary Conference[+] have decided to make health planning part of the policy. For planning is a means, not an end; a process, not an end point;a wayof acting; not a terminus. The method used in preparing the plan is of no importance. The essential thing is the decision to draw up a plan and the achievement of its objectives. The method used will depend on the general and specific purposes pursued in formulating the plan. Once the policy decision has been made, the plan should ideally be as inclusive as possible, covering at least the health problems which affect most of the population and for whose protection the necessary knowledge and resources are available. Experience so far has shown that lack of continuity or changes in form and content have perhaps been the major obstacle to or the major constraint on planning.

During the period that has elapsed since the first meeting of the Ministers of Health, progress has been made in health planning as a separate activity of Ministries of Health, and the need for planning has been further recognized. Considerable efforts have been made in the health sector, although all the health investments of a country have not been included in the national health plans. Nor has there been any realistic correlation with economic and social development plans where they exist, although a correlation between budgets and programs has been worked out. This situation is due to large measure to the absence of research that would make it possible to determine in each country and in each of its development areas the reciprocal influence of the various sectors composing the national development plan. Whilst this positive relationship can be demonstrated in economic activities, it is not always easily demonstrated in social and particularly in educational and health activities.

The failure to incorporate health plans into national development plans is reflected in the paucity of the investments flowing from the policy decision. Although man has been recognized as "the sole protagonist and beneficiary of all development",[++] his actual contribution to the growth of the economy, to progress, and to well-being is ignored or underestimated by some. Those who think along these lines believe that funds devoted to education and health are not a true investment but an expenditure, that they are not "reproductive" in the economic sense. In education, professional productivity can be measured in terms of university or technical training

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[+]WORLD HEALTH ORGANIZATION. WHA18.37 Methods of project planning and execution. PAN AMERICAN HEALTH ORGANIZATION XVI DIRECTING COUNCIL, Resolution XX: Status of Health Planning XVI Pan American Sanitary Conference, Resolution XXIX.

[++]MORA, JOSE: Task Force on Health at the Ministerial Level, PAHO, Official Document No. 51, p. 47.

plus experience. There is a true economic theory of education.[+] Such a theory has not yet been established for health but we hope that it will be for the bases and rationale are fully comparable to that of education. Attempts have been made to express the value of health in terms of the cost of sickness and the prevention of disease.[++] So far no such attempt has been made to appraise the improvement of the physical environment by techniques that are part of health activities. A study of this nature would show that the funds devoted to that general purpose are a true investment.

Planning at present under way has already brought visible benefits but it has uncovered weaknesses in the organization and administration of health services. We will refer to them later on. Nevertheless, there is an awareness of the value of planning as an essential tool for establishing realistic priorities in the use of health resources. The Governments have decided to continue to formulate, evaluate, and periodically adjust health plans, and, insofar as it is possible, to correlate them with economic and social development plans. The experience gained so far shows that planning cannot be conducted in a vaccum, isolated from the realities of human existence. Therefore both the "providers" and the consumers of health services should actively participate in it. The better informed they are, the greater their understanding and the deeper their perception of health problems, the factors conditioning them, and the circumstances under which they arise. The "consumers" should come from the most diverse segments of the community, from the rural areas, the shanty towns, and communities whose environmental conditions are to be deplored. It is difficult to identify leaders among such groups and to induce them to take an active part in planning and reviewing. The problem is one of communication in the health field and is by no means unique. We must solve it if we wish health plans to truly meet the most urgent needs and if the persons for whom they are intended are to obtain the maximum benefits from the opportunities offered by the programs. The more we take into consideration the value our societies attach to their health needs and the way ther view them, the more possible it will be for us to satisfy them.

At the same time the need for a multi-national approach to certain activities has become clear, as has the need to coordinate the work of institutions of several countries in order to achieve common goals. These are true regional, multidisciplinary programs in which emphasis is put on aspects deriving from geo-political-social characteristics. The health sector is being incorporated into this type of regional programming.

[+]SCHULTZ, THEODORE W. The Economic Value of Education. Columbia University Press, 1963.

[++]KLARMAN, HERBERT E. The Economics of Health, Columbia University Press, 1965.

Organization and Administration

There are still extensive areas in the countries of the Americas whose population is without basic health services. At the same time - a fact that will appear paradoxical - there is wastage and defective utilization of available resources. Although this situation has existed since the founding of each country, it has clearly been aggravated in recent years by a population growth out of all proportion to health investments; by the social demand stimulated by the transistor radio, by word of mouth, and by the sight of the goods which others enjoy; by currents of public opinion and by promises whose fulfillment the course of events at times frustrates. This explains the interest of Governments in establishing priorities and thereby obtaining better and greater social effects from the funds available. There is no antinomy between improving the quality and quantity of the services rendered in existing institutions and increasing the coverage especially in rural areas. These are ways of achieving a goal that should be universal: health as the inalienable right of every individual.

The American Continent has become aware of the importance of organization and administration as an essential tool for preventing and curing diseases and promoting health. Organization and administration are indivisible without the one the other cannot exist. The purpose of organization and administration is to ensure that programs achieve their objectives. As has been repeatedly said, they are a means not an end, for the end is the health of the people, the prolongation of life and the prevention of disease or, if it occurs, the limitation of its spread.

In the last five years, marked progress has been made in improving administrative principles, practices and procedures in health services in the Americas. Within the framework of national legislation it has been possible to improve systems of public administration by training civil servants in universities or by providing inservice training; by adopting modern methods, including computerization in some countries; by organizing seminars and workshops to enable the technical personnel of several countries to exchange experiences, and, finally, by providing advisory services.

The results are visible, and they are to be seen in departments and sections of the Ministries of Health or other State institutions with similar purposes. Emphasis on administrative reform has been greater in central than in regional and local Government agencies. The field is therefore still wide open for the modernization of administration to the end of improving the performance of technical personnel and their working equipment.

Experience has shown the need for what is called "operational research". It had its origin in military operations in the last war and in large-scale industry. By analyzing the various factors involved in producing a given effect it is possible to ascertain the value of each and the most appropriate combination to achieve given objectives. In health there is a wide field for

operational research, the end in view being the rechannelling of resources according to their potential effects and their availability. Because of these characteristics operational research can be applied to very specific situations either in an institution or in a health department or program. Generalizations can only be made with respect to its principles and methods, but no assurance can be given as to its equal effectiveness in solving similar problems. In short, operational research is a valuable method of improving the organization and administration of health services. Its use is recommended, but its limitations must be borne in mind.

The modernization of rural life must lead to improved living conditions for communities, families, and individuals. The need for health services is clear from the general and specific mortality rates in rural areas, which are two or three times higher, for the same causes, than those of urban centers.+ With a few exceptions our knowledge of the dynamics of rural society is incomplete. We know that there is a tendency for rural dwellers to migrate, a matter we have already touched on. We know that work in rural areas is sporadic, with long period of idleness. We are aware of the effects of inadequate land utilization and unfair systems of land tenure on the life of peasants, their motivations, and their value judgements. People speak of a rural population as being concentrated as dispersed, using conventional definitions rather than realistic ones. But such characteristics only provide a very general description of those societies. We do not have enough objective information about them to enable us to pinpoint their problems and apply specific solutions. For us modernization means applying modern technology without impairing the way of life of a community. Furthermore, it means seeing the process of modernization as a whole, with its own dynamics, in which the solution of problems is attempted in an integral way, with the active and conscious participation of the inhabitants. This is the cardinal factor of a rural welfare policy. What is certain is the worth of the beneficiaries of such a policy and their willingness to work for the commong good, as we mentioned earlier.

In health work there are no standard formulas because of the diversity of the problems which the geo-political-social conditions of each rural society give rise to. It is not merely a matter of increasing health service coverage but of organizing it with the conscious support of the population, priority being given to their most manifest needs and to satysfying them with the aid of properly motivated and technically trained auxiliary workers. The task is an urgentone, but the possibilities of success are also great. However, through direct action by the Ministries of Health or through coordinated efforts with Ministries of Agriculture, Public Works, etc.,health must be incorporated as a social function into all projects for the modernization of rural life.++

+PUFFER, RUTH AND GRIFFITH, WYNNE. Patterns of Urban Mortality Pan American Health Organization. Scientific Publication No. 151, 1968.

++PAN AMERICAN HEALTH ORGANIZATION. Health Services in Rural Areas. Technical Discussions. XVII Meeting of the Directing Council, 1967.

Planning, to which we have already referred, has pointed up the weakness of administrative structures and methods. The formulation of program budgets -the practical expression of the plan - has shown the disassociation between the specific objective and its attainment. If administrators do not work hand in hand with technical staff, there is no possibility of achieving the anticipated benefits. Frequently personnel are not appointed or supplies not provided on time or funds are not made available when they should be and the result is the failure of the best planned programs. It is the same - so experience shows - when the performance of professional and auxiliary staff is below what has served as a basis for formulating the program. In a nutshell unless organization and administration are efficient, no service can be effective.

Human Resources

In the Americas both in the developed and in the developing countries there is still an absolute or relative shortage of professional and auxiliary staff for preventive and curative activities and for other activities that directly or indirectly promote health. The community demand is constantly increasing; services are far from covering the whole country,to the serious detriment of the rural population; medical technology is becoming increasingly complex and activities more costly; and health investments are not commensurate with what is necessary to provide even essential care. Nevertheless, available information shows that in the period under review there has been a substantial increase in health manpower and of university and technical institutions providing health training.[+] The problem of the uneven distribution of medical and other professional personnel who still concentrate in large towns and are in short supply or totally absent in large tracts of the rural areas is still with us. In some countries, salaries are not high enough to induce them to take up whole-time work in the State health services. Furthermore, in view of the average family income, the increasing cost of medicine already mentioned has considerably reduced private practice. At the same time, the social security system is providing only a part of the population with medical benefits even though the right of all to health is recognized. In these circumstances the State is required to provide health services for the indigent and the uninsured and even for those who cannot afford private medical care. Taken as a whole, this is a complicated social process whose immediate expression is a shortage of professional health workers and technicians. Hence the responsibility shared by the Governments and the universities.

The Charter of Punta del Este recommends the adoption of educational plans to fit the people of Latin America to participate constructively in economic and social development. Where necessary, new teaching institutions

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[+]PAN AMERICAN HEALTH ORGANIZATION. Facts on Progress. Scientific Publication No. 166. September 1968.

must be established and old ones refurnished with a view to increasing their capacity and improving the quality of their teaching. To that end it is advisable to ascertain the health manpower needed in the light of the priorities and objectives of the health plan and the gross national product of each country. This has been done in Colombia through a study sponsored by the Government, the Association of Medical Schools, the Milbank Memorial Fund, and the Pan American Health Organization.[+] The method used is today known to all the Governments of the Americas, and in some countries it is being applied. Its general use as a method of educational planning is recommended.

In the period under review, national associations of medical schools have been organized in all countries in which such schools exist. In 1963 they were united in the Pan American Federation of Associations of Medical Schools, which was recognized as an affiliated non-governmental organization by the XV Meeting of the Directing Council of the Pan American Health Organization. These associations have promoted closer ties between medical schools and the Governments and, at the international level, the Federation and the National Associations with the support of the Organization, are carrying out programs for the improvement of medical education.

During the period under review, concern has been voiced about improving the quality of teaching and learning. Thanks to the initiative of the Pan American Health Organization, a number of universities have adopted active medical education methods based on a harmonious relationship and a continuing interchange of ideas between teachers and students. The results have been remarkable and justify the adoption of these principles by all medical schools and health institutions the practical application being determined by the nature of the subject being studied. The essential thing is that the goals of students and teachers should be identical.

The importance of organizing teaching and properly administering the branches of each department has become clear, not only because of the enormous investments involved but because each university is a dynamic, constantly changing society sui generis. These experiments should be expanded in the light of the findings of the survey on the teaching of preventive and social medicine which are very pertinent.[++]

[+] PAN AMERICAN HEALTH ORGANIZATION. Study on Health Manpower and Medical Education in Colombia. Ministry of Public Health of Colombia and Colombian Association of Medical Schools. International Conference on Health Manpower and Medical Education, Maracay, Venezuela, 19-23 June, 1967.

[++] PAN AMERICAN HEALTH ORGANIZATION. Special Meeting of Ministers of Health of the Americas. Development of Health Manpower. Working Document Item 3.4, REMSA/11, 1968, p. 10

Continuing education for professional and technical personnel is today a widely accepted idea in the Americas, although infrequently observed in practice. It is urgently necessary to satisfy the need felt by doctors in rural areas to refresh their knowledge to enable them to deal with the local population. This must not be done haphazardly but in an organized and sustained way, priority being given to the problems considered most essential for the professional health worker and the institution. For this purpose the Ministries of Health and medical schools must work out joint schemes that take into consideration the situation in the country and area concerned, and are based on the regionalization of care and teaching facilities

Another way of improving the quality of teaching is the provision of textbooks selected by instructors in the subjects concerned and produced in sufficient quantity and sufficiently cheaply to allow students to purchase them. At the same time, it is necessary to increase the library holdings of reference works or treatises on the same subject recommended by a number of instructors. In this way the student can compare and expand the contents of his textbook. Such a program has been approved by the Governing Bodies of the Pan American Health Organization and recently initiated.+

Where the ratio of physicians to nurses per unit of population has been studied, it has been found to be an inverse one. As a result, physicians are obliged to carry out preventive or treatment procedures which nurses could perform equally well. Nursing is another area of professional education in which the number of students must be increased and the quality of teaching improved. The shortage of nurses makes itself felt not only in preventive and treatment services but also in specialized services.

A further result of this situation is the increasing importance of nursing auxiliaries and other paramedical personnel. It has been recognized that they represent an element apart among the technical personnel responsible for the prevention and cure of diseases. They are not a substitute for professional nurses and therefore require a special curriculum in which theoretical and practical instruction are well balanced. There is today a great diversity in the many training courses for auxiliary health workers. It is therefore essential to make a survey of their functions and responsibilities; the findings could serve as a basis for the formulation of a curriculum. As we shall see, substantial progress has been made in the education and training of auxiliary workers, with a view to making them even more efficient in the activities assigned to them.

Worthy of mention is the PAHO Program for the improvement of sanitary engineers which is being carried out in a number of universities. It is a form of continuing education in modern techniques for dealing with the

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+PAN AMERICAN HEALTH ORGANIZATION. Supply of Textbooks for Medical Students, Directing Council, XVII Meeting, Resolution XXI, Official Document No. 82, 1968, p. 78.

problems of the physical environment caused by industrialization as well as other traditional problems which still affect a great many inhabitants of the Americas.

Today the Continent is aware of the need to gear university and technical education to the needs of development. This approach is seen in the various subjects which make up the science and arts of health. It is necessary to integrate preventive and curative medicine in theory and in practice and to train the type of professional health worker that each country currently needs, emphasis being placed on those attitudes that favor continuing instruction and the ideal of service. What is normal in health problems must be stressed, not what is exceptional. That does not mean to say that the aim is to create technicians; on the contrary, it is to create educated men genuinely interested in the moral values governing their mission and in the progress of their country.

On the continental level the decision to move forward to an economic community has brought out the need to first create a well-organized intellectual and cultural community, eager to fathom the eternal truths concerning man and society. This is the mission of the university in our time.

Research

Among the major developments in the five-year period under review is the recognition of research as essential to development in the Americas, and this is reflected in the decisions of the Chiefs of State and the activities of public and private organizations. The urgent need to modernize institutions and systems in order to be able to apply the recommendations of science and technology has been acknowledged. We wished thereby to emphasize that, though the countries of the region have a varying knowledge of the new technology, a knowledge that diminishes the further one moves into the rural areas -- they are nevertheless unable to put it at the service of their people. What is more, those decisions have reaffirmed what is a basic tenet: that unless there is due respect for the cultural traits of a society, its history, way of life, currents of public opinion and tradition, its beliefs and superstitions, the most outstanding scientific advances can make no headway and therefore cannot benefit the communities.

It has been shown that as they are conceived today the health sciences cover a range that runs from molecular biology to social biology, the latter including economics. With this conception there can be no conflict between pure or basic research and applied or practical research. To the extent that all new knowledge or experience helps directly or indirectly to humanize development and contributes to the well-being of human beings, it is genuine and authentic research. From a moral standpoint, what is important is not where research is done -- whether in the laboratory, the hospital, or the community -- but whom it benefits and how they benefit. The greater the suffering and the anxieties it mitigates and the more it contributes to the happiness that each individual aspires to, the more meaningful it is.

In short, Government supported research is today one of the basic tools for protecting, promoting, and restoring health. At the international level, research forms part of the policy and the activities of the World Health Organization and the Pan American Health Organization.

In their Declaration the Chiefs of State emphasized the urgent need to apply modern technology and science to development and to undertake national research programs, that is, programs geared to the society concerned and, wherever possible, original. It is clear that this pronouncement covers the "life sciences", especially the sciences of human beings as biological units and as social beings.

There will have to be close coordination between the Program of Education, Science, and Technology of the Organization of American States and that of the Pan American Health Organization in all projects dealing with subjects of interest to PAHO.

What PAHO has done in the field of research [+] is in line with the foregoing considerations, and represents a significant contribution to the sciences and arts of health. Its research studies deal with problems of basic importance for the Continent, and the results have opened up new prospects for deepening our knowledge of reality. We will refer to some of them later on. This experience is reflected in "Science Policy in Latin America" approved by the Governing Bodies of the Pan American Health Organization.[++] That document pointed out that "the development of science and the use of science to aid man depends more on an understanding society than on an affluent society." [+++] In other words, the capacity to undertake research depends on the availability of understanding and a vocation and not only on the availability of funds. The number of talented scientists in the Americas is increasing, and they constitute the potential wealth of the region. The future of research depends on the decisions of the political authorities and on the quality of the universities. The need to institutionalize the relationships between Governments and science, between decision-making and specific knowledge, has become evident. If the ultimate objective is well-being, everything society possesses must be directed towards and organized for that purpose.

A study of the migration of scientists, engineers, and health personnel from Latin America shows the magnitude of the "brain drain", which is more serious for some countries than for others. It is the responsibility of the

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[+]PAN AMERICAN HEALTH ORGANIZATION. Research and Progress, 1968, Res. 7/12

[++]PAN AMERICAN HEALTH ORGANIZATION. Science Policy in Latin America, Scientific Publication No. 119, 1965.

[+++]Ibid., p. 5

Governments and of the universities to reduce the size of the problem.[+] It is recognized that it is an inherent trait of living beings to migrate, either temporarily or permanently, from one place to another. In a world which has enormously reduced distances, increased communications, and stimulated the imagination, it is not surprising that persons travel and emigrate. Nevertheless, if a society values its members, it must create incentives to keep them put and enable them to pursue their vocation in the society that trained them.

A recent updating of the report shows that in some countries the situation remains unchanged; in others, it has improved except in the case of nurses.[++]

We wish to underscore the work of the PAHO Advisory Committee on Medical Research, which is composed of outstanding scientific personalities from the countries of the Americas. Its annual examination of policy and current programs and studies has made a great contribution to the decisions taken by the Governing Bodies with respect to research.

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So far we have commented on some of the various aspects of the Charter of Punta del Este and the Declaration of the Presidents of the Americas directly or indirectly related to health as a social service. We have distinguished the principles and instruments those documents recommend for organizing resources and satisfying the health needs of each country and each community, such as planning, organization and administration, education and training, and research. We have also directed our attention to various declarations of the Chiefs of State concerning economic and social development. Hence our references to the Latin American Common Market; to increasing intra-regional trade; to modernizing rural life; to the adoption of methods for improving the amount and quality of foodstuffs; to the extensive application of the contributions of science and technology; to education at all levels; to the development of geo-political areas so as to benefit large sectors of the Continent; to the promotion of essential economic infrastructure projects covering several countries. Our purpose has been to show or enunciate the role of health activities and, as the Chiefs of State decided, the need for health services to participate in activities as early as the pre-investment phases.

[+] PAN AMERICAN HEALTH ORGANIZATION, Migration of Health Personnel; Scientists and Engineers from Latin America, Scientific Publication No. 142, 1966.

[++] PAN AMERICAN HEALTH ORGANIZATION. Advisory Committee on Medical Research. Report to the Director. Res. 6/21, 1967.

We have paid particular attention to the relations between population and development, not only because they have been a subject of public debate during the period since the last meeting of Ministers in 1963, but also because they are at the basis of all economic and social planning.

We believe that these considerations constitute a true frame of reference for health activities as we conceive of them today, and we believe that projections up to the end of the present century should be made. There is no activity for the protection, promotion, and restoration of health which does not find a place in the undertakings, programs, and instruments for development that we have examined. But at the same time, those programs cannot be carried out successfully if they do not provide for activities aimed at the prevention and treatment of the diseases of the persons who take part in or benefit from the programs.

We shall now deal with the goals of the Ten Year Public Health Plan of the Charter of Punta del Este and the objectives of the Declaration of the Presidents in order to establish specific measures for achieving them. As our starting point we shall take the results obtained so far by each Government and the Continent as a whole,[+] the experience acquired in each program, the contributions of science and technology during the same period, economic and development trends, and the prevailing trends of public opinion as reflected in community demands.

[+]PAN AMERICAN HEALTH ORGANIZATION. Facts on Health Progress. Scientific Publication No. 166, September 1968.

III. CONTROL OF COMMUNICABLE DISEASES

1. General

Infection, in its widest sense, continues to be an important direct or indirect cause of sickness and death both in the technologically developed and in developing societies. The progress in diagnosis due to advances in microbiology and biochemistry is obvious, as is the progress in treatment due to the introduction of antibiotics and chemotherapeutic agents and in control due to new immunization systems and the use of insecticides; but in spite of it, infection is still important, as is shown by morbidity and mortality rates. The principal expression of infection is the communicable diseases, which continue to be a significant health problem in the Americas as in other parts of the world.

The relative importance of the communicable diseases in relation to health is nevertheless changing, because of the above-mentioned advances in science and technology, their application by means of systematic programs, education, and the greater knowledge of the diseases that increasingly larger sectors of the population now have, and the improvement in the economy and the increase in the funds devoted to health - in a word, to development in general. On the other hand, the hazards arising from infections with natural foci have increased because of the expansion of international trade and of the transport of live animals and food products, agricultural and industrial development, and the penetration into and exploitation of virgin land. Such infections include parasitic diseases in various parts of the world. Another point is that new diseases have been identified for which no methods of prevention and control existed.

If the prevalence of the commonest communicable diseases in the Americas in the last twenty years is examined in the light of what information is available[+], it will be seen that considerable progress has been made. The great pestilences are disappearing. In this century not a single case of cholera has been notified, except for two laboratory infections in 1965 in the United States of America. Urban yellow fever, for a long time one of the great scourges of tropical, subtropical and even temperate parts of the Americas, has been controlled, the last patients having been diagnosed in Trinidad in 1954. Nevertheless, jungle yellow fever is firmly established in the forests of the river basins of the Amazon, Magdalena and Orinoco, from which the virus spreads from time to time and gives rise to epizootic outbreaks with repercussions in man. A solid and long-lasting immunity is provided by a vaccine that is available in adequate amounts. In recent years plague has been on the increase in some regions, especially in Ecuador and Peru, but the total number of cases fell considerably in 1967. In the decade 1958-1967 the decrease in the number of cases of smallpox notified was 54 per cent as compared with the previous decade 1948-1957. The number of cases of louse-borne typhus has continued to decrease, the disease at present being limited to the mountainous parts of Mexico and the Andean area.

[+]PAN AMERICAN HEALTH ORGANIZATION, Special Meeting of Ministers of Health of the Americas, Present Status of Communicable Diseases in the Americas, Working Document REMSA/4, 1968.

In spite of these favorable trends, the fact that the incidence of acute and chronic communicable diseases is high in Latin America and in the Caribbean Area in comparison with what it is in developed countries shows that preventive measures of proven value are not applied sufficiently widely to control or interrupt their transmission. Outstanding examples of this are children's diseases (such as diphtheria, whooping cough, mumps, poliomyelitis, and tetanus neonatorum); tuberculosis, leprosy, and venereal diseases; and rabies and other zoonoses. In the case of Chagas' disease more effective treatment methods and less costly control measures need to be discovered through research.

There is thus greater knowledge of preventive and curative methods for the common diseases than is actually being applied. This is the immediate task, and to carry it to a successful conclusion it is essential to consider the characteristics of the problem within the countries themselves, in the different communities, in the light of the organization of the health services, the coverage of the national territory, the availability of human, material and financial resources, and the possibility of increasing such resources in proportion to the magnitude of each problem. To deal quickly with epidemic outbreaks efforts must be concentrated; but to prevent them and to keep the population free from them, health units, however small, are essential in all the areas where human beings live.

To make the best use of the available resources, it is important to establish a list of priorities as follows:

1. The first depends on the availability of effective methods for the eradication of the vector or the disease, as in the case of malaria, smallpox, yaws, measles, or Aedes aegypti.

2. The second covers diseases for which proven methods of control make programs feasible. Examples of such diseases are tuberculosis, leprosy, diphtheria, whooping cough, tetanus, plague, poliomyelitis, rabies and venereal diseases.

3. The third covers such infections as Chagas' disease, filariasis, onchocerciasis, hydatidosis, schistosomiasis, and other parasitic endemic diseases.

4. In the fourth group may be included other diseases such as louse-borne typhus, which is a potential hazard.

An urgent need is for ways and means of improving and speeding up the diagnosis of the common communicable diseases - a diagnosis that should be of the cause but also, if possible, of the ecological factors involved. The training of epidemiologists, microbiologists and parasitologists needs to be improved and their numbers increased; laboratory services should be created or strengthened in a regionalized system; a larger number of technical staff should be trained in the various disciplines; departments for the epidemiologica

study and control of communicable diseases should be expanded in all branches of the health services and equipped with at least the minimum of resources for continuous work, particularly with effective vaccines and sera in sufficient quantity; and methods and techniques should be modernized when required. On such a basis a fresh drive is possible to reduce the health problem of the common communicable diseases in the Americas in the next twenty years to being a minor one.

RECOMMENDATIONS

1. That the Governments of the countries of the Americas organize or expand their epidemiological services responsible for planning, conducting, and supervising communicable disease control or eradication programs, according to national and regional priorities, and pay particular attention to the establishment of surveillance services.

2. That the Governments organize or expand public health laboratory services, which are a basic tool in the control of communicable diseases.

3. That in communicable disease control programs efforts be made to reach and maintain a useful level of coverage of the susceptible population through better use of personnel and equipment so as to reduce the cost of operations but without reducing the efficiency of the program.

4. That the Governments promote and support basic and applied research designed to lead to a better knowledge of activities for the prevention and control of communicable diseases.

5. That the Governments promote and stimulate the training of epidemiologists and personnel in methods for the diagnosis, prevention, and control of communicable diseases.

6. That the countries that are more advanced in their knowledge and control of communicable diseases provide the countries that need it with technical assistance.

2. Smallpox

Between 1958 and 1967 the countries of the Americas notified the World Health Organization and the Pan American Health Organization of 61,088 cases of smallpox. During the last five years 92 per cent of the reported cases came from Brazil; this country is therefore the key country in any attempt to erradicate smallpox from the Continent.

> "An effective vaccine against smallpox has been available for more than a century and a half, and if it is applied systematically and in an organized manner, it will provide complete protection of the population. There is no doubt that the eradication of smallpox from the Americas can and should be achieved.

> Today there is a sufficient amount of good quality vaccine available for the purpose. Furthermore, all the countries have sufficient technical resources in their health services to complete the smallpox eradication program and to maintain freedom from the disease."[+]

So said the Ministers of Health at their Meeting in 1963. We agree with their views and reaffirm the goals they set. The possibilities are even better today as a result of Resolution WHA19.16 of the Nineteenth World Health Assembly, in which the program and budget estimates for the worldwide eradication of smallpox were approved.

In the Americas all the conditions required to achieve such an objective are present. The only reservoir of the disease is man, and vaccination protects for some years. All that is required is systematic, well-organized immunization programs for the population.

Smallpox can be eradicated from the Americas. That it has not been done so far is due to a great variety of factors, the most important of which are incomplete coverage of the population because of insufficient health services, lack of adequate priority, and economic and administrative difficulties. The funds required are relatively small when compared with the costs and particularly the sufferings arising from the continual presence of the disease. The resources needed to keep the disease from entering countries that are free from it are high; hence the interest of such countries in its eradication from the Americas. For these reasons it follows, as is the rule in eradication campaigns, that the efforts put forth by countries should be joint and, ideally simultaneous when they embark on immunization programs and on the series of measures needed to reduce gradually and then eliminate the disease.

The plan of operations of each Government is prepared with and can rely on the collaboration of the World Health Organization and of the Pan American Health Organization. It is agreed that priority should be given to countries where smallpox is indigenous, especially to Brazil and to countries that have already eradicated it but, sharing a common frontier with infected countries, need maintenance and epidemiological vigilance programs. All Governments are recommended to keep a high proportion of their population immune to smallpox. The greater the movement of people between countries in the Continent and other parts of the world, the greater the need for vaccinatic

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[+]PAN AMERICAN HEALTH ORGANIZATION, Task Force on Health at the Ministerial Level, Official Document No. 51, April 1964, page 18.

RECOMMENDATIONS

1. That it should be reaffirmed that the eradication of smallpox, as part of the world program, is one of the most important priorities of countries of the Americas and of the Pan American Health Organization.

2. That, with a view to eradicating smallpox from the Americas, Governments should establish and maintain an immunization program with adequate funds that should cover not less than 20% of the population, including 80% of the children born in any one year.

3. That countries that have eradicated smallpox should establish well-planned programs of epidemiological surveillance and maintenance, with special stress on the investigation of suspect cases capable of reintroducing the disease.

4. That thanks should be expressed to countries that have generously donated supplies of smallpox vaccine, and that the wish should also be expressed that other countries follow that laudable example.

5. That the Pan American health Organization and the World Health Organization should continue to provide the countries with technical and material assistance to enable them to maintain effective eradication programs.

3. Poliomyelitis

The possibility of establishing solid immunity has led to important changes in the characteristics of poliomyelitis mortality and morbidity. The information available[+] shows that, in 1955, 30,000 cases and more than 1,000 deaths were reported in North America. In 1966 the number of reported cases had fallen to 166 and the number of deaths to 9. These results were due to immunization programs and the motivation and interest of families in Canada and the United States of America.

In Middle America, the mortality rate fell from 5.2 per 100,000 population in 1955 to 1.9 in 1967. This reduction was due to the systematic immunization of millions of children in Mexico and Cuba.

In South America, with the exception of Brazil for which no information is available, the reduction in the rest of the area was smaller, from 4.1 cases per 100,000 population in 1955 to 2.2 in 1967. These results were due to the oral vaccination with live attenuated virus of a varying number of children in the different countries.

[+]PAN AMERICAN HEALTH ORGANIZATION, Special Meeting of Ministers of Health of the Americas, Present Status of Communicable Diseases in the Americas, Working Document REMSA/4, 1968.

The epidemic of 1967, which affected various countries in the Pacific region of the Continent and required the adoption of emergency measures, is to be regretted. It brought out the need for a Continent-wide program to prevent new outbreaks; to ensure and maintain a satisfactory immunity level; to organize epidemiological vigilance in order to ascertain variations in the immunity level for each type of poliomyelitis virus; to have on hand sufficient quantities of modified live virus vaccine either to interrupt transmission during epidemics or for regular vaccination programs; to establish a network of laboratories in the Continent for diagnosis and virus typing, determination of the status of immunization in population samples, epidemiological studies, education and training.

These are the bases for a program which should be supported by all the Governments and be assisted by the Pan American Health Organization when requested. If that were done, it would be possible to substantially reduce the incidence of poliomyelitis in the Americas in the next few years.

RECOMMENDATIONS

1. That in order to achieve an adequate reduction in the incidence of poliomyelitis in the Americas the Governments establish national and regional poliomyelitis vaccination programs.

2. That the goal of the program be the immunization of 80 per cent of the susceptible population in the shortest possible time.

3. That PAHO/WHO collaborate with and assist the countries in carrying out their poliomyelitis programs when so requested.

4. That PAHO/WHO help the countries to establish good laboratory resources for the diagnosis and typing of poliomyelitis viruses.

5. That PAHO/WHO help the countries of the Americas by promoting the large-scale production of poliomyelitis vaccine to ensure that control programs have adequate supplies of the vaccine.

4. Measles

As in the case of poliomyelitis, the production of a modified live virus vaccine with considerable immunizing capacity has opened up the possibility of controlling measles. In some countries in the Americas, as has been demonstrated by the Inter-American Investigation of Mortality in Infancy and Childhood, measles is a major cause of death in children under five years of age and is aggravated by the generalized malnutrition of the population. The large-scale use of measles vaccine makes it possible to interrupt the epidemic outbreaks which occur every two or three years. The seriousness of respiratory complications, in particular laryngitis and pneumonia, and of encephalitic complications has become apparent. The more undernourished the children, the greater the lethality of measles.

We hope that vaccine production will be increased and the unit cost reduced, so that a larger proportion of susceptible persons in each country can be covered.

RECOMMENDATIONS

1. That the Pan American Health Organization assist the Governments in the planning and conduct of national measles vaccination programs to protect the largest possible number of susceptible children under five years of age.

t 2. That the Pan American Sanitary Bureau promote the production of measles vaccine so as to reduce its cost and thereby permit the routine use of this vaccine to protect susceptible persons.

5. Tuberculosis

Tuberculosis is still a serious health problem in Latin America and in the Caribbean Region, despite the advances made as a result of modern chemotherapy, BCG vaccination, and a better knowledge on the part of the public of the disease and the possibilities of preventing and curing it. The present mortality rate gives an indication both of how much has been done and of how much still remains to be done. The reduction in mortality, which was rapid in the period 1948-1954, has continued more slowly in recent years in the three regions of the Americas. In 1966 the mortality rate was 3.8 per 100,000 population in North America, 19.8 in Middle America, and 27.9 in South America. The available morbidity data also reveal the seriousness of the problem.

It is estimated that in Latin America there are at present 85 million infected persons and 1,250,000 active cases. If one out of every 625 infected persons were to fall ill, there would be 136,000 new active cases under present epidemiological conditions.[+]

The inefficiency of most tuberculosis control programs has been attributed to lack of resources. However, seeing that the cost of the chemotherapeutical treatment of a case ranges from US$5 to $10, and that each BCG vaccination costs US$0.10 to $0.20, it is clear that in actual fact all the countries are in a position to carry out activities that will substantially reduce the incidence of the disease, regardless of social, economic, and epidemiological conditions.[++]

[+]PAN AMERICAN HEALTH ORGANIZATION, Special Meeting of Ministers of Health of the Americas, Present Status of Communicable Diseases in the Americas, Working Document, Item 2.2, REMSA/4 (Eng.), page 29, 1968.

[++]WORLD HEALTH ORGANIZATION, Introduction by the Director-General to the Proposed Programme and Budget. Official Records No. 163, Geneva, December 1967, P. XVI.

The fact is that there is still a gulf between our knowledge and its application. Unfortunately, it has not been possible to completely change traditional ideas or to prevent the influence of methods used in developed areas. Institutional treatment continues to be emphasized to the detriment of preventive and curative activities in the community. The result has been the continuation of an exceedingly costly structure which has not been even capable of coping with the expected demand from the community. This reluctance to change outworn approaches and to apply scientific advances has led to expensive programs with little epidemiological effect, which concentrate specialized units in large towns at the expense of rural areas.

In the Charter of Punta del Este the Governments gave an undertaking that they would reduce tuberculosis mortality to half the rate it was at the beginning of the decade starting in August 1961. In the five years that have elapsed since then, tuberculosis mortality in both Middle and South America has not fallen to the extent expected, so that it is possible to forecast that, if the present regimen is not changed, the above-mentioned goal will not be reached. In North America the reduction has been more substantial and the possibility is greater.

Under present circumstances, the developing countries will have to increase their resources for BCG vaccination, diagnosis, and outpatient treatment, and the education and training of professional and auxiliary personnel. For this purpose, they must reduce their expenditure on the costly maintenance of existing hospitals and other inefficient services. Today the construction of facilities, exclusively for tuberculosis patients, is to be considered only exceptionally. As a general rule, tuberculosis control activities may be incorporated into those of the general health services.

This new approach will be accepted and applied the sooner the education of general practitioners and public health officials includes the elements of the epidemiology, diagnosis and control of tuberculosis, with due emphasis given to the ethical aspects of the treatment of patients and the responsibility for preventing their condition becoming chronic. In turn, tuberculosis specialists who deal with tuberculosis problems must master the principles of public health and of the organization, administration, and evaluation of tuberculosis control programs.

As the Ministers of Health declared at their Meeting in April 1963:

> ".....the aim pursued is to attack tuberculosis effectively and economically by the most rational application of available knowledge and resources, in accordance with the local technical social and economic conditions, within a broad public health program. The objective is to eliminate tuberculosis as a public health problem as rapidly as is compatible with the over-all public health needs in each country."[+]

[+]PAN AMERICAN HEALTH ORGANIZATION, Task Force on Health at the Ministerial Level. Official Document No. 51, April 1964, P. 17.

RECOMMENDATIONS

1. That the Governments of the countries of the Americas continue to give the highest priority to the control of tuberculosis in national health programs.

2. That they place greater emphasis on immunization, diagnosis, and outpatient treatment and reduce expenditures on hospital services and others with little epidemiological effect.

3. That they extend tuberculosis control activities to cover the whole country and incorporate them into the work of the basic health services.

4. That they continually evaluate the results of activities so as to ensure that the most efficient methods and techniques are used.

5. That they strengthen the training of professional personnel specialized in tuberculosis epidemiology and in the formulation, execution, administration, and evaluation of tuberculosis control programs.

6. That medical schools give the necessary importance to the teaching of tuberculosis and provide the general practitioner with a knowledge of modern concepts of prevention, epidemiology, diagnosis and treatment of that disease, including the basic principles of health education which ensure the continuity of the treatment.

7. That the Pan American Health Organization and the World Health Organization continue to assist the Governments in the formulation of programs, conduct of operations, research, and personnel training.

6. Leprosy

Leprosy exists in all the countries of the Americas with the exception of continental Chile. The true magnitude of the problem is unknown because the available information is deficient.

It is estimated that there are more than 400,000 cases in the Western Hemisphere. Nevertheless, according to the data reported to the Pan American Health Organization by 26 countries and territories, there were 174,615 leprosy patients on the active register at the end of 1967. Of these 77 per cent were under control. In only 69 per cent was the clinical form known. Of these 64,531 or 53 per cent were of the lepromatous type, which is the form with the greatest transmission potential; 26,283, of the tuberculoid type; 27,910, indeterminate; and 1,735 came under other clinical forms. The number of registered contacts in 16 countries was 325,940, of whom half were under control. In 1967 a total of 5,510 new cases of leprosy were discovered in 19 countries.

Ignorance of the real magnitude of the problem is due in some measure to important gaps in our knowledge of the characteristics of Mycobacterium leprae, and of the pathogenesis and the epidemiology of the disease. Only recently has it been possible to cultivate the leprosy bacillus on certain laboratory animals. So far, it has not been possible to cultivate the causative organism in vitro. The period of incubation, mode of transmission, and the factors and circumstances determining the infection are unknown. A drug belonging to the sulfone group (DDS) has proved to be the most effective for treatment and has very few side effects. Trials of new long-lasting products, which will facilitate ambulatory treatment, are under way.

This is the background to present and future research on the biology, therapy, and epidemiology of leprosy.

Despite lack of knowledge of the essential facts for interpreting the dynamics of the disease, sufficient knowledge and effective methods are available to extend leprosy control in the countries in which it is prevalent. Our concept of the disease and the attitude of communities towards leprosy patients has radically changed. Today we speak of hospitals and not of leprosaria, of patients and not of lepers. The period of isolation of patients has been considerably reduced and, once the period of infectivity is passed, they return to their communities to lead a normal life. Leprosy control has been accepted as a routine activity of health services. The periodical supervision and health education of patients and their contacts is regarded as essential to the early diagnosis of new cases, which is designed to break the chain of infection and to prevent deformities. Renewed emphasis has been placed on physical and social rehabilitation, which should now be an integral part of any leprosy control program.

Generally speaking, the Governments are confronted with three types of problems in leprosy control: to ascertain the extent and characteristics of the disease and to formulate a program; to organize technical and administrative structures for achieving the program objectives, bearing in mind the factors involved in the dynamics of the disease in each country and region; finally, to train professional and auxiliary personnel in all aspects of diagnosis, control methods and program administration.

Leprosy control programs as at present conducted are unable to change the natural course of the disease. However, we believe that this can be done if programs are planned, formulated, organized, and evaluated in accordance with methods that ensure that the resources used are the most efficient, that they produce the maximum return at the lowest cost, and that activities are carried out at a useful level and in a relatively brief period of time. If this is done, it is to be expected that the incidence and prevalence of the disease will be reduced. In this connection the experience acquired by Argentina, Ecuador, and Venezuela has been very valuable, and was analyzed at the Seminar on Administrative Methods for Leprosy Control Programs which was held in July 1968 in Guadalajara, Mexico, under the auspices of the Pan American Health Organization. The conclusion reached by that Seminar can serve as a basis for programs designed to systematically and progressively reduce the incidence of leprosy in all the countries of the Americas and other regions of the world in which the disease is prevalent.

RECOMMENDATIONS

1. That the mere presence of leprosy in a country justifies its consideration as a high priority public health problem, since control is feasible even with limited resources when its prevalence is not too great. This opportunity should not be missed.

2. That the Pan American Health Organization and the World Health Organization help the Member Countries of the Americas by giving them technical and material assistance in the planning, conduct, and evaluation of their national leprosy control programs; endeavour to coordinate the activities being carried out in the various countries; and request assistance from UNICEF.

3. That basic and applied research aimed at solving substantive questions concerning the bacteriology, epidemiology, treatment and control of leprosy be encouraged and supported.

4. That due emphasis should be given in schools of medicine to the prevention and control of leprosy, for which diagnosis, treatment, and knowledge of its epidemiology are essential.

7. Parasitic Diseases

The parasitic diseases, excluding malaria, are widely distributed in the Americas and are often very prevalent. A vast majority of the people harbor parasites and very many of them harbor more than one species. Aside from infections with schistosomes and the parasite causing Chagas' disease, which will be mentioned later, there are millions of persons infected with Ascaris, Amoeba, Onchocerca, Leishmania, Hookworms, Toxoplasma and a number of other parasites. The parasitic infections are often so inapparent that some health authorities may ignore them, seemingly because they are so familiar. They are often insidious in their effects, weakening their victims rather than causing obvious disease or death. Nevertheless, they take an immense toll especially among the poor and neglected. The parasitic diseases demand much more attention than they have been receiving.

Some countries have sound control programs for one or more of the parasitic diseases but others have no really effective program for any of the parasitic infections. Indeed, in some areas the prevalence of the most important parasitic diseases is scarcely known and in few has their public health significance been adequately estimated.

One of the main obstacles to progress in the control of the parasitic diseases is the possible underestimation by some health planning authorities of the public health and economic importance of the parasitic diseases.

Programs for the prevention of parasitic disease should be given increased consideration. Control of some of them, such as ascariasis and

hookworm disease, could be accomplished through community health services where the specific measures can be integrated with sanitation and health education programs. Others, such as schistosomiasis, Chagas' disease, and onchocerciasis, which require campaigns using special techniques against the vectors over a large area, must be prevented by a special organization operating on a regional or national basis.

Countries not having preventive programs should consider pilot projects for the more important parasitic diseases. These can serve as demonstration areas and as centers for in-service training.

Since research is absolutely essential for an effective long-term control program, provision should be made to aid research, especially when it is oriented towards the solution of the problems involved. Personnel devoted to a research program can be used to great effect in collecting basic data leading to a well-conceived program and they can also provide objective evaluation of its results.

Because the number of well-trained and experienced specialists on the parasitic diseases has fallen far behind the number needed, means should be found to attract, train, and retain high-grade people.

Since schistosomiasis is one of the two most important parasitic diseases in the Americas, after malaria, it is appropriate to record certain facts concerning it. Schistosomiasis affects between 6 and 7 million people in the Americas. Recently it has been said that about 119,000 persons are totally disabled by it and that about 1.5 million are partially disabled. A conservative estimate has placed the economic loss due to this disease in Brazil at about $60 million per year. The disease continues to spread, and development schemes promise to increase the problem greatly in the future unless counter-measures are taken.

RECOMMENDATIONS

1. That increased support to parasitic disease control programs be given by Governments and by the Pan American Health Organization and the World Health Organization.

2. That training in the diagnosis and prophylaxis of the more important parasitic diseases be encouraged.

3. That research on the parasitic diseases, especially that directed toward a better understanding of preventive and control measures, be encouraged.

4. That the countries of the Americas in which schistosomiasis is a major health problem review the control programs for the purpose of accurately measuring progress and for the purpose of discovering more efficient techniques.

5. That the Pan American Health Organization and the World Health Organization assist countries to determine the magnitude of the problem of schistosomiasis, to collect the data necessary for a control program, and to plan a control program.

6. That the Pan American Health Organization collaborate with Governments at their request in the training of personnel in schistosomiasis survey and control methods.

8. Chagas' Disease

Chagas' disease occurs in almost every country of the Americas. However, its distribution and prevalence are so far not well known. Its prevalence varies greatly from one locality to another, but reaches almost 100 per cent in some places. It is estimated that seven million persons are infected with Trypanosoma cruzi. However, this figure may be an underestimation.

The morbidity and mortality caused by Chagas' disease are even less well known than its prevalence, although there can be no doubt that in some countries it is a major cause of morbidity and death. It is probable that at least 900,000 persons in the Americas have cardiopathy due to the infection. Many are doomed to die in the prime of life from cardiac failure; others are handicapped by cardiac insufficiency. Congenitally transmitted Chagas' disease affects the development of young children and is a cause of death. Thus, to a public health problem of first magnitude are added economic effects of no small consequence.

Although infection is usually a rural problem, it is a threat even in urban centers since it can be transmitted by blood transfusion, by donors infected in a rural environment.

Since the disease is aggravated by ignorance, poverty and insanitary housing conditions, the basis of its control is education and economic and social development. Improved housing and the construction of new houses unsuitable to triatomids should considerably reduce the frequency and seriousness of transmission of the diseases. The enormous investment this entails is to be seen in the fact that the estimated number of dwellings in the area affected by Chagas' disease in Latin America is about 7 million. A proportion of these can be repaired, and efforts in this direction are under way in some countries. It is necessary to determine the method which produces the maximum effects at the lowest cost since the objective is to protect the population from the attacks of triatomids. Due consideration must be given to the customs of the community with respect to the type of housing and the nature of the building materials used. In any event, this is a program in which a well-motivated population will cooperate, and their cooperation is essential to the success of the program. Furthermore, priority should be given in the house building policy of Governments to areas in which Chagas' disease is endemic, and either domestic resources or external capital should be used for such programs.

Chagas' disease can be controlled, using the information and weapons that we have at this time. The preventive measure that gives the most rapid result is destruction of the vectors by spraying insecticides in and about the houses. This method has been shown to drastically reduce the insect population and transmission of the infection even when done at widely spaced intervals.

In spite of what has been said, a number of matters need to be investigated in connection with the distribution and prevalence of the disease, the morbidity it causes, and its dynamics and ecology. Methods of diagnosis and control need to be improved, an effective drug developed, and the immunity mechanism and the pathogenesis elucidated. Meanwhile, to the extent funds are available, control programs must be extended to at least the highly endemic areas.

RECOMMENDATIONS

1. That all countries be encouraged to determine by standard sampling methods the distribution, prevalence, and biology of the vectors; the distribution and prevalence of human infections; and the significance of domestic and wild animal reservoirs.

2. That all countries, after collection of the data mentioned, determine the morbidity caused by the disease by study of a sample of those found to be infected (sero-positive).

3. That PAHO and WHO assist countries on request in the planning, execution, and evaluation of their control programs.

4. That research workers be encouraged to develop new information in all aspects of the problem but especially on subjects related to the prevention of the disease.

5. That PAHO and WHO take the lead in the development of adequate basic information on the subject and on the bases for more adequate preventive programs.

6. That PAHO and WHO stimulate country projects for the epidemiological study of the disease, including standardized diagnostic techniques and evaluation criteria.

7. That PAHO and WHO consider the designation of reference laboratories for training technicians to produce standard reagents and to advise on technical problems.

9. Venereal Diseases

A study by the World Health Organization on world trends in the venereal diseases[+] carried out during the period 1950-1960 showed that there had been a significant persistent increase in the incidence of early syphilis and gonorrhea in all parts of the world during later years of the decade. Out of 105 countries and territories 76 showed an increase in early syphilis, and out of 111 countries and territories 52 showed an increase in gonorrhea.

The Americas are no exception to this trend, although the true magnitude of the frequency of the venereal diseases is not known. The reason for this is that data are incomplete; notification practices vary from country to country; diagnostic facilities are inadequate; and investigation and prophylactic methods are often antiquated.

In spite of this, both syphilis and gonorrhea rank among the ten principal diseases for which notification is compulsory in the Americas. Data from out-patient clinics indicate that there are about four cases of gonorrhea for every case of syphilis. Because of the effectiveness of treatment, however, mortality from syphilis has been considerably reduced, the figures for 1966 in North, Middle and South America being respectively 1.1, 1.7, and 1.3 per 100,000 population.

As in other countries of the world, soft chancre, lymphogranuloma venereum and granuloma inguinale occur in the Continent, but relatively less frequently. The rate for the first-mentioned of those venereal diseases amounts to half of that for syphilis.

The increase in syphilis and gonorrhea in recent years - in some countries it has exceeded the peak reached in the years immediately following the last World War - is the more serious because it is concentrated in the younger age groups. Many of the factors involved in this problem are social in natura and derived from changing patterns of behavior.

In spite of the existence of very effective drugs, it has proved impossible in both the developed and developing countries to discover and treat enough patients in the communities to achieve control of syphilis and gonorrhea. Contributing factors in this situation are a certain degree of complacency in the population, persuaded of the value of the treatment available; the greater mobility of the people, which increases the spread of the disease and makes notification difficult; and the lack of systematic control programs which should be based on the same principles as govern those on communicable diseases in general. These factors were carefully analyzed in a seminar on venereal diseases sponsored by the Pan American Health Organization and the National Communicable Diseases Center of the United States Public Health Service held in October 1965 at PAHO headquarters.[++]

[+] WORLD HEALTH ORGANIZATION, International Work in Endemic Treponamatoses and Venereal Infections, 1948-1963, Geneva, 1965, Page 2.

[++] PAN AMERICAN HEALTH ORGANIZATION, Seminar on Venereal Diseases, Scientific Publication No. 137, 1966.

Present experience enables preventive programs to be extended at least in the big urban centers of the Continent, where the incidence, especially of early syphilis, is for obvious reasons higher. Meanwhile there is a need for more research, coordinated internationally, on methods of diagnosis and treatment, as well as for epidemiological studies.

RECOMMENDATIONS

1. That the Governments of the countries of the Americas unite their efforts with a view to establishing a continental venereal disease program to significantly reduce the incidence and prevalence of those diseases, especially syphilis, in a relatively short period of time.

2. That countries that are more advanced in their knowledge and control of venereal diseases give countries that need it technical assistance for initiating or improving their respective programs.

3. That the Governments give special attention to the training of personnel at all levels in venereal disease epidemiology and methods of control and more particularly in contact investigation as an important tool for the prevention of the disease.

4. That the Pan American Health Organization and the World Health Organization assist the countries of the Americas by providing them with technical and material aid, to the extent funds permit, in the planning, programming, organization, execution and evaluation of venereal disease control programs; and that at the same time they serve as the coordinating agency for the programs of the countries, so as to ensure that they attain the same level throughout the Continent and move forward in a coordinated manner.

5. That Governments be requested to undertake health education activities directed towards changing the patterns of those habits which are responsible in part for an increase in the incidence of these diseases.

10. Zoonoses

Among the many zoonoses those that will be considered because of their importance for human health and for the economy are rabies, brucellosis, hydatid disease, and bovine tuberculosis. Their importance and the great interest Governments have in combating them are explained by the economic losses for which they are responsible, the loss of essential proteins for adults and children, and the possibility of controlling them,as well as by their high frequency. Not only do they have grave socioeconomic consequences, but they also present a serious obstacle to the free movement of animals and animal products between the countries of the Continent. They will be considered separately in the order given above.

* * *

10.1 Rabies

In the last ten years 2,203 cases of human rabies have been notified in all the countries of the Hemisphere. In domestic animals the average annual incidence is approximately 10,000 cases, not including bovines, and this is estimated to represent 10% of the real incidence.[+] A contributing factor in this undernotification is the lack of adequate means of diagnosis. Of the cases notified 90 per cent were caused by dog bites, dogs being the most important carriers and the chief reservoir of the disease. The risk of dog bites, particularly of bites by stray animals, has been increased by population movements from the rural areas to the towns, which has been accompanied by an increase in the dog population. That this is the situation is shown by the administration of antirabies treatment to more than 25 per cent of those bitten because of the impossibility of identifying the animal involved. It is estimated that approximately half a million persons are vaccinated annually in the Americas, and the expenditure on administering antirabies treatment in many cases exceeds the outlay on control of the disease in animals.

Human cases transmitted by Chiroptera have also been notified in five countries. It is also estimated that cattle mortality from paralytic rabies transmitted by vampire bats exceeds 500,000 head annually, the losses being approximately $50 million each year.[++] These facts justify the organization of programs based on the immunization of susceptible animals and on vector control. Such programs should, as far as possible, be self-financing, as should programs to prevent human rabies by immunizing at least 70% of the dog population, controlling stray dogs, and carrying out effective education of the public - these activities being integrated into the health services. In some countries there is considerable experience of the employment of these principles in the campaign against rabies.

10.2 Brucellosis

Because of its wide distribution, the number of human cases, and the economic losses it causes, brucellosis is perhaps the most important zoonoses in the Americas. Approximately 8,000 human cases are notified annually in the Continent, a figure that represents a mere fraction of the actual number owing to the lack of adequate diagnosis of the disease in man. Most cases occur in countries where caprine brucellosis occurs, transmission of the disease taking place frequently through the ingestion of fresh milk or cheese or through contact with infected animals. In cattle the disease mostly affects milch herds in areas adjacent to the big cities in Latin America, where more than 60 per cent of the herds have been shown to be infected. Porcine brucellosis is a source of infection for man, but its effects on the economy and on the livestock industry have been very little studied.

[+] WORLD HEALTH ORGANIZATION, World Survey of Rabies IX (for year 1967), Document WHO/Rabies/68.167, Pages 12-22.

[++] PAN AMERICAN HEALTH ORGANIZATION, Special Meeting of Ministers of Health of the Americas, REMSA/INF/3 (Eng.), 1968, Page 2.

Strain 19 vaccine is effective against bovine brucellosis, and Rev. 1 (Elberg) vaccine is effective against caprine brucellosis. Both reduce the infection rate, producing resistant herds, and this makes it technically and economically possible to eliminate brucellosis by the slaughter of reactors. This situation justifies the organization of a systematic self-financing program based on domestic resources supplemented by international credit. We underline the need, in the control of brucellosis, to have standardized antigens for diagnosis, common systems for the control and use of vaccines, and common health regulations and methods throughout the countries of the Americas. It was suggested that the Pan American Zoonoses Center be responsible at the international level for coordinating the programs, advising national laboratories, training and preparing professional and auxiliary staff, and carrying out research.

10.3 Bovine Tuberculosis

Owing to the fact that it is a source of infection to man and other species, causes great protein losses, and is a serious problem for the livestock industry, bovine tuberculosis should be the subject of control programs. At present the only control method that has stood the test of time is the slaughter of reactors to the tuberculin test. Even though it may not, because of the economic effects, be possible to apply that method throughout the whole country, programs for the control of animal tuberculosis should include: an assessment of the magnitude of the problem; protection of herds and parts of the country free from the disease; eradication of infection in herds with low reactor rates so as to furnish sources of replacement; and control and/or elimination in heavily infected areas.

Countries are justified in seeking international credit in order to attempt to solve these problems, and they can count on the collaboration of the Pan American Zoonoses Center.

10.4 Hydatid Disease

The existence of hydatid disease in one or both of its clinical forms - unilocular and alveolar - has been confirmed in almost the whole Hemisphere.[+] Control of the disease involves first the education of the public, the hygienic slaughter of meat animals, and the sanitary control of dogs. The disease is responsible for heavy economic losses which greatly affect the livestock industry and reduce the supply of foodstuffs of animal origin. Human infection persists for many years, and its prevalence is favored by low cultural, social, and economic conditions. The high cost of hydatid disease is shown in the few existing studies of the losses it causes to patients, their families and the community, as calculated on the basis of hospital expenses and partial or total working incapacity. The seriousness of the problem makes it necessary to implement programs envisaging the most appropriate control measures as quickly as possible.

[+]PAN AMERICAN HEALTH ORGANIZATION, Special Meeting of Ministers of Health of the Americas, REMSA/INF/3 (Eng.), 1968, Page 5.

RECOMMENDATIONS

1. Zoonoses

1.1 In view of the social and economical impact of the zoonoses, we suggest that Governments develop appropriate measures to combat them. National health services should include in their organizations Veterinary Public Health Departments, which must establish closely coordinated working relationships with Ministries of Agriculture and their veterinary health departments in the pursuance of coordinated planning, control and research activities.

1.2 Countries should formulate plans of a permanent and continuing nature for the control of the major zoonoses and we suggest that, where necessary, they seek loan funds from the international lending agencies. In this planning and development process the countries are urged to make maximum use of the facilities and services of the Pan American Zoonoses Center, first in the planning and later in the development of personnel and techniques during the operational phases.

1.3 To coordinate activities against the zoonoses, countries should group together areas that are of like nature because of their geographic relationships, similar ecology and close relation in animal movements and establish a firm regional cooperation with a view to mutual protection against the spread of and future reinfection by those diseases.

2. Rabies

2.1 Considering the importance of the rabies problem both in its effect on public health as well as in its economic impact, the Governments should extend and initiate their programs of rabies control in accord with modern methods, and give them high priority in their national health programs.

2.2 Governments should implement national programs for the control of rabies in which the following points should be considered: massive vaccination covering a minimum of 70 per cent of the canine population; elimination of ownerless and control of stray dogs; and an energetic health education program. These programs should be, if possible, self-financed and provide for the participation of the agricultural and educational services and the municipal authorities. As a rule, they should receive material and economic support from the community.

2.3 It is indispensable that the countries be assured of the production of anti-rabies vaccine of good quality and in sufficient quantity to provide for the development of the required intensive vaccination campaigns. We recommend that the public health and animal health services be more closely coordinated in order to combine their resources and efforts in the campaign against rabies.

2.4 We recommend that the Governments increase and improve services for the diagnosis of rabies in order to improve case reporting and to avoid the indiscriminate anti-rabies prophylaxis of humans. The Pan American Zoonoses Center, at the request of Governments, will collaborate in the training of a large number of professional personnel in this field and lend assistance in the diagnosis, production, and control of vaccines and in field investigations.

3. Brucellosis

3.1 We recommend that each country institute a program for the control of bovine and caprine brucellosis in terms of its own ecological areas, using the methods that are most efficient and best adapted to its conditions and possibilities. It is suggested that as the agency specialized in the subject, the Pan American Zoonoses Center be requested to assist.

3.2 The need to standardize the brucellosis antigens and vaccines used in the various countries is stressed. For this purpose the collaboration of the Pan American Zoonoses Center can be requested.

3.3 We recommend that each country establish a system, backed by appropriate legislation, for the control and use of anti-brucella vaccines produced in national and foreign laboratories.

4. Bovine Tuberculosis

4.1 We recommend that the Governments implement programs to control and/or eradicate bovine tuberculosis in accord with the human and economic resources available.

4.2 We recommend that for the planning, execution, and future financing of these programs the experience gained in those countries which have developed control programs be used, as well as the collaboration of the Pan American Health Organization through the Pan American Zoonoses Center.

4.3 We recommend that for the development of these programs special attention be given, among other things, to the education and training of personnel; to the conduct of surveys to determine the prevalence of the disease; to the coordination of the public health and animal health authorities; to the use of approved and uniform tuberculin tests; to the elimination of reactors; and to economic incentives for producers, which are necessary to obtain their support in the development of these programs.

5. Hydatid Disease

We recommend to the Governments that they implement programs for the control of this disease which will take into consideration a continuing, intensive program of health education aimed principally at communities in rural areas; the veterinary inspection of slaughterhouses, and the sanitary control of dogs. These programs should be coordinated at the highest level between the health, agricultural and educational authorities as well as other public and private organizations.

11. Aedes aegypti

In the time that has elapsed since the Meeting of the Ministers in 1963, the program for the eradication of Aedes aegypti has remained stationary in the countries and territories where the mosquito was present and has regressed in other countries, which have again become reinfested. Among the former are the United States of America, Venezuela, Guyana, Surinam, French Guiana, and a few localities in Colombia and in the Caribbean Area where, apart from Trinidad and Tobago and certain islands, all the countries and territories are extensively infested.

In Argentina, Brazil, Guatemala, Honduras and Mexico the vector has appeared in recent years in foci of variable size but in the case of El Salvador, the whole country is infested. The Governments of all these countries have again begun to take action to eradicate the vector.

In this same period of time no cases of urban yellow fever have been reported, but an extensive epidemic of dengue was reported affecting Venezuela, Jamaica, Puerto Rico and some territories in the Caribbean Area. An enormous number of cases were confirmed, with the consequences to be expected for the economy of the areas where the incidence was highest.

There is at present no technical obstacle to the eradication of Aedes aegypti from the Americas. The reasons why the campaigns are not proceeding satisfactorily are administrative and financial in nature. Removal of those obstacles depends on whether Governments are prepared to give eradication of the vector the priority the problem deserves. The protection of infected areas solely by yellow fever vaccination is not to be recommended. In addition to the improbability of being able to maintain a sufficient level of immunity in the population indefinitely, this type of protection could turn out in the long run to be more expensive than the eradication of the vector. It is most desirable that biological and ecological research should be stimulated, and new methods be found of eliminating Aedes aegypti that would be comparable in effect to those used at present but would cost less.

Aedes aegypti has already been eradicated from nearly 80 per cent of the areas ecologically favorable to it in the Americas. That undertaking has cost millions of man-days of work in repeatedly inspecting and treating millions of houses, and represents an immense outlay of funds and efforts that has been of vital importance to the Continent. It is our responsibility to complete that undertaking without further delay, in accordance with the successive resolutions that have been passed by the Governing Bodies of the Pan American Health Organization and the Regional Committee of the World Health Organization for the Americas.[+]

[+]PAN AMERICAN HEALTH ORGANIZATION, Special Meeting of Ministers of Health of the Americas. Eradication of Aedes aegypti, Item 2.2, Working Document REMSA/4 (Eng.), 1968.

RECOMMENDATIONS

1. That the PAHO assume, with the highest priority, leadership of the Aedes aegypti campaign, in order to achieve coordination of the national programs and collaborate with the Governments, so that they may have available the necessary personnel and equipment, as well as the vital financial resources.

2. That the Governments use their influence with international lending agencies to have them include in their credit policy the provision of loans for the eradication of Aedes aegypti.

3. That the countries, directly or through the Pan American Sanitary Bureau, provide one another with mutual help for the eradication of the vector, in the form of loans or subsidies or the supply of material and equipment for the campaign.

4. That the countries now free of Aedes aegypti maintain strict vigilance to prevent reinfestation of their territories, and that the Pan American Sanitary Bureau provide such countries with the aid they require for the establishment and maintenance of their vigilance services, as well as for their periodic review to correct any defect that may be hindering their satisfactory operation.

5. That encouragement be given to research aimed at increasing knowledge of the biology and ecology of the mosquito and at developing new methods that can make the eradication of the vector easier and more economical.

6. It is essential that countries that are still infested make every effort to overcome the difficulties that up to the present have prevented the completion of programs that all the countries of the Americas agreed to carry out and approved in repeated resolutions of the Governing Bodies of the Pan American Health Organization; and that they fix a time limit for completion of the programs and notify the Pan American Sanitary Bureau accordingly.

IV. STATUS OF MALARIA ERADICATION IN THE AMERICAS

During the period 1963-1968, considerable headway was made in the continental program against malaria. The commonest and most comprehensive indicator of progress is the distribution of the population in the malarious areas, according to the phase of the eradication program. Thus, in the above-mentioned period, leaving aside the population of the countries that had eradicated malaria before 1955, the population of areas in which malaria eradication has been achieved, has doubled, from 6,737,000 inhabitants to 13,200,000, an increase of 96 per cent; the population living in areas in the consolidation phase has tripled, from 13,879,000 to 41,581,000, an increase of about 200 per cent. Numerically these two groups are equal to half the population in the regions of the Continent that were exposed to endemic malaria in 1955 when the continental program began. The population living in areas in the attack phase has increased by 15 per cent and that living in areas in the preparatory phase has fallen by 69 per cent. It is expected that, by the end of 1968, there will be no programs with areas in the preparatory phase, and that all the inhabitants of the Americas will be to some degree protected as a result of activities designed to reduce or interrupt malaria transmission. In the period under review (1961-1967) the total population in the originally malarious areas increased by 12 per cent from 100,672,000 to 112,401,000.

Activities in the problem areas, where vector resistance to insecticides made it necessary to adopt more expensive and supplementary attack measures, were seriously handicapped in recent years by lack of funds. This difficulty has now been overcome, and almost all the programs have resumed coordinated attack phase operations buttressed by the necessary special measures.

Research on the various negative factors in the problem areas continues to be sponsored by the World Health Organization. At present new insecticides, new drug formulations, and a long-lasting injectable antimalarial product are being tried out. Systems analysis with computers is being used to coordinate operations and to rapidly obtain information on the epidemiological situation.

Experience in recent years confirms the conclusion of the Meeting of Ministers of Health in 1963 that the "immediate crucial problem in our Hemisphere is still the financing of local costs". It is clear that, if eradication is to be accelerated, sufficient funds must be assigned to it and they must be supplied on time by the Governments and international agencies. Deficiencies have also come to light in administrative services and these have a serious negative effect on the conduct of programs. It is extremely important for Governments to take the necessary interests to ensure the highest possible degree of efficiency. In this program, which involves a huge investment, we must promote research on the benefits that are expected from eradication, not only in terms of a reduction in mortality and morbidity but also in its effects on other aspects of community life. With this end in view, PASB/WHO has initiated a study on the socio-economic impact of malaria and its eradication in Paraguay.

Further efforts must be made to maintain the progress already achieved in the campaign. For that purpose, there must be increased coordination of the malaria eradication services with the general health services, and the training of the staff of the general health services in malaria vigilance operations must be stepped up. At the same time, the staff of the malaria campaign must be trained in multi-purpose health activities.

The results obtained from operational research indicate that national and international agencies should continue to promote it. Experience has shown the usefulness of the exchange of information between neighboring countries as it usually deals with the solution of common problems.

RECOMMENDATIONS

1. We stress the need to intensify the efforts of Governments to speed up malaria eradication in the Americas.

2. We emphasize the need to provide funds that are sufficient and are delivered on time.

3. We recommend that special attention be given to the improvement of administrative services, until the highest level of efficiency is obtained.

4. We recommend to Governments and to international organizations that they carry out or encourage basic studies, in carefully selected areas, concerning the impact of malaria and its eradication on the population and on economic development.

5. We express our satisfaction with the increase in the population now living in areas in the maintenance and consolidation phases and the shifting of new areas into the attack phase.

6. We request the Governments to accelerate the training of personnel in the malaria eradication services in polyvalent public health activities and the personnel of the general health services in malaria vigilance activities so that they can assume the corresponding responsibilities in the maintenance phase.

7. We emphasize the need to increase the coordination of the national malaria eradication services with the general health services, to improve existing services, to increase coverage in the rural areas, and to give polyvalent health responsibilities to personnel in the malaria eradication services in areas in the maintenance phase.

8. We recommend to the Governments and to international organizations that they conduct or encourage investigations for the solution of the problems of persisting transmission of malaria.

9. We emphasize the need for the Governments to give priority in eradication activities to areas affecting the programs of neighboring countries so that their activities can be coordinated.

10. We draw the attention of PAHO/WHO to the desirability of having periodic technical and administrative evaluation of the malaria eradication programs made by independent groups and we request the Governments to implement the recommendations resulting from these evaluations.

V. ENVIRONMENTAL SANITATION - WATER SUPPLY AND SEWAGE DISPOSAL PROGRAM

The Charter of Punta del Este and the report of the 1963 Ministerial Task Force on Health gave priority consideration to environmental sanitation and, within this field, to the needs of the people for water supply and sewerage services. In the Alliance goals, the signatory Governments undertook to meet the water and sewerage needs of 70 per cent of urban and 50 per cent of rural populations. These pledges, reaffirmed by the American Chiefs of State at the Punta del Este summit meeting in April 1967, recognize that community systems of water supply and sewerage are basic to the health and the economic and social well-being of the peoples. Further, that safe water, in adequate amounts,available in homes, will reduce enteric infections and related illnesses; will decrease infant mortality; will promote cleanliness of the person, the home, and the community; and will stimulate self-respect and enhance the dignity of man.

Since 1961, the Governments of the Region have responded promptly and effectively to this public need. Progress reports by the Director of the Pan American Sanitary Bureau reflect the unprecedented achievements of the continental water-supply program, especially in urban areas, and the uniformly good progress being made on the technical, management, and financing aspects of these public works.

Under the stimulus of this program, 18 countries have already achieved the Punta del Este goal of providing water for at least 70 per cent of their urban populations; others are relatively close. Since 1961 about $1.4 billion has been committed for water-supply and sewerage works. Sixty per cent of this is current national funds - and the remaining 40 per cent represents international loans (75 per cent from the Inter-American Development Bank). In terms of the human equation, these improvements benefit 62 million urban and rural residents. On a regional basis, the urban water supply program is on schedule. The Charter goal will be achieved. On a lesser priority scale, the provision for urban sewers is progressing in reasonably good order.

With respect to rural areas, progress has been much less spectacular in providing water services in small towns and villages. While all the Governments have initiated rural water programs, rates of progress vary widely among countries, and the total continental program is lagging behind the desired time schedules. At present, 16 per cent of the 118,000,000 rural population have water services. This represents about one third of the target goal for the Alliance Decade. We urge the Governments to accelerate their efforts to promote the rural water program -with emphasis on the community self-help concept; to develop local water co-ops; and to stimulate, in each country, the establishment of a revolving-fund mechanism as stated in the Declaration of Chiefs of State. Special emphasis should be given to community organization and to mass-approach techniques.

In the Americas, man's physical environment is undergoing rapid and profound changes. Pertinent influences include population growth, increased urbanization, greater interminglings of people, and widening technological industrialization. As cities grow and industry expands, problems of water, air, and soil pollution will become more pronounced and more important. While some deterioration of these resources must be accepted as the price of progress, environmental pollution must be kept below levels which would endanger the personal health of people. Beyond the health parameter, such pollution should not reach levels which would seriously deteriorate the values and uses of these resources, particularly where the economics of an area and the general well-being of its people would be adversely affected. The changing complexities of man's environment require much broader concepts to keep in reasonable balance the total ecological system. More attention must be given to remedial measures to prevent the creation of environmental hazards, with less dependence on corrective or control actions. Each country must face the difficult task of establishing standards and control practices that will meet the needs and aspirations of the people.

Region-wide programs are well advanced to strengthen engineering education and to develop a network of university-based training and research centers. The Pan American Sanitary Bureau is stimulating and supporting these activities. Partnerships are being formed between the regulatory agencies for water-and-sewer works and the universities. Search is on for new approaches which will be more economical and more adaptable to mass applications. New legislative, administrative, financial, and institutional patterns and arrangements are emerging. The logistics of river basin developments are under study, with special attention to health related implications. Within the framework of stern economic realities, priorities and alternatives become necessities. The Pan American Sanitary Bureau is developing in Peru a sanitary engineering center to provide the Governments with expert scientific and research assistance.

In the years ahead, the Governments will have to cope with environmental problems of greater magnitude and complexity. Advancing technology will leave in its wake a more sophisticated array of human stresses. Environmental contaminants will increase and will broaden from microbiological pollutants to those having their origin in chemical substances. Long-term exposure to toxic substances will be more significant and more difficult to diagnose, with wide separation of cause and effect. The growth of cities will aggravate problems of traffic congestion, accidents, and noise hazards. Population densities and poor housing will increase the hazards of communicable diseases and problems of mental health. In industrial complexes, occupational health will require more focused attention and remedial measures.

In the future, health agencies must expand their activities to include the health-related considerations of slums, poverty, and filth; of ignorance, delinquency, and crime; and of the effects these have on the total health of people.

RECOMMENDATIONS

1. Noting that technological advances in an urbanizing society are creating unprecedented changes in the physical environment of man; and that the magnitude and complexity of these changes intensify traditional problems and create a host of new stresses affecting the health and well-being of man we propose to modify programs and practices to meet new trends. We urge the Pan American Sanitary Bureau to continue to intensify the attention it is giving to new problems, and to adjust and utilize its resources to broaden its assistance to the Governments.

2. We urge the Governments to continue to give the highest priority to programs to provide community water-supply and sewerage services, in order to maintain the unprecedented progress now beingmade. Special considerations include:

a) In urban areas, actions should be intensified to ensure that the goals established in the Charter of Punta del Este are attained;

b) For rural areas, these programs should be made more adequate and intensified, where necessary, and accelerated so as to approach the goals established in the Charter of Punta del Este;

c) Newly developed methods and procedures in management and administration, initially devised for water agencies, should be applied in the management of sewer systems;

d) Water and sewerage agencies should be given sufficient authority and autonomy to permit them to carry out assigned responsibilities, <u>including proper coordination with appropriate Ministries.</u>

e) In order to provide for effective organization and management, our Governments are urged to modify policies, if necessary, in order to use international funds to strengthen the administrative structure responsible for water and sewerage programs.

3. In order to improve planning and methods of financing water and sewer systems, the Pan American Sanitary Bureau should broaden its assistance to the Governments in developing mass-approach techniques and in establishing and using revolving-fund mechanisms. Studies should be made to determine the percentage of the Gross National Product that might be adequate and appropriate for investment in community water and sewer systems, especially in rural communities.

4. We request the Governments to give greater emphasis to programs of education and training of professional, technical and auxiliary personnel in the field of environmental health. We recommend to the universities that they intensify teaching of public health engineering in their engineering, architecture and related departments, for the purpose of satisfying the growing demand for the human resources needed to design environmental engineering

woks; and in the application of practical and efficient methods of control.

We request the Pan American Sanitary Bureau to continue to support programs of education, training, and research that are going forward in the countries.

5. Our Ministries of Health should play a leading role in developing policies and practices to control air and water pollution; to reduce occupational hazards through stronger programs of industrial hygiene; and to plan and support the execution of housing programs, including revolving-fund systems and appropriate integration of essential sanitary services and vector control practices.

6. In the more densely urbanized areas, our Ministries of Health should broaden their traditional programs to include the health effects of such problems as noise, congestion, accidents, and poisoning. Where practical, preventive measures should be used to minimize adverse effects on the ecological system, rather than depending entirely on corrective or control actions.

7. Our programs should take into consideration the health implications of slums, poverty, and filth; of ignorance, delinquency, and crime; and the effects these have on the total well-being of people.

8. In order to cope with the expanding health and economic problems of solid waste management, the Pan American Sanitary Bureau should encourage international lending agencies to make to the Governments, under favorable terms, loans for financing equipment and installation of facilities.

9. In order to improve the programs of environmental sanitation it is necessary to strengthen the community organization and self-help concepts, especially in rural areas.

10. Our Ministries of Health should have enough competent technical personnel and adequate regional and national laboratories to supervise water quality and related sanitary controls.

11. Our Governments should undertake activities at the national level in connection with the problem of pollution caused by the expanded use of chemicals, especially pesticides, which should be coordinated especially by region.

VI. MATERNAL AND CHILD HEALTH AND THE HEALTH ASPECTS OF COMPREHENSIVE FAMILY EDUCATION

In the Charter of Punta del Este the Governments pledged themselves to halve mortality in children under five years of age during the decade. In their Declaration the Presidents of America, in addition to reaffirming that commitment, decided to foster maternal and child health services and comprehensive family education.

The information provided by the Ministries of Health[+] shows that more progress has been made in reducing mortality in the age group 1 to 4 than in the age group under 1 year. Indeed, in Central America, the mortality rate for the former has fallen from 14 per 1,000 in the period 1960-1962 to 11.6 per 1,000 in 1966; in other words, by 17.1 per cent. The target figure to be reached by the middle of the decade is a 25 per cent reduction. In South America, in the same period, the rate is 13.3 per 1,000 and 10.2 per 1,000 respectively. There has been a 23.3 per cent reduction, which means that 93 per cent of the target has been achieved.

With respect to infant mortality the rates in Central America were 71.3 per 1,000 live births in 1960-1962 and 53.4 per 1,000 in 1966, or an 11 per cent reduction in the 5-year period. For South America the rates are as follows: 83.9 and 73.6 per 1,000 live births, or a 12.3 per cent reduction in the 5-year period. The target for both regions is a 25 per cent reduction by the end of 1966, 50 per cent of the goal.

An analysis of the causes of death shows that diarrheal diseases in infancy and infections of the respiratory tract as well as a few communicable diseases such as measles, tetanus, whooping cough and malaria, and also accidents, are the main causes of death during the first 28 days of life and the first 5 years of life. Certain diseases of childhood, which are related to congenital factors, pregnancy, confinement, and the environment surrounding the newborn, are the most important cause of mortality in the first 28 days of life.

Undernourishment, which does not appear among the principal causes of death but which affects a large proportion of children under 5 years of age, is influenced by the age of weaning and the economic and cultural status of the family. Research studies under way, including those being carried out by the Institute of Nutrition of Central America and Panama (INCAP), point to a direct relationship between nutritional deficiency and mental retardation.

In some countries there has been a rapid change in the age of weaning, which is becoming more and more early in the life of the child, a development that can be of serious consequence to its physical and mental development.

In addition to the biological factors we have mentioned, social, economic, and demographic factors are also very important, for they all affect the health of the child, the mother, and the family.

+PAN AMERICAN HEALTH ORGANIZATION. Special Meeting of Ministers of Health of the Americas, Maternal and Child Health and Health Aspects of Comprehensive Family Education. Working Document, Item 2.5, REMSA/7 (Eng.), 1968.

Demographic factors are also important, especially when the growth of the population is rapid, as is the case in many countries in Latin America, which as a whole has the highest annual population growth rate in the world. This causes sudden increases in the absolute and relative number of children at the most vulnerable age, who are exposed to the environment hazards which they are unprepared to resist, a situation which leads to increased morbidity and mortality. It is very difficult for the Governments to satisfy medical, social, and educational needs when these sudden increases in the child population occur. Many of these needs therefore remain unsatisfied. Furthermore, it is noted that in low-income families the higher the infant mortality, the higher the birth rate, and vice-versa.

Observations made in several countries in the Continent show the higher biological risk involved in large families, a risk that weighs heavily on those segments of the population most vulnerable from the standpoint of economics and medical care. In some countries induced abortion and complications following abortion, including a high maternal mortality, are observed among those sectors of the population.

These findings have led some Governments to consider the participation of the health sector in the formulation of family planning policy and programs. In doing so they have taken into account the resolutions of the World Health Assembly and the Directing Council of the Pan American Health Organization. On the basis of these resolutions some Governments have already prepared maternal and child health and family planning programs aimed at reducing the risk of death and disease to which children and mothers are exposed and at the same time to improving conditions of family life.

In order to achieve the target of the Charter of Punta del Este, which is to reduce mortality in children under five years of age to half of the 1961 rate, a considerable effort is necessary even though much progress has been made in the first five years. Of course we shall refer essentially to the technology of health and its immediate effects. There is no doubt that not much is to be hoped for if levels of living are not improved at the same time, particularly in rural areas and in the shanty towns where environmental hazards are greater for the child, the ecological equilibrium is more critical and, therefore, the risk of disease, stunted growth and development, and death are higher. Most of the preventive and curative problems of maternity and child health do not call for expensive equipment. Manpower, whether professional or auxiliary, is the critical input. Auxiliary personnel has a very defined responsibility which, in the rural areas of Latin America today, is fundamental. The damage caused by malnutrition, childhood diseases, illiteracy, and deficient sanitation are so serious that they call for urgentaction by the communities and their leaders in cooperation with the health services.

RECOMMENDATIONS

1. That the Governments that have not done so promote economic development and the raising of living standards in areas where the health situation of children and families is most critical, namely, in rural areas and in the shanty towns ringing rapidly growing cities.

2. That we intensify social welfare activities on behalf of needy children and families such as health insurance schemes covering the family, lactation grants, help with food for children and indigent pregnant women, etc., thus contributing to the improvement of their situation and the redistribution of wealth.

3. That we rapidly extend integrated health care for mothers and children to wider sections of the population, through continuing activities, with special emphasis on those sections most exposed to risk.

4. That maternal and child health, nutrition, and comprehensive family education activities, programs, and services be adequately coordinated at all levels, with a view to achieving the maximum employment of resources through mutual support and potentiation and to avoiding competition at all costs.

5. That we give due priority to maternal and child health promotion and restoration, and disease prevention, activities.

6. That we step up the training of personnel at all levels, especially of experienced administrators, on the one hand, and, on the other, of untrained auxiliary personnel to carry out minor technical tasks in the worst equipped areas.

7. That we encourage universities to expand the pediatric and obstetric training of physicians, nurses, midwives, social workers and nutritionists, inculcating a more profound knowledge of the fundamental biological processes of reproduction and growth and development and their interrelationship with social and demographic factors.

8. That we encourage studies on growth and development at critical ages with a view to establishing reference curves both for measuring this phenomenon in the various communities and for guiding and evaluating child nutrition programs.

9. That, with the technical advice of PAHO, our countries undertake studies relating the growth and development of children and their educational achievements with family size, food consumption, and income level.

10. That community action be promoted so as to achieve the informed and effective participation of the community in maternal and child health activities through leaders, neighborhood units, natural and organized groups, etc.

11. That, in coordination with the education and social welfare sectors and with help from the universities, we undertake large-scale educational activities based on the findings of socio-anthropological studies, with a view to promoting the adaptation of the family to the conditions of modern life resulting from general development.

12. That the means for ensuring breast-feeding for an appropriate period be promoted and facilitated.

13. That international agencies concerned with child health and welfare coordinate their activities so as to improve the results obtained.

14. That with the technical advice of PASB the countries undertake studies to periodically establish, in each economic region, the minimum expenditure in relation to the income of the family necessary to safeguard the life and health of its members, bearing in mind the number of children in the family. Wide circulation should be given to these data in the countries.

15. That, in those countries whose Governments have officially adopted a policy of family planning, these services should be integrated and coordinated with existing maternal and child health programs and made available to all members of the community who wish to utilize them.

16. That PAHO attend, to the extent budgetary funds permit, to the requests of the Governments for advisory services and assistance in connection with maternal and child health programs and with family planning programs, whether these be aimed at increasing or reducing the number of pregnancies.

17. That Governments, through our Ministries of Health, give their full support to the Inter-American Investigation of Child Mortality sponsored by PAHO. The aim of this investigation is to study the mortality of infants and of children in their early years, taking into account nutritional, environmental, and sociological factors. This investigation will produce findings of the greatest interest, which will to a large extent enable maternal and child protection and medical education programs to be improved.

VII. FOOD AND NUTRITION POLICY

It has been shown that there has been clear progress in our approach to the diagnosis and treatment of nutritional disease. However, preventive aspects have not received the same emphasis, chiefly because the provision of an adequate food supply, particularly in terms of calories and protein, for the vulnerable segments of the population lies outside of the responsibility of the health services. In turn this situation results from the lack of a specific Government policy on food and nutrition which will harmonize the biological needs of the population with the demands for economic development, especially those relating to the import and export of foodstuffs.

We have recognized, in principle, the need to create a nutrition data retrieval and analysis center for this Continent which would provide information on all aspects of the food chain. Such information would permit the Governments to establish the above-mentioned food and nutrition policy and the intersectoral plans that would emerge from this. It would also permit a comparative study of the problems and programs of the different countries of the Americas as a basis for continental action.

An analysis of the progress in nutrition programs since the previous meeting of the Ministers in 1963 shows that a wide variety of activities are being pursued to meet the broad range of nutrition problems. These include the establishment of norms for optimal population nutrition; the incorporation of nutrition in national health plans; the reduction of food losses by more effective control of rodents as well as of enzootic diseases; the iodization of salt for the control of endemic goiter; the enrichment of cereals to improve their nutritional value and to prevent specific deficiencies; research into industrial production, distribution and utilization of new sources of low-cost high protein foods. The development of INCAPARINA, based on vegetable proteins, has stimulated corresponding investigations in six countries which have now produced similar products with a high protein content suitable for use in infant and pre-school feeding. In this context mention was made of the research programs on high protein foods, presently being carried out, which involve fish protein concentrate, sunflower seed, and rape seed.

Reference was also made to the importance of intensifying the training and education of professional health workers specialized in nutrition. In this respect, progress has been made, though there is need for greater efforts in the future. Improvement in the quality of training for nutritionists and an increase in the number assigned to health services and to teaching will be required.

From available information, it is evident that considerable progress has been achieved in nutrition activities in the past five years. Much, however, remains to be done. The problem in Latin America is not a static one; on the contrary, it increases in proportion to the growth in population and the associated demand for more and better foodstuffs. In the majority of Latin American countries, *per capita* food production levels have remained

low and stationary for the last ten years, meanwhile food imports have progressively increased in order to compensate for the deficit. National food supplies have thus been maintained; however, owing to problems of distribution and purchasing power, large sectors of the population do not consume sufficient calories and protein to achieve normal nutritional status.

What the Americas produce today represents only a fraction of the potential capacity of its great natural resources. And even land presently under cultivation can produce much more in terms of quantity and quality. The losses of protein through animal diseases and the destruction caused by rodents and insects can and should be controlled. This cycle of scarcity is completed by the low purchasing power of the greater part of the population; ignorance of the principles of basic nutrition as reflected in patterns of food purchasing and preparation, resulting in a further reduction of available nutrients; and the interaction of other environmental factors such as infectious and parasitic diseases which contribute to, or precipitate, malnutrition.

This problem is essentially multidisciplinary and requires coordinated action by different government agencies, together with the active cooperation of the community. Basic responsibilities lie with the health sector, on the one hand, in stimulating and participating in the formulation of a national food and nutrition policy and its application to the community and, on the other, in the prevention and control of nutritional disease, as a routine activity of health services.

RECOMMENDATIONS:

1. That the planning units of health agencies stimulate and participate actively in the formulation of national food and nutrition policies and intersectoral plans designed to assure an adequate food supply to all sectors of the population in order to fulfill defined biological requirements.

2. That we establish a center for the retrieval and analysis of nutrition data for the Americas, preferably utilizing existing institutions. This center should collect, collate, analyze, and distribute relevant nutrition data on a country-by-country basis in order to provide the basic information upon which a food and nutrition policy could be established. In addition, the center should provide training of national staff in the approach to policy formulation and program planning.

3. That the Governments increase studies of food and nutrition status of their populations and thus provide a sound and objective basis for the establishment of their national food and nutrition policies.

4. That the health sector clearly define its responsibilities within the national food and nutrition policy and that these be incorporated in the health planning process to provide for specific activities to be carried out at the regional and local level. Such activities should contemplate a coordinated effort involving maternal and child health, environmental sanitation, health education and other relevant services.

5. That increased support by national and international agencies be given to schools of nutrition and dietetics in order to provide more qualified professional personnel in this field.

6. That schools of public health, medicine, dentistry and nursing, as well as teacher training colleges, be assisted in strengthening nutrition instruction in order to ensure the active participation of their graduates in local programs.

7. That our Governments continue to enact suitable legislation that will ensure the utilization of existing technology in such fields as salt iodization, cereal enrichment, and the commercialization of low cost, high-protein foods, and to provide consumer protection against false advertising of weaning foods. It is important that such legislation be planned in close collaboration with the private sector in order to assure effective implementation.

8. That our Governments give increase support to research institutes to enable them to find effective methods of applying existing knowledge of food and nutrition science under the restricted socio-economic conditions that exist in many areas of the Continent.

VIII. NATIONAL HEALTH PLANS AND IMPROVEMENT OF THE ORGANIZATION AND ADMINISTRATION OF HEALTH SERVICES

The title of this item reveals the logical sequence which should characterize national health plans, that is to say, a rational scheme of priorities and investments for the solution of problems and within the integrated services that must carry them out. In other words plans are made to serve a need, which in this case is a vital one, and this is done by coordinating the present and potential resources of a country, regardless of their origin, in order to achieve the measurable objectives of the plan. It is only for administrative reasons that a distinction is made between medical care and rehabilitation and health protection and promotion. They are stages in the same biological and social process whose exclusive beneficiaries are human beings and the societies they compose.

Planning is a result of a policy decision without which it cannot be instituted; it is not an end in itself; it is the beginning and condition of a process. Today planning is acknowledged to be a fundamental tool for achieving the continental objectives of the Charter of Punta del Este as well as the national objectives of Governments.

The data collected[+] show that, in the interval between the two meetings of Ministers, undoubted success has been achieved in planning efforts but that, at the same time, critical problems, which must be overcome in the short, medium, and long-term have arisen. These include the fact that in the health sector only a few State institutions are included in the plan which frequently does not cover the social security institutions. The integration of health plans into economic and social development plans is in some cases purely formal and is limited to investment programs and determined by budgets. Program execution has revealed the weakness of the administrative and technical infrastructure, which impairs the continuity of planning and the possibility of improving it.

Nevertheless, what has been done in the interval shows that in all countries the formulation and execution of national health plans has been the beginning of positive change, despite the short time that has elapsed. The method used, in addition to being instrumental in bringing about this change, has also been of use in establishing the above-mentioned limits and in suggesting means of modifying and improving the whole process.

A fundamental obstacle has been the incompleteness of bio-medical and accounting statistics which, generally speaking, are defective, irregularly recorded, and not always compiled in sufficient time to enable health activities to be planned and evaluated. This has been especially serious in

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[+]PAN AMERICAN HEALTH ORGANIZATION. Special Meeting of Ministers of Health of the Americas. National Health Plans and Strengthening of the Organization and Administration of Health Services. Working Document, Item 3.2, REMSA/9 (Eng.), 1968.

the case of hospital statistics. It is also necessary to further develop the method to include substantive activities such as nutrition, sanitation, community organization, and the like.

We are of the opinion that efforts must be made to ensure that the health sector take an active and systematic part in the formulation and execution of economic and social development projects which involve the movement or settlement of considerable numbers of persons as well as appreciable changes in their living and working conditions. Furthermore, our lack of knowledge of the dynamics of the phenomena conditioning health *per se* and in the context of development, must also be considered.

Fundamental factors in planning are the policy decision and the capacity to carry out plans and programs.

There was general agreement that the coordination of health resources is essential and that it would be pointless to continue to talk about health planning unless there was a mutual understanding among institutions in the health sector to coordinate their resources. It was noted that several countries had taken a decisive step towards coordination but it was also recognized that these efforts were still insufficient to ensure the fulfillment of the goals of an integrated health plan. The diverse nature of health activities and the part played in them by private and semi-independent agencies, the high cost of medical care, the shortage of available resources, and the pressure of the increasing demand, make it both urgentand essential to set up national systems for the effective coordination of the preventive and curative services of Ministries of Health and of these, as a whole, with those of social security institutes, universities, and other public and private agencies.

Coordination will make it possible to raise the level of medical care, expand coverage as much as possible, and promote the active participation of the local community in the planning and administration of services.

The administrative regionalization of services will prevent duplication of effort. Highly specialized resources should be concentrated in facilities for the care of patients drawn from the entire country or from a given region, according to the situation. Guided by common standards provided by the central organization, disease prevention, health promotion, and health restoration activities can be carried out through a network of integrated services which should achieve the widest possible national coverage.

The regionalization and coordination of programs for the building of hospitals and other health facilities is even more important when such programs are covered by the investment plan which, in turn, is one of the components of the national health plan and of the economic and social development plan. The enormous capital investment necessary to implement a construction program has a major impact on the distribution of financial resources, and its effect on the national economy is such that it must reflect a strictly functional and economic standpoint, since the capital invested in hospitals could, as an alternative, be invested in schools, roads, or industrial machinery, and thereby benefit other areas of economic and social development.

To promote the coordination of health services at all levels, recommend that standing inter-institutional commissions or committees be set up to collaborate in the establishment of technical standards for the systematic improvement of the quality of medical care and of the effectiveness of activities covered by the plan and of other activities arising from their intersectoral relationships.

We also deem it advisable to undertake programs of operational and administrative research for the purpose of developing and improving the method to be used for formulating and evaluating plans, programs, projects, and activities, thereby facilitating the formulation of sectoral policies. This includes the analysis of expenditures and sources of income,and of available and potential resources.

Another factor that we consider to be important as a first step towards planning, is a review of the juridical and legal aspects bearing on closer inter-institutional links and the establishment of a common administrative system designed to ensure better use of the available resources.

In the light of the foregoing considerations, we recognize that, in order to increase coverage and make better use of the available resources, each country should adopt the coordination system best adapted to its historical tradition, its juridical and administrative system, and the degree of development of its health resources. What is important is that the system chosen guarantee and respect the policy-making, coordinating, and supervisory function of the technical agencies of the Ministries of Health.

The financing of medical care services should essentially be based on health insurance, as a method whereby those using the services contribute to the costs according to their economic capacity. Those members of the community who are not in a position to contribute should be entitled to the services free of charge.

We have reaffirmed our intention of persisting in the formulation of health plans and their periodical adjustment and in increasing the training of professional health planners with a view to creating a common language, guided by the general and specific objectives, and improving the quality and performance of resources.

The experience acquired so far shows once more that, in all health activities, manpower is the critical input and, at the same time, that there is a lack of consistency between the content of the training programs and actual needs, between their costs and benefits, in addition to a failure to make the necessary provision for using human resources effectively.

These facts which reveal progress, as well as others,are to be found in the working document for our Meeting.[+] As a whole they reflect the improvements made in the general health and medical care services and are milestones in the process of planning and integration.

+PAN AMERICAN HEALTH ORGANIZATION, Special Meeting of Ministers of Health of the Americas, National Health Plans and Improvement of the Organization and Administration of Health Services, Working Document, Item 3.2, REMSA/9 (Eng.) 1968.

RECOMMENDATIONS

1. It is recommended that, in those countries in which planning has not been instituted, the Governments take the pertinent steps to formulate and implement national health plans, geared to economic and social development. For that purpose, it is first necessary to establish a health policy.

2. It is essential that those countries in which planning is in any of its stages of development strengthen activities designed to improve planning. For that purpose, the following is proposed:

2.1 To extend the geographical, technical, and institutional coverage of health plans. Planning envisages the coordination within the plan of at least the state institutions, including the social security institutions.

2.2 To undertake periodical evaluations of the plans and of their consistency with the health policy of which they are the expression, in order to develop a long-and medium-term sectoral strategy. These evaluations should be made in the light of economic and social development.

3. It is important for health plans to be periodically revised in order to adjust them to the changes that have occurred. They should also be the means used for preparing budgets for health activities.

4. It is essential to improve the operational capacity of the sectoral system in order to ensure the realization of plans and the fulfillment of goals. In this connection we recommend the incorporation of specific, medium- and long-term programs for the development of the sectoral infrastructure, in particular programs for:

4.1 The strengthening of the administrative structure in accordance with the needs of the plan.

4.2 The adaptation of statistical systems to allow them not only to measure the health level, but also the use and the output of the resources used by the sector. We recommend that use be made of surveys and research to obtain this information in due time.

4.3 We recommend the establishment of accounting systems, cost accounting systems, and control systems to ensure maximum efficiency in the operation of plans.

4.4 The conduct of operational and administrative research for the development and improvement of the method for formulating and evaluating plans, programs, projects, and activities, thereby facilitating the establishment of sectoral policies. This also involves the analysis of expenditures and sources of income from other available and potential resources.

4.5 The trainingof personnel for the sector, according to the needs of the plan, and of its relations with other specific ares of the general, economic, and social development plans.

4.6 The definition of a policy for the recruitment, retention, and promotion of the manpower needed to ensure the best utilization of investments.

4.7 The establishment of standing committees in institutions to assist in the preparation of technical standards for systematically improving the quality and output of the activities covered by the plan and those derived from its inter-sectoral relationships.

4.8 The review of juridical and legal aspects to facilitate closer inter-institutional links, the operation of the administrative system, and better utilization of the resources available.

4.9 The formulation of sectoral investment plans that provide for the necessary means for evaluating the projects included in them and for analyzing their intra-and inter-sectoral relationships.

5. Since the health sector is directly responsible for nutritional, environmental sanitation, and community organizational activities, they must be included in health plans and that will encourage the formulation and implementation of policies in those activities, the programming and development of which are inter-sectoral and inter-disciplinary in nature.

6. Since the health sector is a component of the infrastructure of social development, efforts must be made to ensure that health workers actively and systematically participate in the formulation and execution of development projects that involve large-scale migration or land settlement, and major changes in living and working conditions.

7. Systems should be set up in each country without delay for the effective coordination of the health services of ministries of health with those of social security institutions, universities, and other private and public bodies. To assure that coordination is effective, it should be a permanent activity of all those who participate in the process of planning, administration and provision of services under the guidance of the ministries of health or the corresponding agencies. In this way, closer institutional links will be forged at the central level; regionalization will be achieved at the intermediate; and integration of curative and preventive services at the local level.

8. We recommend that the countries prepare, as an integral part of their national health plan, a program for the construction, remodeling, and maintenance of hospital and other health facilities, geared to the available resources, so as not to distort the economic and social development investment plan.

9. With the exception of the indigent, all patients should contribute to the costs of medical care according to their ability to pay.

IX. THE ROLE OF HEALTH SERVICES IN PROJECTS FOR THE MODERNIZATION OF RURAL LIFE

For the development of health services in projects for the modernization of rural life, mention was made of the need to consider at the same time the improvement of the economic situation through changes in the system of land tenure, credit facilities, education, housing, and mechanization so as to increase agricultural output.

Other points we considered were the importance of an adequate distribution of human resources, improvement in communications, and a progressive policy in environmental health.

In spite of the difficulties of defining the rural population, it is essential to do so. Even though it is difficult to define the term "rural" within any one country, it is still more difficult to compare the term as it is construed in different countries. In one country an attempt is being made to classify the rural population into indigenous, scattered, and grouped. The first category consists of traditional communities; the chief feature of the second is that it is scattered over extensive geographical areas and over parts of the country where its isolation is dictated by the topography; and the third category form small centers of population.

The need was expressed for bearing in mind the social and cultural characteristics of the indigenous group. In the case of the scattered group, it was considered desirable to employ staff from special campaigns such as that against malaria to assist with other health activities while at the same time carrying out their specific duties. In the case of the small centers of population, it was proposed that all kinds of facilities should be held out to induce medical personnel to settle in them - credit to help them acquire a house, periodic refresher courses, thereby satisfying their economic needs and alleviating any scientific anxieties they might feel, and providing them with agreeable social surroundings.

Mention was made of the need to improve, extend or build hospital installations when required and to offer their services to social security organizations as a way of achieving inter-institutional coordination. In this way a broader utilization of health facilities could be reached.

It was suggested that, to obtain maximum coverage, it would be desirable to provide health care services manned by the smallest possible teams.

Stress was placed on the use of extension workers for community development, so that social change and active community participation in the solution of its problems might be achieved with all due respect for its cultural characteristics.

The need to integrate health programs, especially in the rural areas, with general economic and social development programs was emphasized, so that all the programs of the various sectors contributing to the progress and modernization of the rural areas, can be carried out simultaneously.

To make the best use of the physician's professional abilities and to achieve greater coverage by the health care services, it is desirable that physicians should delegate certain activities to auxiliary medical personnel under strict periodic supervision.

In accordance with that principle, permanent services could be set up for scattered populations, staffed by auxiliary personnel duly instructed in what they can and what they cannot do. In this way health promotion, protection, and restoration programs, with clearly defined activities and permanent supervision, can be carried out.

With regard to the problem of physicians living in the rural areas, the responsibility of the university in medical training was emphasized, in relation to the preparation of the physician for working in rural areas. It is necessary and desirable that medical students should become equally well acquainted with both urban and rural areas throughout his medical studies and, before qualifying, do practical work in rural health services with due guidance and under due supervision. This would be one way of offsetting to some extent the intense pressure for the creation of highly differentiated services, and of achieving instead a rational distribution of human and material resources for the benefit of the community, in terms of priorities established on epidemiological and administrative grounds. The appropriate place for first influencing the future physician in this direction is the university.

Another need mentioned was that the rural areas should contain at least a minimum of facilities such as education, electricity, water, housing and communications, so that the health services can be put to productive use. It is also important to make use of school teachers and other public servants for health work, especially for vaccinations and health education.

To prevent the migration of the rural population to the cities, it is desirable that there should be a labor code providing equal guarantees to all workers, whether urban or rural.

Reference was made to the importance of the administrative regionalization of services in preventing duplication of efforts. Highly specialized resources should be concentrated in institutions for the care of patients drawn from the country as a whole or from each region, as the case may be. Guided by common standards issued by agencies at the central level, disease prevention and health promotion and restoration activities are carried on through a network of integrated services designed to achieve the highest possible level of coverage.

RECOMMENDATIONS

1. That health programming be an integral part of all economic and social development planning for rural areas.

2. That health programs be carried out simultaneously and in coordination with programs for agrarian reform, education and agricultural improvement and, in general, all programs contributing to rural uplift.

3. That, in determining activities in health programs, attention be paid to social and cultural conditions, especially in traditional rural communities.

4. That, in order to achieve a better distribution of human resources and retain professional personnel in the rural services, the economic and social status of professional personnel be improved and attempts be made to keep their scientific knowledge up to date.

5. That, in order to awaken the medical student's interest in the study of health problems in rural areas in terms of their ecology, cultural characteristics and implications for the social development of the country, universities afford medical students during their studies, within the context of their teaching systems, the opportunity of becoming acquainted with the rural areas of the country.

6. That activities carried out through vertical mass campaigns be integrated with the general health services in order to make better use of existing resources.

7. That the health infrastructure be organized as an integral part of the national health plan within a system of administrative regionalization, due attention being paid to the seriousness and urgency of the problems, the resources available, and the social and cultural characteristics of the population.

8. That the countries study the question of the better utilization of auxiliary personnel such as medical and nursing assistants who, when duly trained and supervised, can carry out work delegated to them by physicians and so increase the coverage of the health services.

9. That health education activities be strengthened in all programs that contribute to the economic and social development of the rural community.

X. DEVELOPMENT OF HEALTH MANPOWER

The planned development of manpower is today one of the essential conditions of socio-economic progress. One of the most serious obstacles most development programs encounter in the Latin American countries is the shortage of qualified personnel of various categories. Health programs are no exception; indeed, in them the shortage seems to be more marked than it is in other sectors.

Education and training effectively contribute to the improvement of tha ability and skill of personnel, an effect that is seen in increased output and in the efficiency of the labor force. They have a great multiplier effect on development in general and assume a high priority in health programs.

The situation in the health field tends to grow progressively more acute because the demand, needs, and cost of services increase at a greater rate than resources. Demand rises with progress in medicine and with the expansion of scientific possibilities. In some Latin American countries the problem is made more acute because of the selective emigration of qualified manpower to other countries in search of better working opportunities and better facilities for specialization.

A health manpower development policy should come out of studies providing a greater knowledge both of the existing situation and of the training needs of health personnel which should be met within the frame of reference of national health plans. It should be pointed out that such studies should mainly pursue programming purposes and not exclusively research purposes. They should also go beyond the limits of a mere statistical analysis of present and future demand and supply and furnish criteria for the use of those who take decisions about the quantitative and qualitative aspects of the education and training of health personnel. These objectives may be helped by the application of new techniques of operations research for the identification of systems enabling human and material resources to be used to the maximum advantage.

Recognizing the importance of this, some countries have institutionalized this activity, conducting it on a permanent basis through the national manpower units they have set up.

From what has been said it follows that there should be joint planning of education and training programs by the health authorities and by those in charge of medical and paramedical university education, both at the professional and the auxiliary level, with a view to forming a multidisciplinary team with an ecological approach to health that will look after the needs of communities for their greater welfare.

We emphasize the need for the establishment of interinstitutional relationships for the preparation of plans and execution of programs for the training of health personnel, and point to the desirability of closer links between ministries of public health, universities, social security institutes, and national professional associations.

We recognize that properly trained and supervised auxiliary staff can substantially multiply the activities of professional personnel. We underline the need to define these terms in greater detail with a view to standardizing the nomenclature.

We draw attention to the trials being carried out involving the training of health personnel intermediate between nursing auxiliaries with few qualifications and university trained nurses.

Attention was drawn to the inadequate geographical distribution of health personnel and to the discrepancy between the distribution rates of professional medical personnel and of paramedical personnel, which appears to be linked with the lack of definition of their functions as well as with shortcomings in present systems of medical care.

It was emphasized that the teaching programs in medical and other professional training schools should be revised so that the training of health personnel should be more in accord with the needs of their respective countries. This multidisciplinary or team approach to health as a way of meeting the needs of the services has led to experiments with new teaching structures such as the faculties of health sciences which some countries are establishing and which are intended to train personnel responsible for health protection, promotion, and restoration. These teaching schemes will undoubtedly make the work of teaching institutions more efficient, by making better use of resources.

It follows from what has gone before that present teaching programs should be revised to adapt them better to the needs of the health services and to place at the disposal of students teaching materials that will facilitate their training. Among such materials special mention should be made of high-quality, low-cost textbooks and of library consultation services. The program PAHO has instituted for the supply of textbooks to students of medicine and other health professions through a self-financing system is intended for that purpose, and the welcome it has received from universities suggests the desirability of extending the scheme to its full extent and of trying similar schemes for supplying other teaching aids.

We draw attention to the need for health personnel to receive more training in those aspects of administration that would be of value to them in carrying out their functions as administrators either of hospital centers or of other health services.

In considering the preparation of auxiliary and paramedical personnel, it is also important to note that there are some fields that require greater attention. Laboratory technicians for clinical analysis, technicians for radiology departments, physiotherapists and technicians to help in the collection and analysis of statistical data are badly needed.

FELLOWSHIPS

Collaboration in the training of health personnel through fellowship programs continues to be one of the most effective ways of strengthening health services. This is shown by the increasing demand by countries for this kind of cooperation, and it is essential that the manner in which the Organization is fulfilling this responsibility should be reviewed by a continuing evaluation of the procedures followed and of the centers used for training.

New programs of collaboration should be tried for the preparation of health personnel with special features, as in the case of the preparation of high-level personnel in teaching or research. Such programs might include interinstitutional exchange of teaching staff and research workers at the national or international level.

Many teaching and research institutions in Latin America have reached such a high level that it is desirable that they should be used more often for the preparation of professional health workers.

It has been said that the education of a university professional man is a process that continues throughout the whole of his life. The need to add to his intellectual equipment the fresh advances of science and technology, now developing at such a rapid pace, prolongs the responsibility of the educational institution well beyond the mere grant of a degree or a diploma, and this is recognized by the programs that have been called "continuing education". Such programs should be provided not only for physicians but also for other members of the health team.

PROGRAM OF TEXTBOOKS FOR MEDICAL STUDENTS

In our opinion, the selected textbooks for medical students should be periodically revised to keep them abreast of advances in science and technology. The textbook selected should not be regarded as the only text; it should be supplemented by a program to strengthen the medical libraries of professional training institutions and to place at the disposal of students and teachers bibliographical resources that will supplement the textbook.

We emphasize that textbooks should be regarded as valuable working tools for the student, that they should reflect the main problems that the future doctor would meet in the practice of his profession, and that they should preferably be written by authors steeped in Latin American problems. Translations into Spanish or Portuguese of works written in other languages should be of the latest edition in the original language.

MIGRATION OF HEALTH PERSONNEL

The migration of physicians and other health personnel is a cause of serious concern in many countries and in some cases is alarming in its extent. We consider it desirable that Governments should study the problem more thoroughly. Basing themselves perhaps on the study made on the subject by

PAHO in 1966, the Governments themselves might carry out thorough studies in their own countries, with the collaboration of associations of medical schools and other health professions and the cooperation of PAHO or other international bodies.

The causes of this migration do not seem to be purely economic in nature. Attempts should be made both by the countries receiving the doctors and by the countries from which they emigrate to ascertain the causes and to moderate this brain drain.

RECOMMENDATIONS

1. That PAHO assist the countries with manpower studies designed to obtain a better knowledge of the existing situation and of the training needs of health personnel which must be met within the time period and reference limits of national health plans. The countries would then be in a position to continue such studies on their own initiative.

2. That institutions for the training of the manpower needed for the health services should be strengthened and their development encouraged.

3. That countries jointly program for the education and training of health personnel at different levels, keeping in mind the need to prepare a multidisciplinary team to meet the needs in the field of health.

4. The multidisciplinary or team approach to meet the needs of the health services has led to experiments with new teaching structures. Some countries are establishing faculties of health sciences, intended for the teaching of the various disciplines responsible for health protection, promotion and restoration. Such schemes appear to make the work of teaching institutions more effective. It is recommended that PAHO encourage, promote, and strengthen initiatives of this kind. This will necessitate a revision of the organizational and administrative systems of the teaching institutions.

5. That PAHO continue to assist Governments in improving teaching methods, advising on the design of curricula better adapted to the needs of the country concerned, establishing centers for the training of medical educators, and cooperating in the provision of the materials required by students in their studies, especially low-cost textbooks of high quality and library consultation services. The PAHO program for the supply of textbooks to medical students and other professional health personnel through a self-financing system has this aim, and it is desirable that it should be put into effect. Similar systems can be tried out for the supply of other teaching aids.

6. That Governments tighten the bonds that should exist between bodies dealing with health and the institutions training the personnel working in them and, through joint planning, promote programs for the training and employment of health manpower.

7. That PAHO collaborate with Governments and universities and institutions of higher education in programs to keep health professional personnel abreast of new advances in science and technology through "continuing education" and, in the specific case of physicians, through hospital residencies that will both provide education and help improve hospital care.

8. That programs for the education and training of auxiliary health personnel be strengthened, new types of auxiliary personnel be developed, the responsibility of various categories of such personnel be clearly defined and, if possible, some attempt be made to standardize the nomenclature of the types of auxiliary personnel, for which purpose, it is hoped, the Pan American Sanitary Bureau will provide assistance.

9. That the causes of the emigration of health personnel continue to be investigated, with the aim of adopting measures to remedy the present situation which constitutes such a serious problem to some countries. For the moment, it appears desirable to promote training and research programs in the countries as a method of inducing professional personnel to remain there.

XI. RESEARCH AND TECHNOLOGY FOR HEALTH AND WELFARE

In previous pages we have emphasized that research is essential for socio-economic development and that scientific and technological advances should be adapted to the social and cultural characteristics of each country. This was acknowledged by the American Chiefs of State in their declaration that "science and technology offer genuine instruments for Latin American progress and must be given an unprecedented impetus at this time". Scientific advances are changing the patterns of disease in many parts of the world, including Latin America. Whatever the objectives of an institution, if it fails to keep itself abreast of such advances and such changes, it will gradually lose its vigor and its effectiveness.

In the biomedical disciplines research is necessary for the development of the scientists of the future, for the maintenance of a tradition of learning, and for the encouragement of a spirit of inquiry in university students.

We have noted the contributions of the Pan American Health Organization to the study of the phenomena and circumstances conditioning health and disease, and assessed the work of its Advisory Committee on Medical Research. We have been informed of the plan to expand the Organization's activities by establishing multinational programs with a view to making the most effective use of specialized skills and equipment in research and research training programs. This plan also includes support for carefully selected research workers and the study of the existing health problems in the Region. Another aim of the plan is to improve communication between bio-medical scientists in the Americas, inter alia, by the Organization's Regional Library of Medicine, which will facilitate access to the most recent knowledge on the health sciences. Part of the plan is for operations research, for which there is a wide field of application in the Continent because of the low output of human and material resources, studies on high-risk age groups and groups with other characteristics; epidemiological surveys in the pre-investment phases of large-scale development schemes and those dealing with disappearing diseases; and methods of establishing priorities and investing resources in health plans.

Taken as a whole, the proposed plan will strengthen and stimulate the health sciences community in the Americas.

RECOMMENDATIONS

1. We recommend that national and international efforts in health research be expanded, and be specifically designed:

1.1 To increase the capacity of the peoples of the Americas to protect themselves against the major diseases that affect them.

1.2 To contribute to the attainment of the health goals defined at the Meeting of American Chiefs of State in Punta del Este.

1.3 To help improve the effectiveness of health expenditure in the nations of the Hemisphere.

1.4 To improve the quality of the training of physicians and other health workers and to strengthen the institutions that educate them.

1.5 To establish conditions that will encourage more physicians and health-related scientists to remain in their own countries.

1.6 To promote and support health research in priority areas and to coordinate these programs with activities sponsored by international and national bodies.

1.7 To support research programs relevant to the health problems of the Region.

1.8 To strengthen the existing biomedical capacity of institutions in the Member States, and to tie them together more effectively.

2. We recommend that Governments:

2.1 Recognize the profound influence of the health of their people on the attainment of national goals.

2.2 Weigh with the utmost care the risk involved in delaying the solution of health problems that reduce the capacity of the peoples to be fully productive.

2.3 Consider the consequences of a lack of scientific and technical knowledge as to how to solve certain health problems and how to apply it.

3. Since the major expenditures in health research are those of Governments, we recommend that Governments review at the ministerial level the substance and magnitude of their national investments in research and research training, with a view to making such modifications as may be indicated to secure the greatest possible national benefits, including the maximum contribution to economic and social goals, and to expand their efforts in this area.

4. We recommend that high priority be given under both national and international programs to study of the major disease problems that reduce the productive capacity of the population, such as virus and parasitic diseases, environmental sanitation, housing, occupational hazards, and malnutrition.

5. We recommend that under both national and international programs support designed to make health research most efficient and productive be provided. This includes project-grants for research and research training, multinational collaborative programs, operations research, and improved communication - including library resources - among Latin American scientists.

6. With respect to international activities, it is recommended that all agencies with resources and competence in the area of health research be invited to intensify their efforts.

7. With specific reference to PAHO, we recommend that:

7.1 Governments contribute to the Special Fund for Research established pursuant to Resolution XVI of the XVII Pan American Sanitary Conference to facilitate the achievement of the social, economic and health objectives described in Chapter V, Section C, of the Declaration of the Presidents of America.

7.2 The Director of the Pan American Sanitary Bureau continue with a sense of urgency his efforts to secure additional support for health research at the international, national, and private levels.

XII. THE ROLE OF HEALTH SERVICES IN THE LATIN AMERICAN COMMON MARKET

We recognize that it is still very early to assess the effects of the Latin American Common Market on the health of the population concerned. However, the process of economic integration that has effectively begun in Central America and the formation of the Latin American Free Trade Association should stimulate countries to analyze their possible consequences in the field of health.

From experience of what has happened in other parts of the world we anticipate the following types of problem:

a. Those arising from the increased exchange of goods between countries, especially foodstuffs and drugs.

b. Those caused by population movements, stimulated by the development of centers of intense economic growth.

c. Those arising from the increasing demand for health services by the migratory population in the centers of economic growth.

d. Those due to disparities in the training and utilization of medical and paramedical personnel.

e. Those due to the absence of harmonious and uniform inter-American legislation.

RECOMMENDATION

That, with advice and assistance from PAHO, the Governments study such health problems as may arise in connection with the Latin American Common Market and anticipate appropriate measures for their solution.

XIII. HEALTH LEGISLATION

The national and international repercussions of health legislation were examined, and it was stressed that the concept of health as an individual and collective right is clearly expressed in the constitution of some countries, and implicit in the constitution of others.

Reference was made to the need for countries to give legal expression to those aspects of health that affect the political and administrative structure, in order to facilitate the implementation of measures designed to prevent disease and improve the well-being of the population.

It was agreed that, in the field of international relations, it is urgently necessary to modernize health legislation, since it has suffered a double effect - on the one hand from the increased speed of transport, which has virtually eliminated national frontiers as a means of defense against disease and, on the other, from the advance of science, which makes it possible to take positive measures to control diseases at their place of origin and so prevent them from spreading. It might also be advisable to study the possibility of obligatory assistance in the event of proof being offered of the external origin of the situation to be corrected, in order to reduce the financial burden it represents for the country concerned.

In connection with this point, we note that it is very difficult to draw up uniform legislation. It is, however, to be recommended that an attempt be made to make new legislation flexible, so as to facilitate interchange among countries.

In Latin America we note that the integration movement - and especially the Common Market, which is one of its expressions - requires the creation and operation of a legal instrument contributing to the increase in the exchange of people and materials among countries. Such an initiative conforms to and confirms the ideas expressed by the Presidents of the Americas at their last Meeting.

We unanimously agree, after examination of the present Pan American Sanitary Code, that it is not realistic in relation to Western Hemisphere health matters, or in matters related to the economic and social development of countries; that the Code is not in accordance with other international provisions; and that in some cases it has created problems for international agencies in carrying out their functions.

RECOMMENDATIONS

1. That Governments - even though some have begun or are beginning to modernize their health legislation - take the necessary steps to revise their health legislation and keep it abreast of scientific advances as well as the needs of economic and social development. Such legislation should contain provisions related to the individual and collective right to health.

2. That careful studies be made and the appropriate steps be taken to achieve a degree of uniformity in national health legislation or sufficient flexibility to ensure international cooperation.

3. That PAHO arrange for a thorough study to be made of the Pan American Sanitary Code in the light of advances in science and technology, existing problems and the effects of social and economic development. Such a study should decide whether or not it is desirable to replace or modify the Code to provide a flexible instrument which can be periodically brought up to date and thus be brought into accordance with national and international legal instruments concerned with health and development.

XIV. REFERENCE LABORATORIES - QUALITY CONTROL OF DRUGS

The use of pharmaceuticals in modern therapy continues to increase and the consumption of drugs in Latin America is now at the level of US$1,500,000,000 per year (estimated cost at retail). Because of the many technical difficulties in making good drugs, protection of the public health requires Government action to ensure that only well made drugs reach physicians and the public. The need for improving the quality control of drugs has been expressed on a number of occasions by the World Health Assembly and the Directing Council of the Pan American Health Organization and in recommendation VII.C.2 of the Final Report of the Meeting of the Task Force on Health in 1963.

Effective control of the quality of drugs requires that each country have a modern drug law, a well-coordinated Government agency staffed with highly trained inspectors, analysts, and administrative officials, plus adequate funds for the agency to carry out a high level of drug control activity.

PAHO has aided the countries by providing training fellowships for analysts and drug law administrators and by sending experts to the countries to advise them on drug control problems. On a regional basis, PAHO helped to establish a testing laboratory at the University of Panama to serve the countries of Central America and Panama.

PAHO recently conducted a continental survey which showed that many countries have useful programs for controlling the quality of drugs. However, this study revealed the need for advanced training for the drug control personnel, unification of the drug control activities under a single agency in each country, testing of a larger number of samples taken from the various levels of distribution down to the pharmacy itself, uniform laws and regulations to support the common market principle, and increased funds to enable the drug control agencies to be more active and effective.

PAHO is working with officials of Uruguay on plans for a regional drug institute to be established in Montevideo. This institute will provide advanced training for analysts and other personnel from the drug control agencies of the countries and will distribute drug information to the countries but it will not serve as the drug control agency for any country. When in operation, the institute will have a major beneficial effect on the drug quality control exercised by the Governments throughout Latin America.

Argentina has shown the way to obtain adequate funds for drug control purposes by applying a small tax on the sales of drug manufacturers and importers and using this money to finance the country's drug testing unit.

In addition, the money paid to the Governments by drug firms for registering their products for sale could be used to finance the Governments' drug control activities.

We recognize that some countries are unable, because of technical limitations, to establish their own national drug testing laboratory. These

countries might send their samples to the Laboratorios Especializados de Análisis (LEA) of the University of Panama for testing or form a regional association which would establish a control testing laboratory to serve those countries.

The countries should consider deletion of drugs from their registration lists which are no longer used. Argentina recently eliminated 20,000 questionable drugs from sale.

There is a possible problem of overuse of drugs as suggested by the use of a very large volume of drugs in many parts of the world. Physicians should receive more intensive training, to improve their knowledge of the uses and hazards of drugs. The public should also be made aware of the harm caused by excessive use of drugs. The countries should exercise supervision over the advertising of drugs in order to prevent unwise use of drugs.

The problem of high prices for some drugs is a matter of great concern. A good national drug control agency would have a leveling effect on such drug prices by enabling agencies to buy generic drugs from firms that sell at relatively low prices, provided the drugs are fully satisfactory when tested.

It is important that the countries perform good control tests on the drugs they export as well as on the drugs sold within the country.

We suggest that the reference laboratory at Montevideo should assist the countries by issuing information on drug standards and help the national drug laboratories select the most useful pieces of drug testing equipment.

The actions of the World Health Organization to assist in achieving good drug quality control by issuing the International Pharmacopeia and providing samples of pure drug substances for use as reference standards have been very useful.

WHO should be commended for these actions.

RECOMMENDATIONS

Recalling Resolution VII.C.2 of the 1963 Meeting of the Task Force on Health at the Ministerial Level and recognizing that technical difficulties in manufacturing good drugs require the Governments to exercise close supervision over pharmaceutical production in order to assure a safe and satisfactory drug supply, the Ministers of Health:

1. Recommend that each country make a detailed study of its drug control agency and take whatever action is necessary to assure that the agency is well coordinated and staffed with a sufficient number of highly trained administrators, inspectors, and analysts.

2. Recommend that increased emphasis be placed on testing drug samples at all points from production to consumption.

3. Recommend that each Government provide adequate finances for its drug control agency by supplying an amount of money commensurate with the volume of drugs that must be checked by the agency, i.e. the volume of drugs consumed in the country plus those exported.

4. Recommend that where technical considerations prevent a country from establishing its own national drug testing laboratory, the country should arrange to have its samples tested by a recognized agency such as the Laboratorios Especializados de Análisis at the University of Panama, or form a regional association with a testing laboratory to serve the countries of the Region.

5. Recommend that the Director of the Pan American Sanitary Bureau continue the actions to improve drug quality control in the Americas, particularly the plans to create a regional drug institute in Uruguay which will assist all of the countries by:

a) Providing advanced training for drug analysts.

b) Providing technical training for inspectors and drug law administrators.

c) Supplying the Government agencies with drug control information, including speedy notices concerning drugs that are found to be harmful.

d) Conducting research to improve drug testing procedures.

e) Helping the countries select the best kinds of drug testing equipment.

f) Serving as a reference laboratory with regard to the production and approval of standard materials and the carrying out of special analysis.

6. Thank the Government of Uruguay for its cooperation and offer of funds for establishing a regional drug institute in its country and request the other countries to provide financial support for this regional Institute when such financial assistance becomes necessary.

7. Recommend that, to the extent feasible, the countries adopt uniform drug control laws and regulations in order to achieve a uniformly high quality for drugs throughout the Region.

8. Recommend that the countries examine their lists of registered drugs and eliminate those that serve no useful purpose.

9. Recommend that physicians receive increased training in and information on the effects and uses of drugs.

10. Recommend that the population be educated in the dangers of self-medication and that the Governments enact legislation on the matter.

11. Recommend that the Governments exercise a high level of quality control over the drugs they export, as well as the drugs consumed within the country.

12. Recommend that the Governments exercise close supervision over drug advertising to prevent misrepresentation of drugs promoted to physicians and drugs promoted to the public.

XV. MENTAL HEALTH - ALCOHOLISM

At present there are many serious mental health problems in the Americas. Suffice it to mention the results of epidemiological studies on alcoholism (5 per cent of the population over 15 years of age, and another 15 per cent are heavy drinkers in one country), and the available data on homicides, suicides, accidents, assaults, family break-up, and various types of drug dependence. Allied to this is the relative shortage and the inefficiency of services for mental patients, especially children, and the lack of psychiatrists, psychiatric nurses, and other professional health workers. Finally, there is a distorted approach to the problem whereby treatment of the mentally sick is separated from general health activities.

Mention must be made of the positive interest demonstrated by some countries in the last five years in improving the quality of psychiatric care; in constructing or renovating psychiatric hospitals; or in making arrangements for other establishments to care for mental patients. Mention was made of army barracks which were in good physical condition and which, being unoccupied, were adapted for the above-mentioned purpose, thereby making it possible to close down a corresponding number of beds in institutions providing poor quality care. This arrangement was mentioned as an example of how a more rational use could be made of the installed capacity of the countries, regardless of the purpose of the buildings used and the Government department to which they belong. In addition, a number of occupational therapy programs must be mentioned, since they have had outstanding results in the rehabilitation of patients and in the re-assimilation into society of an increasing number of mental patients. They are capable of the most varied activities and carry them out with great skill and efficiency; and these activities, in addition to providing a therapeutic benefit, help make the persons concerned financially independent.

There are enormous gaps in our knowledge of the origin and dynamics of the most prevalent mental diseases in the Americas. While advances are being made in etiological research - and much remains to be elucidated - epidemiological studies are very useful in developing working definitions for formulating programs, and assigning the scant resources to the most widespread diseases. There are excellent examples of this in the history of medicine. Transcultural psychiatric studies are also necessary, as are behavioral studies and operational research based on the same approach to which we have referred.

According to the modern conception of health, services for the care and rehabilitation of mental patients, and for the prevention of mental disease, should be extended into the community, a system that goes beyond the limits of the outmoded psychiatric hospital.

Special attention was given to alcoholism, in particular its high incidence, which is reflected in the direct risks of falling ill and dying, and as a basic disturbing factor in all health, medical care, maternal and child health and nutrition activities. It is also reflected in low work

output, accidents, absenteeism, illegitimacy and population growth, child neglect, and criminality. It was pointed out that there was no aspect to life in a country in which the negative effects of alcoholism are not making themselves felt.

It was suggested that an international center responsible for research, education, and the supply of technical assistance to the countries of the Continent, should be established as a means of furthering our knowledge of, and in finding a solution to, this serious problem.

RECOMMENDATIONS

1. That mental health units be set up in Ministries of Health, or existing units expanded and given a greater voice in planning the services.

2. That mental health programs be extended to the community, the quality of psychiatric hospital care be improved, psychiatric units be established in general hospitals, or other types of establishments be adapted for psychiatric care purposes, and occupational therapy programs for the cure and rehabilitation of the mentally sick be organized or expanded.

3. That professional staff be trained for existing services, as well as for those to be established in the immediate future, and that the principles and methods of psychiatry and mental hygiene be included in the medical curriculum, and, for that purpose, use be made of the mental health units of the Ministries of Health.

4. That research be encouraged, especially on the clinical, epidemiological, and cultural aspects of mental diseases, and on the mental health problems peculiar to each country.

5. That alcoholism control programs be organized as part of health services or expanded, in view of the seriousness of the disease in the countries of the Americas; transcultural and epidemiological studies be promoted; and the active and informed participation of the communities in these programs be encouraged through their natural leaders.

6. That the Governments intensify research on problems of alcohol and alcoholism, within duly coordinated plans, with the cooperation of the Pan American Sanitary Bureau, to which would be entrusted the function of providing adequate information.

7. That the Governments utilize all possible means to control publicity for and the distribution of alcoholic drinks.

XVI. A TENTATIVE APPRAISAL OF WHAT HAS BEEN ACHIEVED AND OF WHAT REMAINS TO BE ACHIEVED

In this chapter we shall attempt an overall assessment of the steps taken and the measures adopted by our Governments to cope with the major health problems we have referred to in preceding chapters and we shall outline the general policy guiding our endeavors.

During the interval between the signature of the Charter of Punta del Este and this present Meeting, most if not all of our countries have tended to assign economic progress and social welfare the highest priority; of major concern have been efforts to assimilate the population of shanty towns into the body of society and there has been a more marked interest in formulating national plans designed to achieve the objectives of the Ten Year Public Health Program of the Charter of Punta del Este and the Declaration of the Presidents of America.

The PASB document we are considering, namely "Facts on Health Progress", summarizes the advances made. We deem it pertinent to point out that the headway made was insufficient to meet the steadily increasing demand, whose growth in the years ahead will accelerate as a result of the stimulation of the expectations of our peoples by scientific and technological advances and social changes.

Our governments have also kept a close eye on scientific and technological advances and have adopted and applied them to health programs, as and when resources were available.

In our opinion health work is not and cannot be merely one more activity among the myriad state activities. It is as great an endeavour as education, to which it is closely linked and which it precedes, for it is difficult to educate sick people. Hence the high priority which we believe our Governments should give to the allotment of "earmarked" or specific funds for the implementation of health plans and programs. They are essential for dealing with the accelerated population growth of many of our countries, the steadily increasing demand for medical care, and the incorporation of the rural population into the process of economic and social development.

In the above-mentioned interval our countries have embarked on programs for the construction, purchase, and improvement of housing based on the encouragement of savings and the expansion of credit facilities. In the field of education giant strides have been made in reducing the number of absolute illiterates and of functional illiterates and in increasing educational opportunities. For that purpose, our governments have increased educational budgets; the methods used in the education and training of manpower have been improved; and enrolment in educational institutions at all levels has considerably increased. For their part, social security agencies have expanded their services and thereby extended their coverage. In some of our countries programs to change land tenure and bring about a fairer distribution of income through a more rational taxation system have

been instituted. Some steps have been taken to encourage credit unions and to promote the development of depressed areas of the economic sector. With a view to encouraging participation by the public, community efforts to carry out works for the public good have been promoted. We also intend to enact laws designed to strengthen the juridical status of the family; to provide institutional and economic resources for the complete protection of mothers and children and to create a social service for women to the end of promoting health, education, and social welfare activities. Population policy has been of special concern to us and, in some of our countries, legal measures have been adopted to give an economic and social structure to the concept of responsible parenthood.

However, our discussions brought to light situations which indicate delays which are of concern to our governments and which call for an increase in national resources and international assistance. Communicable diseases are a problem that calls for definitive solution; we possess the necessary knowledge, techniques and methods for eradicating many of the diseases endemic in our countries. Environmental sanitation activities were also of particular concern to us, since they increase the basic environmental infrastructure, lack of which has a marked negative effect on health indicators. We consider these activities to be not only supporting measures for achieving the goals for which health agencies are directly responsible but also as factors in fostering the social and economic progress of the urban and rural communities.

In our recommendations we emphasized the need to boldly undertake various activities which have so far been neglected, such as those relating to air pollution, water pollution, sanitary disposal of solid waste, and the participation of health services in programs for the repair and construction of houses.

In order to chart health policies that will enable us to extend and improve the integrated medical care services and give proper priority to those programs so that they can rapidly and efficiently give the greatest benefit per unit cost, we have been anxious to undertake studies on the characteristics and trends of the population in each of our countries, of their health problems, and of the resources available both in personnel and in facilities and equipment. That is why we are endeavoring to proceed with studies on health manpower and medical education such as that carried out in Colombia in 1964 by the Ministry of Public Health and Association of Medical Schools under the auspices of PAHO and Milbank Memorial Fund.

Fundamental tools for implementing the general health policy of our countries are planning, the improvement of administrative structures, and the organization of the ministries of health. We are concerned about the unsatisfactory utilization of resources due to the great number of state, parastate, and private institutions that have similar ends in view. In many of our countries, these institutions have not been integrated into a single health organization, although progress has been made in setting up coordinating commissions as a first step towards establishing common standards and preventing dispersion of effort through parallel and duplicate activities.

We have learned with concern that in certain countries there is a marked contrast between the independence of and amount of money available to certain parastate or private agencies and the restricted legal powers of the ministries of health for implementing a higher health policy. That is why it appears to us to be essential to enact a series of legal measures which, in addition to emphasizing the policy-making, coordinating, supervisory, and evaluating function of ministries of health, will facilitate inter-institutional coordination and the establishment of a common system and thereby ensure more effective integration of available resources. This is perhaps the most urgent task for the immediate future.

We are also interested in strengthening machinery for the coordination and liaison of the ministries of health and integrated preventive and curative services, with Universities and medical schools and with other schools providing training in the health sciences. This step will enable us to promote studies on the professional personnel needed for implementing health plans. Thus we will be able to make a sound and objective determination of the number and the caliber of the professional health workers we need. In the same way we must encourage the gradual and progressive introduction into the curricula of university schools of preventive and social medicine and make future professional health workers familiar with the basic principles of the administration of medical services and the part they will play in the health team. We also believe it is essential to encourage the establishment of programs for the advanced in service training and continuing education of all professional health workers, through regionalized systems of medical care and education. Schools of public health will have to step up the training of epidemiologists and administrators and prepare them not only to manage programs but also to undertake health planning. Special emphasis will have to be given in those schools to all aspects of the life of man in society.

We were much pleased to note that in their Declaration, the Presidents of America (Punta del Este, 14 April 1967) stated that "we will lay the physical foundations for Latin American economic integration through multinational projects", including the joint development of international river basins.[+]

We are inspired by the same thought, and the countries included in the plan for the overall development of the River Plate basin intend to unite their efforts to solve problems concerning water-use that have a direct or indirect bearing on health conditions. A similar spirit has inspired other joint projects such as those for the control and eradication of certain communicable diseases or their vectors (smallpox, malaria, Aedes aegypti, yaws), certain zoonoses, etc.

[+]Pan American Health Organization. La Salud en el Desarrollo Integral de la Cuenca del Plata. Análisis de algunos problemas importantes. Sexta Reunión de Ministros de Salud de la Cuenca del Río de la Plata. Porto Alegre, Brasil, 2-6 septiembre de 1968 MSCP-6/3 (Esp.)

To take an example from malaria: we believe that in order to safeguard the success already achieved in eradication, the result of immense efforts in vast areas of our countries, we should give priority to malarious areas whose epidemiological situation influences areas in neighboring countries and should coordinate inter-country and inter-regional activities as much as possible. Furthermore, convinced of the interdependence in our countries in health matters we intend in the future to emphasize reciprocal assistance. So far, generous assistance has been provided in the matter of donations of vaccine and other technical equipment but we believe that we can also extend it to the provision of technical assistance in such a way that the health personnel of some countries that have gained great experience and a high level of knowledge can assist in controlling infectious and parasitic diseases in other countries where such control is needed. By joining our efforts we will be able to accelerate the achievement of the objectives of eliminating those infectious diseases and protecting the health of our peoples.

Until very recently, health policy in many of our countries tended to assign more resources to medical care serviees than to programs for health promotion and disease prevention. We believe that this situation should be changed and in the future we intend to strike a better balance when preparing draft budgets.

We have already said that we consider the publication entitled "Facts on Health Progress" to be an evaluation of the progress made in reaching objectives of the Charter of Punta del Este. It analyzes each of the goals in terms of what has been done so far in the decade beginning in 1962. In some cases it contains a projection up to 1970 or beyond, assuming that the number and type of activities will be the same and investments will continue at the same level.

The general objective of the Charter of Punta del Este was "to increase life expectancy at birth by a minimum of five years and to increase the capacity to learn and produce by improving individual and collective health."

We noted that in the interval mentioned above there was an increase in life expectancy in Latin America from 60.2 years in 1960 to 62.5 in 1966 or 2.3 years. The increase should have been 3 years, so that only 80% of the target was fulfilled. Of course, some countries did achieve the objective; others did not. In any event, this increase was in large measure the result of the reduction in mortality in infants and children under 5 years of age to which we have already referred. In this respect, although substantial progress has been made, much remains to be done.

The specific objectives of the Charter of Punta del Este were "to provide adequate potable water supplies and sewage disposal to not less than 70 per cent of the urban and 50 per cent of the rural population; to reduce the present mortality rate of children less than 5 years of age at least one half; to control the more serious communicable diseases, according to their importance as a cause of sickness, disability, and death; to eradicate those illnesses, especially malaria, for which effective techniques are known; to

improve nutrition; to train medical and health personnel to meet at least minimum requirements; to improve basic health services of national and local levels; and to intensify scientific research and apply its results more fully and effectively to the prevention and cure of illness." The publication, "Facts on Health Progress" shows simply and graphically the progress made in solving each problem and the most important human and material resources for solving them. The data it contains have been examined by us in connection with various items on the agenda, and we shall therefore not repeat them here.

We shall only add that, in the discussions on the topic "Health Aspects of comprehensive family education" it was emphasized that they were but one area of a general Government policy and, as such, it was the responsibility of each Government to make its decision in the light of the circumstances in its own country. Intimately related to this topic are nutritional problems. Our discussions indicate that it is difficult to solve the problem of nutritional deficiencies unless the appropriate activities are linked to programs designed to increase the availability of foodstuffs and make it easier for the population to obtain them, especially the large segments that are poor and isolated from the main production and consumption centers. So far during this century the rural areas have received the least benefit from technical and scientific programs. We are therefore paying particular attention to this situation.

We emphasize the desirability of integrating the activities of specific programs with those of the general health services so as to ensure better use of available resources and to extend services to cover more persons.

It is evident that the quality of the statistical information provided by the Governments of the Americas has improved in recent years, thanks to the training of an increasing number of professional health workers and auxiliaries and the improvement of systems for the registration, analysis, and distribution of data.

In our recommendations we have repeatedly referred to the need to increase biomedical research in our countries, since we consider it essential to the solution of our health problems.

International collaborative studies have been of great value; outstanding among them has been the Inter-American Investigation of Mortality which has revealed the main characteristics of causes of death in ten major cities in Latin America, in San Francisco (USA) and in Bristol (U.K.). In addition to being a study in comparative epidemiology whose method can be applied to other similar studies, its conclusions must be the beginning of new investigations of the causes for the differences in relation to the same disease in the various participating countries.

As we have said, health planning has brought out the need for the countries to take the necessary steps to ensure that health and population statistics are as complete and exact as possible and that they are recorded, analyzed, and published in due time so that they can serve as an essential tool in the programming, execution, and evaluation of health activities.

Above all, the publication "Facts on Health Progress" shows what remains to be done in order to directly benefit a great number of human beings who have the same right to health. It will be useful for the periodical review of the general and specific activities of ministries of health of the Continent, in accordance with the principles, standards, methods, and procedures outlined in the report of our Meeting.

CHAPTER XVII

SPECIAL RESOLUTION

It is recommended that Governments consider the possibility of making contributions to a Fund whose income would be assigned exclusively to health programs in the form of long-term, low-interest loans. The Pan American Health Organization would be responsible for exploring the feasibility of this proposal.

CHAPTER XVIII

THE PARTICIPATION OF WOMEN IN HEALTH PLANS IN THE AMERICAS

(Special Item)

The Special Meeting of Ministers of Health of the Americas, considering that the participation of women is essential for the better implementation of national health plans, since they are the central point of the family and responsible for the health and education of the children, decides:

1. To confirm Recommendation C.3 of the Meeting of the Task Force on Health at the Ministerial Level, held in Washington, D. C., in April 1963, and to suggest that it be implemented in all the countries in a real and effective form.

2. To recommend to the American Governments and to inter-American and international organizations, both governmental and non-governmental, interested in or concerned with problems of the family, of women, or of children, that they strengthen their activities for the promotion and care of health and everything related to the well-being of the family group.

XIX. FINAL DECLARATION

Viewed in their historical perspective, the aims of the Special Meeting of Health Ministers of the Americas constitute an extension of and a step forward from those of the Meeting that took place in April 1963. That Meeting took its inspiration from the objectives of the Charter of Punta del Este and from the possibility of achieving them within the context of economic and social development. At this Meeting we have been guided by the decisions of the Chiefs of State, signatories of the "Declaration of the Presidents of the Americas", and by the experience acquired in, and the specific achievements of, the five years that have elapsed since then.

We are, however, fully aware that there are still millions of human beings in the Americas who are awaiting the benefits that accrue from the implementation of health plans and the attainment of the proposed goals. We acknowledge that, whatever their origin, ideas, beliefs or aspirations, these people are entitled to such benefits by the mere fact of their being inhabitants of our countries. It can now no longer be denied that health is a right and not a privilege. This concept has gradually been becoming a tangible reality with the multiplication and improvement of health services and the considerable increase in the demand for medical care from urban and rural public medical services.

The social demand for health services has grown more clamant, and because we consider it to be a just demand we have agreed to redouble our efforts to make more rational use of the material resources available for them, by the use of external capital whenever it is considered justifiable, and by applying modern scientific and technological advances to meet the aspirations of our peoples. In this way persons who play a part in this crusade for health will have better opportunities for placing their knowledge and experience at its service.

Although our proposals are essentially humanitarian in nature, we agree that they should be put into practice within a harmonious process of economic development and social welfare.

We have given special attention to the problems of populations living in rural areas, because of their seriousness and because of the need to bring these people into the mainstream of modern life and economic progress. The work carried out since the last Meeting has clearly shown their will and capacity for collaborating in work for the common good when they observe that it is being carried out from disinterested motives. We propose to encourage the modernization of rural life, integrating health techniques with all those improving social welfare and community life. This proposal should have the effect of reducing migration to the big cities and of alleviating the situation created by the shanty towns of the cities, wherein live groups of human beings totally destitute of the most elementary sanitation and material necessities, uprooted from their places of origin, unadapted to their new situation and lacking the technical or occupational training that will assure them an acceptable level of income. These communities constitute focal problems that,

in relation to the serious consequences to health involved, need a concentration of effort and resources for their solution.

An analysis of the whole picture reveals, within each country and within the Continent as a whole, the coexistence of traditional problems with those characteristic of industrial society, urbanization, the effects of modern science and technology on attitudes and customs, and the social imbalances implicit in the life of the big cities. As we move towards the solution of the traditional problems, the other type will become proportionately more marked, acquiring the characteristics of each society and reflecting the mutual relationships between human beings and the environment in which they live and which they in turn help modify. We cannot disregard this kind of problem, for the more development proceeds the more it will obtrude itself. It will also make its presence felt in the programs concerned with the geopolitical zones of the Americas, in the river basin projects, and in the infrastructure projects involving several countries. As was decided by the Chiefs of State, health activities should be an integral part of projects as early as the pre-investment phase. By preparing specific projects we can further the inflow of outside capital that will be needed because of the immensity of the tasks to be carried out.

This is the way, we feel, that health trends will continue until the end of the century. We are confident that economic development will substantially reduce present problems and enable the measures recommended by modern science to be put into operation, while at the same time preventing or reducing the impact of the problems that are beginning to arise and will be the heritage of society in the immediate future. In this order of ideas, we have not failed to consider opinions about the size and structure of the population. We continue to advocate the desirability of a harmonious development genuinely directed towards the general welfare and not centered on investments for economic gain that postpone social benefits, for - it bears repeating - men and women are the sole beneficiaries as well as the creators of all development.

A basic factor in the success of the socially important task of health is the preparation by the universities of the human material that is most valuable from the point of view of intellectual capacity for the study and solution of the problems posed by the increasingly complex and differentiated needs of persons and societies. Education for development should be the theme of the whole teaching process. By this we mean that education should be oriented towards questions relating to the life of man in society with special attention to questions affecting the largest number of people for which rational solutions exist, as well as towards questions for which research is required. The universities should train professional men in accordance with the features implicit in any given moment of history and its prospects for the future, with a harmonious balance between science, technology, and culture and with a holistic sense of the knowledge that inculcates in them humanism and an overall understanding of man and his role in contemporary society. We are confident that, through their work for the public weal, graduates will return to society what was imparted to them in their academic years.

In accordance with the ecological approach to health, and in full awareness of the sufferings and burdens of our peoples, we solemnly state our intention to unite our efforts and our resources with a view to prolonging the lives and promoting the happiness and well being of our populations. We are encouraged to do so not only by our moral responsibilities but also by the cultural wealth of the American people and their intrinsic value as the repository of all economic progress, persuaded that a healthy and dynamic community life arises, inter alia, from the fulfillment of its health needs.

IN WITNESS THEREOF, the Ministers of Health of the Americas, or their Representatives, and the Director of the Pan American Sanitary Bureau, Secretary of the Meeting, sign the present Final Report in the English and Spanish languages, both texts being equally authentic.

DONE in Buenos Aires, Argentina, this eighteenth day of October, nineteen hundred and sixty eight.

Dr. Ezequiel A. D. Holmberg
Secretary of State for Public Health of Argentina

Hon. Cuthbert Edwy Talma
Minister of Health and Community Development of Barbados

Dr. Jorge Rojas Tardio
Minister of Public Health of Bolivia

Dr. Leonel Tavares Miranda de Albuquerque
Minister of Health of Brazil

Dr. Basil D. B. Layton
Principal Medical Officer
International Health of Canada

Dr. Ramón Valdivieso Delaunay
Minister of Public Health of Chile

Dr. Alvaro Aguilar Peralta
Minister of Public Health of Costa Rica

Dr. Antonio Ordoñez Plaja
Minister of Public Health of Colombia

Dr. Mario Antonio Fernández Mena
Secretary of State for Public Health and Social Welfare of the Dominican Republic

Dr. Francisco Parra Gil
Minister of Public Health of Ecuador

Dr. Salvador Infante-Díaz
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Dr. Raymond G. Hyronimus
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Dr. Emilio Poitevin
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Dr. Fritz Audoin
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Dr. José Antonio Peraza Casaca
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Dr. Abraham Horwitz
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