results achieved at the end of the four-year period will be readily understood by governments and peoples. Under this heading, for example, come projects which will lead to a considerable decrease in the number of deaths from malaria or venereal diseases, or to a marked reduction in infant mortality in a given area.

Whether these plans will become a reality depends on whether we will be able to overcome several problems the successful solution of which is essential to the future of W.H.O.

For instance, it is obvious that in order to implement these plans over a number of years W.H.O. will have to avail itself of the services of men with experience and skill in the various fields of medical science and public health as well as with a real understanding of the international obligations incumbent upon the Organization. A maximum effort will have to be made by W.H.O. to recruit such experts and technicians on a world-wide basis so that its Secretariat would have the broadest possible geographical representation and so that progress made in various countries could be used for the benefit of all. This will often call for sacrifices on the part of the Member States in releasing, on a temporary or a permanent basis, medical and technical personnel whom they may need for the purposes of their own health administration.

To carry out our battle for world health will of course take money. It has been estimated that four of the worst diseases could be wiped out from the earth for less than it costs the world to finance a war for one week. Yet the amount of money put at the disposal of W.H.O. for one year's operations is not larger than that spent annually by many a large city for its own municipal health programme. It will be our responsibility, and the responsibility of each health administrator associated with the work of W.H.O., to convince governments that at a time when thousands of millions are allotted for rearmament purposes a few more millions must be invested by the people in the most precious values they have to protect—their own health and the health of their children.

An even more important prerequisite for the success of W.H.O. is the fullest participation of all nations in its work. Unfortunately, W.H.O. is still not the world-wide organization its planners meant it to be. Several countries have not yet joined it, others are not giving it the necessary support, while still others, some of whom played an important part in its creation, have ceased active membership. This situation cannot endure. Political, social, and economic differences have no meaning when the health of the people is at stake. If there are divergent opinions about how our common battle should be fought, they should be settled within the Organization, with the help of everybody.

It is obviously in the interest of all nations and all groups to participate in this crusade, the only aim of which is to alleviate the sufferings of man, and, in so doing, make the coming generation physically, mentally, and socially healthy.

Mr. G. E. Haynes, secretary of the National Council of Social Service, left London on April 30 for a nine weeks' lecture tour in Australia and New Zealand, arranged by the British Council. In Australia he will be the guest of the Australian Government, and his programme, arranged by the Department of Social Services, includes visits to Sydney, Canberra, Melbourne, Hobart, Adelaide, Perth, and Brisbane. He is lecturing on "Co-operation Between Voluntary and Statutory Bodies in Social Welfare" and "The Citizen and the State: Partners in Social Welfare." Mr. Haynes will go on to New Zealand on June 15.

ADVISORY SERVICES OF THE WORLD HEALTH ORGANIZATION

BY

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In the century-old history of international health co-operation a changing emphasis in objectives and methods can be noted—a change from a negative to a positive approach. International co-operation began with the setting up of quarantine regulations to prevent the spread of communicable diseases from one country to another; to-day the objective is the control, even the eradication, of such diseases wherever they are prevalent. From dissemination of information on pestilential diseases we have progressed to pooling knowledge, experience, and resources to provide assistance to countries in promoting the health of their peoples. Instrumental in providing such assistance are the "advisory services" of the World Health Organization (W.H.O.), by means of which governments are granted aid of many types to build up health services which will continue to function after outside help is withdrawn.

The need for the W.H.O. to provide a programme of advisory services to governments is found in the fact that the countries of the world differ to a marked degree in the stage of development of their health, medical, and related services. The interrelation of the health status of a people and their economic and social development has long been recognized. W.H.O., through its advisory service programme and in collaboration with U.N. and other specialized agencies concerned with agriculture or industry, is developing the channels through which the nations of the world together can give the impetus necessary to advance the cause of world health.

The advisory services programme of W.H.O. is the place to which the U.N. and its specialized agencies will look for help in developing the health aspects of special activities, whether of an emergency character, as in the case of the United Nations International Children's Emergency Fund (Unicef) or the U.N. Relief for Palestine Refugees, or of a more lasting character, as in the case of the proposed U.N. programme of technical assistance for economic development. It is not an exaggeration to say that success in any programme of technical assistance for economic development in underdeveloped countries will require that health scourges such as malaria, tuberculosis, and venereal diseases be controlled, and that sources to promote the physical, mental, and social health of industrial and agricultural workers and their families go hand in hand with programmes for economic development.

Types of Service

The W.H.O. advisory service programme consists largely of: (1) assistance to professional and technical education, including: (a) assistance to educational institutions, (b) fellowships, (c) exchange of scientific information, and (d) distribution of medical literature and teaching materials; (2) consultation and advisory services, including general information on organization of health services and specialized advice on medical and related subjects as requested; and (3) demonstration projects and supplies for such.

These advisory services are provided to governments through the Regional Staff of the Organization. They are based on the best available knowledge in the different fields. This information is gathered from a wide variety of sources. It is evaluated and prepared for use at the headquarters of

W.H.O. Expert Committee on Plague.—Meeting at Geneva, September 19-24, 1949. Those sitting, left to right, are Dr. P. C. C. Garnham (U.K.), Dr. P. M. Kaul (W.H.O.), Sir Sahib Singh Sokhey (India, Chairman), Dr. Georges Blanc (France), Mr. D. H. S. Davis (S. Africa). Standing, left to right, Dr. Almir Castro (Brazil), Dr. Karl F. Meyer (U.S.A.), Dr. A. Macchiavello (W.H.O.), Dr. C. Klimt (W.H.O.), Dr. Y. Biraud (W.H.O.).

the Organization and in the regional offices. It is made available to governments and as requested to other health institutions and organizations.

Expert Committees

In order that the knowledge and opinions of experts on subject-matter related to the major interests of W.H.O. may be made readily available to National Health Administrations on a world-wide basis, the World Health Assembly has authorized the appointment of committees of experts to consider scientific questions, service programmes, and related problems, and to prepare reports. Through this means the Organization receives the advice of leading specialists from different parts of the world; the experts are enabled to discuss and exchange opinion on scientific matters from the point of view of countries that have reached different stages in the development of their health and medical programmes; and standards for world-wide use can be established.

The information and recommendations resulting from the meetings of the expert committees are published in the World Health Organization Technical Report Series and are made available to all interested governments, institutions, and individuals.

In connexion with the "advisory services" the following expert committees have been authorized: Environmental Sanitation; Hygiene of Seafarers (joint with I.L.O.); Insecticides; Malaria; Maternal and Child Health; Mental Health; Nursing; Nutrition (joint with F.A.O.); Professional and Technical Education; Public Health Administration; Tuberculosis; and Venereal Infections.

Small subcommittees may also be appointed to advise on particular questions, as, for example, on school health services, problems of premature birth, serology in the diagnosis of venereal disease, the use of streptomycin, and so forth. Committees of experts convened by other departments of the Organization make reports that are useful in the advisory service programmes, for they establish standards that can be utilized by the advisory service staff in giving assistance to national health administrations. Thus the recommendations of committees on epidemiology, plague, cholera, or schistosomiasis, on virus diseases, or on health statistics aid materially in the implementation of programmes of control of communicable diseases and in the development of national or local health services.

Professional and Technical Education

One of the most serious obstacles to the promotion of health in every country is the lack of adequate trained personnel. When tackling this problem on an international scale it is necessary not only to attempt to meet quantitative requirements but also to train specialists and to keep physicians and other medical personnel abreast of the latest developments in medicine, not just in their own countries, but everywhere. These needs are met by a variety of types of assistance, including advisory service to training institutions, fellowships, group training, seminars, and other means for the exchange of scientific information.

W.H.O. must be well informed on all educational opportunities and facilities in the fields of medicine, public health, and nursing, and in the various other aspects of the health programme, such as nutrition, medical social work, and the social sciences in general. Furthermore, W.H.O. must be able to advise and assist countries and educational institutions in training health personnel. This is a large undertaking, and as yet only a beginning has been made. It is an essential part of the work of an international health organization, however, as is well recognized by the Member Governments, and it will be facilitated by the development of regional activities co-ordinated through the headquarters technical staff. Already, however, W.H.O. has been able to give consultation service to a number of schools of public health and is assisting several schools of medicine and nursing with teaching personnel. In two schools of medicine assistance in modern anaesthesia is being given, in one assistance in biochemistry; in several schools of nursing the teaching staff in maternal and child health or in public health nursing is being augmented.

Fellowships

Of the various types of assistance to governments in improving the quality of the health and medical services, the most widespread has been the fellowship programme. This service was inherited by W.H.O. from Unrra, and was carried on by the Interim Commission until the permanent Organization was established. A precedent for this type of service to countries had long been set by certain of the great foundations which for many years have successfully aided in the training of health personnel in many parts of the world through grants for fellowships.

In the selection of Fellows by the countries, emphasis is laid on choosing those who can contribute most to their respective health programmes. Priority is given to subjects in which W.H.O. is particularly interested and to persons who occupy, or may occupy, administrative or teaching positions. Requests for fellowships come through national health administrations, and both the country concerned and the prospective Fellow undertake obligations relating to the utilization of the knowledge and experience gained through the studies financed by W.H.O.

Fellowships may be either for individual tuition or observation or for group training. All are for postgraduate education, with the exception of those granted to countries that do not have their own graduate personnel. Fellowships for undergraduate studies have so far been limited to two countries.

Exchange of Scientific Information

Several methods for the exchange of scientific information through the channel of advisory services to governments are being utilized by W.H.O. These include the arrangement of seminars on special subjects. The leaders of such seminars are experts, brought together by W.H.O. from a number of countries in which special work has been carried out in the special fields in which there have been recent scientific advances, knowledge of which is desired by professional people in the various countries.

The seminars may be held for the benefit of professional workers in a group of countries, and be located in one country to which access is relatively easy and facilities are available. To such, governments in the area are invited to send selected professional workers. In other cases the leaders of the seminar may travel from country to country, thus reaching larger numbers of professional persons in each country.

Another method of providing for the exchange of scientific information is by assisting governments to improve their medical libraries and to develop schemes of exchange of literature through the use of microfilms and reference techniques. Such assistance has been given to one country with a view to making reference materials available to a number of neighbouring countries.

Medical Literature, Teaching Materials, and Other Supplies

Some material assistance is a necessary complement to the other advisory services, especially in the educational and training programmes and in the other projects whose main objective is to assist national health administrations to initiate and carry out new or expanded health projects. In 1949 W.H.O. supplied, in answer to requests from governments, approximately 3,368 annual subscriptions to periodicals, 3,133 books, and a variety of other teaching materials, such as film strips, slide projectors, anatomical charts, skeletons, obstetrical models, etc.

In meeting the needs of countries for medical supplies in connexion with a variety of health programmes the limited budget of W.H.O. could only scratch the surface even if it were devoted entirely to such an undertaking. It can therefore be readily understood why the World Health Assemblies have chosen to devote the major part of the budgets to services of an advisory nature, which have more far-reaching effect for the amount of money invested than would supplies purchased at the same cost. However, it was realized that a certain quantity of medical supplies would have to be provided in some cases for projects to which the Organization would be contributing personnel. Thus budgetary provision has been made for procurement of limited supplies and equipment where no other source of supply is available. Such supplies have included mass x-ray units, microscopes, vaccines, and D.D.T. In projects undertaken jointly with Unicef, the latter has supplied the necessary funds.

Consultation and Advisory Services

One of the most extensively used of the advisory services is the assistance of W.H.O. advisers and consultants in

W.H.O. Yellow Fever Panel.—First Session at Geneva, December 1-6, 1949. From left to right: Dr. Fred Soper, director, W.H.O. Regional Bureau for the Americas; Médecin-Colonel Saleun, adjoint technique du Médecin Général Inspecteur Vauzel, Ministère de la France d'Outre-Mer, Paris; Dr. A. F. Mahaffy, former director, Yellow Fever Research Institute, Entebbe, Uganda; Dr. Waldemar Antunes, director, Serviço Nacional de Febre Amarela, Departamento Nacional de Saude, Rio de Janeiro, Brazil; Dr. G. L. Dunnahoo, Medical Director, Chief, Division of Foreign Quarantine, U.S. Public Health Service, Washington, U.S.A.

surveying the health needs of, and in planning specific projects for, countries requesting aid. These advisers and consultants, who are experts in their particular fields, may be attached to headquarters or to regional offices; or they may be assigned on a short-term basis to a specific survey or project. During 1949 consultant services were granted to approximately 15 governments for help in tuberculosis projects, to 24 for advice concerning control of venereal disease, to 16 on problems relating to maternal and child health, and to 15 for assistance in malaria control. Experts in mental health, public health, sanitation, and health education of the public, or in such highly specialized subjects as poliomyelitis and immunization against whooping-cough, have also visited various countries.

As short-term consultants are requested by countries to advise on a specific aspect of some broad programme, the long-term regional advisers give advice and assistance in the organization and broad development of major problems. In the latter case, not infrequently a team of advisers work together, as when a specialist in maternal and child health and a nurse go to assist a country in planning its child health programme.

The consultant and advisory services are particularly important at this stage in the work of W.H.O., because expert advice is needed before any major project is undertaken. Sending consultants to survey the situation and to map out a feasible programme is one means of assuring ultimate success and of sharing technical knowledge and experience.

Demonstration Projects

Demonstration teams are in some circumstances proving to be an effective type of advisory service. The work which they do can be illustrated by the activities of the malaria demonstration team in Pakistan.

As is well known, malaria is one of the greatest scourges of mankind in Southern Asia, and is a major if not the most important cause of death and sickness in parts of Pakistan, affecting many millions of people, including children.

In 1948 the Pakistan Government submitted a request to W.H.O. for a malaria demonstration team to assist in showing to the people that with the use of D.D.T. and modern spraying methods the disease could be virtually wiped out. A request was also made to Unicef for supplies and equipment, and in the spring of 1949 a W.H.O. international team consisting of a malariologist, a sanitary engineer, and a public health nurse was sent to an area in Eastern Pakistan chosen by the Government. The Pakistan Health Department assigned to the team an entomologist, a second malariologist, a sanitary engineer, and a public health nurse, thus making the project one in which responsibility was shared by the international and the national bodies. The Pakistan Government also supplied all the necessary subordinate personnel for the survey and for spraying operations. Unicef provided equipment, motor vehicles, a laboratory unit, and supplies of D.D.T. sufficient to protect a population of 75,000 for a year. The W.H.O. staff members had the task not only of demonstrating the most effective means of malaria control but also of training local personnel.

The work began with a general survey of the health situation of the area. Spraying operations were carried out, and, when the season for the transmission of the disease by mosquitoes was over, a survey of both the sprayed area and a neighbouring control area was made. Spleen rates in the sprayed area fell considerably below those found in the area at the beginning of the project, whereas in the control area they remained at the same level; subtertian malaria infections were found to be abundant in the control area but extremely rare in the sprayed zone.

Throughout the period entomological data were collected systematically, studies on the bionomics of the anopheline species of the area were undertaken, window-trap catchings were recorded, and experimental work was carried out.

While the malaria-control operations were in progress, and during the period between spraying operations, several members of the team gave assistance locally to other public health activities. For example, the public health nurse, with the aid of her Pakistani colleagues, was engaged in concomitant activities relative to health education and maternal and child welfare; she visited homes and schools, supervised the work of half-trained midwives, and assisted other team members in various projects. When the spraying operations were completed the malariologist assisted the public health services in a survey of kala-azar cases, through the capillary method of the formol-gel and antimony tests, with a view to assessing the results of D.D.T.-spraying on the transmission of the disease. Treatment was also organized. The sanitary engineer assisted in the programme of general health improvement by helping relevant departments of the local government in plans for water supply and sewage disposal.

An agricultural expert has recently been assigned to the team by the Pakistan Government in order to assess the increase in agricultural production, if any, following improved health of the rural population.

The first year of operations must be considered a pilot project. Not until the end of the second year (1950), when the most effective use of personnel and organization is realized and the population protected reaches 250,000, will it be possible to evaluate the results and to assess the minimum cost per capita of malaria control. It is hoped that the cost will be amply compensated by an increased output of work and agricultural production, in addition to other benefits which will follow improvement in the general health of the population.

On completion of the operations the international team will be withdrawn, leaving behind experienced Pakistani personnel with knowledge of a well-tried technique to continue malaria control in the same area and to extend it to other regions.

Fields of Activity

Because the demand for advisory services and the costs involved exceed the financial means of the Organization, certain criteria have had to be established for the selection of projects to which assistance should be granted. It has therefore been considered advisable to concentrate on major health problems and on programmes relating to them which, it is hoped, will produce rapid and readily apparent results. For this reason, the First World Health Assembly decided that priority should be given to maternal and child health and to the control or eradication of malaria, tuberculosis, and venereal diseases, all of which respond well to large-scale operations.

Sanitation and nutrition are next in importance, and programmes in these fields may readily be combined with child health promotion and disease-control projects. Public health administration, nursing, mental health, and health education of the public are receiving much attention. Because progress in any field of public health is dependent on the supply of well-trained personnel, emphasis at every point is given to ways and means of strengthening professional and technical education.

Malaria

W.H.O.'s malaria-control operations include two types of activities: eradication of anopheline vectors by means of spraying with D.D.T. and/or other insecticides, and treatment of malaria cases with the latest antimalarial drugs.

Seven demonstration teams, such as the one working in Pakistan, are operating in Afghanistan, India (four teams), Iran, and Thailand. Unicef has assisted with supplies in five. In one, W.H.O. has provided the supplies as well as the team members. Consultants have visited Africa, Lebanon, Mexico, North Borneo, the Philippines, Turkey, Venezuela, Yugoslavia, and the U.S.A., as well as the countries harbouring the Palestine refugees. Many of these activities have been of a preparatory nature, and it is impossible to arrive at their full value until more time has elapsed and more experience has been gained.

Venereal Infections

In its programmes of venereal disease control W.H.O. is placing emphasis on early syphilis, syphilis in pregnancy, prenatal and infantile syphilis, and venereal infections which represent a particular problem in a certain geographical area or population group. Large-scale operations utilizing foreshortened treatment with penicillin have been undertaken by many countries with the help of W.H.O. or of W.H.O. and Unicef. Serological laboratories and training facilities are a part of each major demonstration programme. An attempt is made to develop a balanced programme in which the participating country provides personnel and supplies in addition to those furnished by the international organizations.

The efficacy of penicillin against other treponemas besides *Treponema pallidum* has given impetus to health work in countries where parasyphilitic extravenereal diseases cause considerable damage to the health of the people, particularly of children. The interrelationship of the endemic syphilis of Bosnia (Yugoslavia), yaws of the Caribbean area, the East Indies, and the Pacific Islands, and pinta of Mexico, the Middle East, and South and Central America has presented problems for health

administrators, epidemiologists, clinicians, and pathologists for many years. The susceptibility of these treponematoses to penicillin has resulted in an orientation towards "treponematoses control" rather than "syphilis control," "yaws control," etc. Field programmes supported by Unicef and/or W.H.O. in mass attacks against yaws in Haiti, Indonesia, and Thailand, against bejel in Iraq (planned for 1950), and against endemic syphilis in Yugoslavia, as well as the activities of W.H.O. venereal-disease-control demonstration teams in Egypt and India, provide invaluable material for comparative investigations of the nature and interrelationship of these treponematoses and their causative agents.

The W.H.O. field programmes assist the countries in undertaking mass clinical and serological surveys of population groups, followed by penicillin treatment of proved cases. In Poland more than 45,000 cases of venereal disease were treated in 1949. In the endemic syphilis area in the Ghund Valley (Simla, India) control of infectious cases of syphilis was achieved within a few months following the mass attack. The entire population of this secluded valley was examined clinically and serologically, and the preliminary survey revealed a large number of infectious cases and a seropositivity prevalence of 65%. In the subsequent mass treatment, procaine penicillin with 2% aluminium monostearate was used. Follow-up examinations at intervals indicated that no new case of fresh infectious syphilis occurred in the valley up to five months after the initial attack. For treponematoses otherwise, it has been shown by investigators in Africa that villages in underdeveloped areas with a high prevalence of yaws can be kept free of the disease.

In co-operation with the health administrations, an endeavour is being made to train in modern methods as many doctors and technicians as possible, using the jointly established local venereal disease demonstration teams and treponematoses projects as provisional training centres so that the latest laboratory and field techniques may become part of local and national programmes. For example, thirty physicians and technicians were trained in 1949 at the laboratory and clinical centres of the Simla demonstration area in India.

Tuberculosis

Much of W.H.O.'s work on tuberculosis has been undertaken in association with Unicef, which has been conducting extensive mass B.C.G.-vaccination campaigns and provides streptomycin and supplies and equipment for tuberculosis laboratories and diagnostic clinics. W.H.O.'s activities have included technical assistance on programmes, equipment, and techniques in various countries, including Austria, Ceylon, China, Czechoslovakia, Egypt, Finland, France, Greece, Iceland, India, Israel, Lebanon, Pakistan, Poland, and Yugoslavia, and preliminary surveys in approximately thirty countries. Through its Tuberculosis Research Office in Copenhagen, W.H.O., in co-operation with Unicef, is evaluating the results of mass B.C.G.-vaccination campaigns. Assistance has also been given in establishing a B.C.G. laboratory in Mexico City.

A W.H.O. demonstration team, consisting of a medical officer, an x-ray technician, a laboratory technician, and a nurse, is being started in El Salvador. Here a tuberculosis centre for diagnosis is being established for which W.H.O. has provided equipment and supplies. Advice was given to Turkey on the setting up of a teaching and training centre in Istanbul, and a full-time director of the project has been assigned by W.H.O. for one year. Lastly, advisory services on streptomycin therapy are being given in a number of

European countries, consultants being provided by W.H.O. and supplies by Unicef.

Maternal and Child Health

In maternal and child health, as in programmes directed against communicable diseases, advisory services take the form of consultations and surveys, demonstrations, provision of personnel and technical information for projects in association with other agencies—Unicef in particular—assistance to already existing health services, and educational aid of various types. Consultation services on numerous subjects relating to maternal and child health have been given to approximately fifteen countries. A demonstration team, consisting of one paediatrician and one instructor in paediatric nursing, is working in India, and joint Unicef/W.H.O. teams have begun operations in Malaya and in South Korea. Full-time regional advisers in maternal and child health have been attached to the offices in South-East Asia, Eastern Mediterranean, and the Americas, and to the special offices for Europe and the Western Pacific.

Since the programme for the promotion of the health of mothers and children is largely one of advice to governments on the organization of national and local services, methods of establishing preventive clinics and health education, and on modern obstetrics and paediatrics, the work of the regional advisers in these fields has a particular importance. At the request of governments highly specialized consultants are made available, as in the case of two teams of consultants in the care and treatment of children with poliomyelitis that have spent three months each in India and Chile. These teams consisted of an orthopaedic surgeon, an orthopaedic nurse, and a physiotherapist. Particular emphasis is placed on planning with the government health authorities on how training centres for such teams can be established.

Other Activities

In addition to these major activities relating to communicable diseases and to maternal and child health, W.H.O. provides advisory services in the fields of mental health, nutrition, public health administration, environmental sanitation, health education of the public, nursing, and professional and technical education.

Close collaboration is maintained with other U.N. agencies—for example, some of the mental health activities are closely related to Unesco projects and to projects of the Division of Social Activities of U.N.; nutrition problems are handled jointly with F.A.O.; certain public health projects, particularly in relation to occupational hygiene and the hygiene of seafarers, require the co-operation of I.L.O.; and many programmes are carried out in association with Unicef inasmuch as they are concerned with problems of child health.

No attempt has been made to describe in full the field activities of W.H.O. Details may be found in the annual reports of the Director General and in the "Programme and Budget of the Organization," both of which are published in the *Official Records of the World Health Organization*.

Selection of Programmes

In 1949, the first full year of operation of the permanent Organization, one-third of the budget of W.H.O.—or about \$1,600,000—was allotted to the advisory services. This amount represents only a part of what would have been required if the Organization had provided all the services requested by Member Governments; and it does not

include the substantial sums which the Unicef, in co-operation with W.H.O., has spent on child health activities. Requests for the assistance of W.H.O. in 1950 have far exceeded those in 1949. Approximately \$2,000,000 is available to meet these requests (roughly one-third of the total budget).

Because of financial limitations and the consequent necessity for making the best possible use of the funds allotted to the advisory services, certain guiding principles for the selection of projects have been set up by the Executive Board of W.H.O. The following criteria are used :

1. Programmes established by the World Health Assembly or by the United Nations and its specialized agencies.
2. Recommendations of expert committees.
3. The importance of the problem to the whole health programme of the requesting country, and inability of the country itself to provide the services required, as measured by the availability of trained personnel, the means of training personnel, or available foreign currency.
4. The probability of achieving successful and useful results.
5. Assurance of participation and co-operation on the part of the government throughout the programme, including contributions to the programme by meeting such costs within the country as can be met in domestic currency.
6. Reasonable assurance from the government, where appropriate, that the programme will be continued, especially that the government has established, or will establish, a health organization with personnel and financial support adequate to continue the programme.
7. Equitable distribution among the various countries seeking assistance when the requests exceed the available budget.

Requests and Approvals.—Requests for advisory services are submitted by Member Governments as part of a general programme for which aid is desired. Detailed proposals come later, after tentative allocations have been made and consultations have taken place with the W.H.O. Regional Director and with the technical advisers attached to the headquarters of the regional offices of W.H.O. In mapping out both general and specific programmes the assistance of special consultants or advisers from the regional office is usually required. Requests for assistance are forwarded by the countries to the Regional Directors, who, after any necessary consultation with the technical staff at Headquarters, make recommendations to the Director General with respect to approval and allocation of the necessary funds. The ultimate decision whether or not a specific project is approved rests with the Director General.

Conclusion

The current programme of W.H.O.'s advisory services to governments is based upon the constitutional provision that among many functions W.H.O. shall "assist governments, upon request, in strengthening health services." The scope of these advisory services could be as broad as the total health programme. Because of the limitation of funds, however, and the desirability of focusing attention on the most urgent problems, the World Health Assembly has given priority to certain major programmes, chosen because of their world-wide importance and because of the susceptibility of the conditions or diseases involved to well-established methods of approach.

This form of international service is relatively new. It can be expanded as the need for more services becomes apparent or as new knowledge is developed. Through it the nations of the world have a means of exchanging information with each other, of giving technical assistance to each other, and of pooling their knowledge and resources for world health.

ORIGINS OF INTERNATIONAL HEALTH WORK

BY

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The subject of this article is international health work in the restricted sense of intergovernmental action on health problems. As Sir George Buchanan (1943a) remarked some years ago in his Milroy Lectures : "Any suggestion that medicine, always amongst the most international of the learned professions, should henceforth first look to the League of Nations or any other intergovernmental office in order to maintain its proud tradition of internationalism would indeed be retrograde." In any complete account of international health work reference would also have to be made to the International Red Cross Organization, the International Health Division of the Rockefeller Foundation, and the various international medical congresses.

Nevertheless, in spite of technical improvements in facilities for communication, the last century has seen the growth of many obstacles to non-governmental internationalism in medicine. Latin no longer provides a common scientific language for physicians, and the excessive proliferation of periodical medical literature not only creates difficulties for the individual worker but makes it impossible for medical libraries in all but a few wealthy countries to maintain collections which are representative of the world's output.*

The rise of political and economic nationalism has seriously limited the individual's freedom to travel and study abroad, and the increasing responsibilities for health services undertaken by governments cannot be without effect on the fruitfulness of unofficial international relations in medicine. These factors, and the widening gap between the level of development of science and technology in the advanced and that in the less-advanced countries, necessarily increase the potential usefulness and range of activities of an intergovernmental health organization.

Early Quarantine Measures

The first intergovernmental health measures depended upon the theory of the contagiousness of certain diseases, and originated with precautions, often excessive, designed to restrict the importation of such diseases from one country into another. Although the segregation of lepers had long been common, maritime quarantine measures were first instituted when the pandemic of bubonic plague—the Black Death—devastated Europe in the fourteenth century. There is little agreement among writers concerning the date and place of the first introduction of maritime quarantine, and such agreement as exists is probably more correctly regarded as the product of faithful emulation than as the weight of cumulative testimony.

Some writers attribute this distinction to the Republic of Ragusa, on the eastern shore of the Adriatic, in 1377. It is said that seafarers suspected of being affected by plague were isolated for 30 days at a place distant from the

*As late as 1834, William McMichael, in his evidence to the Select Committee on Medical Education, said : "Most of our best treatises on physic are written in Latin; it is not possible to read them without a knowledge of this language." McMichael also said : "The science [of medicine] is advanced so much, that it is not expected that we should have voluminous publications."