WHO at Fifty

1. Highlights of the early years until 1960

*To mark the fiftieth anniversary of the World Health Organization in 1998, **World Health Forum** briefly reviews the early years of the Organization and highlights some of the wide range of activities carried out or promoted by WHO during the last 50 years. This article describes the founding of the Organization and gives examples of WHO's work until 1960.*

The beginning: 1946 to 1948

The World Health Organization, whose objective is "the attainment by all peoples of the highest possible level of health", officially came into existence as a Specialized Agency of the United Nations on 7 April 1948. However, some twenty months earlier, on 22 July 1946, the representatives of 61 countries at the UN-sponsored International Health Conference in New York – after much preliminary work and "long and arduous efforts" – had approved the Constitution of the new Organization. The Conference decided that an Interim Commission consisting of 18 States should assume the responsibilities and tasks of the future Organization until 26 Member States of the United Nations (at that time there were 51 Members) had accepted or ratified the WHO Constitution. The twenty-fifth and twenty-sixth ratifications were received on the same day (7 April 1948) from the Byelorussian SSR (now Belarus) and Mexico, and this date marks the birth of the new Organization.

Interim Commission

The two years of the Interim Commission (1946–1948), based first in New York and then in Geneva, Switzerland, were packed with activity. Assuming the functions of three of the four pre-existing health organizations – the Office International d'Hygiène Publique (OIHP), the Health Organisation of the League of Nations, and the Health Division of the UN Relief and Rehabilitation Administration (UNRRA), the Interim Commission had to deal with a variety of international health matters. Its main task was to pave the way for the staffing, siting and priority programmes of the new World Health Organization, and to prepare for the first World Health Assembly. It also demonstrated international cooperation in the health field by offering its services to individual countries – for example, to Egypt in October–November 1947 in the battle against a serious cholera epidemic – and appointed 19 expert committees and subcommittees to help combat old as well as new health problems after the Second

The material for this article was gathered by Dr Ali Hussein, former Editor of the *WHO Chronicle* (1977–1982), the *Bulletin of the World Health Organization* (1983–1995) and *World Health Forum* (1992–1996).

A founding father of WHO: Dr de Paula Souza

One of the founding fathers of WHO was Dr Geraldo de Paula Souza (1889–1951) of Brazil. It was he who was responsible for the inclusion of the concept of "health" in the Charter of the United Nations and who, in a joint proposal with the delegation from China, asked for an international conference on health. This conference was convened in July 1946 in New York and led to the creation of the World Health Organization.

– see "WHO: from small beginnings", interview with Dr Szeming Sze, in World Health Forum, 1988, 9:29–34.

World War. The subjects covered by the expert committees included biological standardization, malaria, tuberculosis (with subcommittees on streptomycin and on tuberculin and BCG), venereal diseases, quarantine (including yellow fever) and international epidemic control (cholera, plague, typhus, and smallpox), habit-forming drugs, and preparation of the Sixth Decennial Revision of the International Lists of Diseases and Causes of Death.

The Interim Commission elected Dr Andrija Štampar (Yugoslavia) as its permanent Chairman, and Dr Brock Chisholm (Canada) as its Executive Secretary. Its expenses were met from funds advanced by the United Nations, and the Executive Secretary was responsible for the preparation of the budget estimates.

First World Health Assembly

The First World Health Assembly met in Geneva from 24 June till 24 July 1948, with the participation of representatives from 65 nations (53 Member States and 12 observers). Dr Andrija Štampar, Chairman of the Interim Commission and President of the Yugoslav Academy of Sciences and Arts, was elected President of the Health Assembly. One of its first actions was to nominate and appoint Dr Brock Chisholm, Executive Secretary of the Interim Commission, as Director-General of WHO and to elect 18 members to the WHO Executive Board.

The Health Assembly accorded special priority to four subjects: malaria, tuberculosis, venereal diseases, and maternal and child health. Environmental hygiene (sanitary engineering) and nutrition were also granted priority status, while 33 other subjects were identified for activities on a more limited scale. These were grouped under public health administration (such as problems relating to hospitals, clinics, medical aid and rehabilitation, nursing, sanitary training, hygiene in industry, and hygiene of seafarers), parasitic diseases (ancylostomiasis, filariasis, leishmaniasis, schistosomiasis and trypanosomiasis), virus diseases (poliomyelitis, rabies, influenza and trachoma), mental health (including problems of alcohol and drug dependence), and efforts to stimulate the production of penicillin and improve its distribution throughout the world. The new Organization was to continue and expand the work of its predecessors in various fields, such as international epidemiology, biological standardization, unification of pharmacopoeias, health statistics, and publications.

The Assembly approved the following.

- Six regional organizations to be created newly or from existing institutions (e.g. the Pan American Sanitary Organization in Washington, DC, USA, and the

Sanitary Bureau in Alexandria, Egypt) and to be responsible for countries in Africa, the Americas, the Eastern Mediterranean, Europe, South-East Asia, and the Western Pacific.

- WHO headquarters to be located in Geneva, which was selected unanimously (out of four possible sites) because of the "spirit of peaceful international cooperation, which has long distinguished Switzerland, and particularly Geneva, and the traditions of fruitful work inherited from the League of Nations Health Organisation".
- An official emblem for the new Organization.
- A budget of US$ 5 million for 1949.

The following extract from the statement by Dr Karl Evang (Norway), during discussion of the budget, deserves our attention even today:

"... The Interim Commission had carefully and cautiously prepared its programme and then asked for at least six-and-a-half to seven million dollars. The Programme Committee of this Assembly adopted the programme on general lines, with some amendments which would have normally increased the budget. In spite of that, it was cut. ...

"I am not surprised at the lack of imagination and vision expressed in this drastic cut in the first year of the World Health Assembly. The rather miserable way in which human beings have conducted their world affairs in the last decades does not indicate a very high degree of imagination and vision, and there is no reason why we here, as a group, should display a higher average standard of these most desirable qualities. What to my mind is surprising is the lack of realism and of practical sense of which this decision carries proof. We are public health people, not representatives of treasury departments. We know that action is needed, and we know that we cannot convince anybody unless we take action. To take action, you have to be an operating agency – to go out into the field and do the work."

Selfishness: an obstacle to international action

"... national selfishness, excluding as it does any spirit of real cooperation, is one of the most serious obstacles to international action; it is as harmful to the United Nations as the selfishness of one member can be to a family or the selfishness of one class to a whole society."

– Professor J. Parisot (France): address to the Third World Health Assembly, 1950

With the conclusion of the First World Health Assembly, the work of the Interim Commission was over and its legal existence came to an end on 31 August 1948. All its property and assets were transferred to WHO as from that date.

WHO's work, 1948–1952

International sanitary regulations

International health regulations will always be needed until the true objective of international epidemic control – the eradication of pestilential disease – can be achieved. The Expert Committee on International Epidemiology and Quarantine met in Geneva in November 1948. Its main task was to agree on the best means of relieving public health administrations from the constant menace of epidemic outbreaks of smallpox, typhus, cholera, plague and yellow fever. Recommendations were made on such topics as epidemiological notification and information, immunization and vaccination certificate requirements, measures relating to mer-

War or Peace?

"The Director-General of WHO is today [1951] finding it difficult to collect together a paltry eight million dollars ... We are also reminded that there are nations which are prepared to spend 60 billion dollars on defence. I say that the surest way to bring peace into the world is to encourage activities of organizations of this nature, and I therefore trust that America, which is today blessed with vast resources, with leadership, and with technical skill, will undertake to bring about a reformation – a revolution – in the world, by taking the leadership not in war but in fighting disease."

– Mr V. Nalliah (Ceylon): address to the Fourth World Health Assembly, 1951

chandise and baggage, and disinsectization of aircraft.

At its next meeting, in Geneva in December 1949, the Expert Committee revised the draft new international sanitary regulations, the text of which was submitted to the third and fourth World Health Assemblies for approval. It took much time and effort by the Committee concerned before the Fourth World Health Assembly's adoption, in 1951, of the new International Sanitary Regulations. The object was to ensure not only measures of protection against pestilential diseases, but also freedom of international traffic by modern means of transportation by land, sea and air. It was already foreseen, considering the progress in rat-proof and insect-proof construction of ships and aeroplanes and in methods of rodent and insect extermination, that modifications of the Regulations would be needed within 5–10 years in order to avoid imposing unnecessary restrictions on the movement of passengers and cargo.

WHO regional organizations

South-East Asia. In accordance with the principles laid down in the WHO Constitution and the decision of the First World Health Assembly to establish regional organizations to deal with particular health problems in different parts of the world, a first regional conference was held in New Delhi, India, in October 1948 to lay the groundwork for the WHO regional organization for South-East Asia. It was agreed that the new Regional Office would be located in New Delhi and would be operational from 1 January 1949, with Dr Chandra Mani, Deputy Director-General of Health Services in India, as Regional Director.

Americas. Meeting in Washington, DC, USA, in October 1948, the Directing Council of the Pan American Sanitary Organization (PASO) accepted the draft agreement between WHO and PASO, whereby the Pan American Sanitary Bureau would act as WHO's regional organization and receive funds for those of its activities undertaken on behalf of WHO. An agreement signed by Dr Brock Chisholm, WHO's Director-General, and Dr F.L. Soper, Director of the Bureau, was duly endorsed by the Second World Health Assembly and became effective from 1 July 1949.

Eastern Mediterranean. A third region for WHO's activities was defined by the Eastern Mediterranean Conference, which took place in Cairo in February 1949. This

region had a long tradition in international health matters, including collection and distribution of epidemiological information, especially relating to the annual Mecca pilgrimage, and a Sanitary Bureau was set up in Alexandria, Egypt, in 1928. The Cairo conference agreed that the new Regional Office would begin operations on 1 July 1949 using the buildings of the former Sanitary Bureau in Alexandria, and nominated Sir Aly Tewfik Shousha, Pasha, Under-Secretary of State, Egyptian Ministry of Public Health and Chairman of the WHO Executive Board, as Regional Director.

Europe. Health rehabilitation of the war-devastated countries in Europe was the main focus of WHO's activities in this region. Seventeen countries were represented at a European Health Conference in Geneva in November 1948 to promote international cooperation in order to help the afflicted countries rebuild or restore their health care services and manpower, and combat infectious diseases (especially tuberculosis and venereal diseases). Help was provided by sending experts, granting WHO fellowships, and supplying drugs, medical literature and equipment. A temporary office was established in Geneva to coordinate this work. In September 1951, the WHO Regional Committee for Europe was constituted at a meeting of representatives from 16 countries in Geneva. Dr Norman D. Begg, Chief of the Special Office for Europe, was nominated Regional Director, with the Regional Office temporarily continuing to function in Geneva.

Western Pacific. The establishment of a WHO regional organization for the Western Pacific was approved by the Third World Health Assembly in 1950 and a temporary office was set up first in Geneva then in Hong Kong. The first session of the Regional Committee in Geneva (May 1951) nominated Dr I.C. Fang as Regional Director from 1 July 1951 and designated Manila in the Philippines as the site for the Regional Office.

Africa. The WHO regional organization for Africa formally came into being at the first session of the Regional Committee for Africa, held in Geneva in September 1951. Out of several possible places, Brazzaville in French Equatorial Africa (now Republic of the Congo) was selected as the site for the Regional Office, with Dr François Daubenton, Chief of the WHO Office for Africa since 1950, as Regional Director.

Withdrawal of the USSR and other Communist states from WHO

In February 1949 the Ministries of Health of the USSR, the Ukranian SSR and the Byelorussian SSR announced their intention to withdraw from WHO because of dissatisfaction with some aspects of the work of the Organization. Two reasons given were: "the swollen administrative machinery involves expenses which are too heavy for Member States to bear" and "the direction taken by the activities of the Organization does not correspond to those tasks which were set before it in 1946 at the inaugural conference of the Organization". During the following twelve months similar notifications were received from Bulgaria, Romania, Albania, Czechoslovakia, Hungary and Poland. As the WHO Constitution makes no provision for withdrawal from membership, these states were considered by the Organization to be "inactive". Despite the best efforts of the Director-General, the Executive Board and World Health Assembly resolutions, it was not till 1957–

1958 that these countries resumed active membership.

World Health Day

The First World Health Assembly resolved that a Health Day should be observed throughout the world "to remind every individual of the part he himself must play if the objectives of the World Health Organization are to be realized". World Health Day was celebrated for the first time on 22 July 1949 by more than 30 countries, this date marking the signing of the Constitution of the new Organization at the close of the International Health Conference in New York in 1946. However, as 22 July falls within the vacation period for many countries, the Second World Health Assembly changed the date for future years to 7 April, the date upon which the WHO Constitution officially entered into force in 1948.

WHO fellowship programme

This programme was started during the period of the Interim Commission, and in 1947 over 200 fellowships were awarded. In 1951, the fifth year of the programme, 665 fellowships were awarded to candidates from 74 countries, the great majority of them financed by WHO. There was a clear trend towards decentralization, 66% of the awards being intra-regional, and for the subjects of study to be determined by the needs expressed by individual countries. These subjects included public health administration, control of tuberculosis and malaria, maternal and child health, nursing, rehabilitation of the handicapped, industrial and occupational health, and medical education.

Why is there no training for parenthood?

"Even today [1950] almost everywhere, parenthood is perhaps the only job, if I may say so, which is supposed not to require any training or knowledge such as is required in any other profession ..."

– Dr J. Oren (Israel): address to the Third World Health Assembly, 1950

Other activities

With the active involvement of its Member States, WHO organized groups of experts from around the world in order to bring together different perspectives on various health-threatening situations. These expert groups played a key role in formulating the policies that were the basis of WHO's work in the early years.

Mental health. After formulating the principles upon which the future WHO mental health programme was to be based, with recommendations on mental health education, collection of information, and research, WHO's work concentrated on "mental hygiene" in public health practice, i.e. activities dealing with psychological disorders associated with communicable diseases and psychological problems among immigrants, training of health workers in mental hygiene, and promotion of family mental health services.

Environmental sanitation. The role of sanitary engineering in health care was defined, with a focus on the importance of education of the public in the improvement of public health, and measures were taken for the inclusion of environmental sanitation in WHO programmes.

Dr Brock Chisholm of Canada (1896–1971), the first Director-General of WHO, was born in Oakville, Ontario, on 18 May 1896. He volunteered for military service at the age of 18 to fight in the First World War and was decorated with the Military Cross with Bar. He completed his studies after the war, receiving his degree of doctor of medicine from the University of Toronto in 1924. After his postgraduate work in several hospitals in the UK, he returned to Canada, where he engaged in general practice in his native city and, after further training, practised psychology in Toronto until 1940. During the Second World War Dr Chisholm held various military posts, ending as Director of Medical Services and Chief of Personnel Selection, Department of National Defence, Ottawa, with the rank of Major General. He was appointed Deputy Minister of Health in 1944. In July 1946, he was elected Executive Secretary of the WHO Interim Commission. Dr Chisholm became WHO's first Director-General on 21 July 1948 and, refusing re-election, left at the end of his mandate in 1953 to settle in British Colombia. By the time he left the Organization, WHO had 83 Member States. Dr Chisholm was the author of numerous articles and publications, among them *Moral 40*, *Prescription for survival* (1957), and *Can people learn to learn?* (1958). He was made a Companion of the Order of Canada in 1967. He was Honorary President of the World Federalists of Canada and President of the World Federation of Mental Health (1957–1958). He was an Honorary Fellow of a number of prestigious medical associations and the recipient of numerous degrees. Dr Chisholm died in a plane crash on 4 February 1971.

Malaria. The large antimalaria programme was active in all continents. Malaria control by DDT residual spraying was first carried out in Italy in 1944; in 1949 the morbidity rate had fallen to 422 (compared with 3629 in 1942) per million inhabitants, and the mortality and case-fatality rates had both reached zero from, respectively, 23.77 per million and 0.6% in 1942. Similarly impressive results were obtained in Argentina and Greece where malaria had been a traditional scourge. In the late 1940s, therefore, several countries in Africa, America, Asia and Europe were receiving or had requested WHO's technical assistance for the implementation of their malaria control programmes.

Tuberculosis. WHO's activities in this area were greatly expanded in 1949, preliminary surveys being conducted in 19 countries of the Americas and several countries in Asia and Europe. Many of the BCG vaccination programmes were carried out

with assistance from UNICEF, and much of the work was decentralized to the regional offices.

Influenza. The objectives of WHO's influenza programme were to plan against the recurrence of a pandemic like the one in 1918–1919, to devise control methods to limit the spread and severity of the disease, and to limit the economic effects of an epidemic. In 1947 the WHO Interim Commission, in response to requests from various countries, created a World Influenza Centre (subsequently located in London) and a worldwide network of centres and laboratories to report, with all possible speed, the occurrence of influenza within a country and to identify the type of influenza by serological tests and virus isolation.

Smallpox. A study of the world distribution of smallpox endemicity by case rates from 1936 to 1950 showed the highest endemic levels ($\geq$1 per 100 000 inhabitants) in India and Pakistan, followed by Burma and Indochina. Mexico and several countries in South America and sub-Saharan Africa, as well as Portugal in Europe, had relatively high endemicity rates. Lower rates (0.02–0.99 per 100 000) were found in some Middle Eastern and North African countries, Spain, Argentina, and the USA. Considering this widespread distribution of smallpox, the various WHO Regional Offices called on countries to intensify smallpox vaccination and revaccination of their populations.

Schistosomiasis. In 1949 about 150 million people were affected in Africa, Asia and America. Research in the areas of diagnosis, treatment and prevention was considered of paramount importance.

Vital and health statistics. Constitutionally, WHO is required to maintain epidemiological and statistical services and to revise international classifications of diseases and causes of death. In the first years of the Organization, effort was given to the preparation and publication of the *Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death* (in English, French and Spanish). A WHO Centre for Classification of Diseases was established in London in 1951 to help with problems arising in the applica-

Equity in health

"The world cannot remain half healthy and half sick and still maintain its economic, moral and spiritual equilibrium. The United States is fortunate in possessing a well-developed public health and medical profession. It is the belief of that profession that its knowledge and activities for the good of the people should be shared not merely by all parts of our own society but by people throughout the world. There is today [1951] a very strong feeling of international understanding and solidarity among medical and public health people of all countries of the world. The origin of this feeling of fellowship dates far back in history, but it is only now, through the World Health Organization, that an opportunity has been given to translate fully the separate hopes of the people of individual countries into a combined and effective action."

– Dr L.A. Scheele (USA), Surgeon-General of the US Public Health Service, President of the Fourth World Health Assembly, 1951.

tion of the international classification. WHO considered issues such as the definition of stillbirth and fetal death, registration of cancer cases, and hospital statistics. Besides the *Manual* mentioned above, WHO has maintained publication of important weekly, monthly and annual epidemiological and vital statistical periodicals, which it had inherited from pre-existing international health organizations.

Publications. Several delegations to the Second World Health Assembly, which was held in Rome in June–July 1949, stressed the importance of WHO's publications. These included, at that time, the *Bulletin of the World Health Organization, Chronicle of the World Health Organization, International Digest of Health Legislation, Weekly Epidemiological Record, The WHO Newsletter (World Health* since 1957) the *International Pharmacopoeia*, manuals on disease control and treatment, statistical handbooks, and supplements to the *Bulletin*.

Appointment of Deputy Director-General. Dr Pierre Dorolle was appointed Deputy Director-General of WHO in 1950. He had participated in the work of the Epidemics Commission of the League of Nations in China in 1937 and been Director of Public Health Services in French Indo-China, and was a member of the French delegation to the Third World Health Assembly in 1950.

CIOMS (Council for International Organizations of Medical Sciences). This Council was established in 1949 under the auspices of UNESCO and WHO as a nongovernmental body to coordinate conferences in the medical field, as well as seminars and symposia, and to disseminate the scientific findings and resulting information. In 1950 the Council, financed mainly by WHO and UNESCO with its Secretariat in Paris, had over 40 member organizations.

Nonproprietary Names for Drugs. Owing to the confusion arising from proprietary names of drugs, the delegates from Portugal and Greece to the Third World Health Assembly (Geneva, May 1950) proposed that some impetus should be given by WHO to introduce "common" (non-proprietary) names for chemicals that had medicinal uses. The Assembly decided that work should be started on the unification of pharmacopoeias and that the Director-General should communicate the selected names to national authorities for their official recognition and approval (see below, page 33).

Technical Discussions. An innovation at the Fourth World Health Assembly in 1951 was the inclusion of Technical Discussions on a topical subject. "Education and training of medical and public health personnel" was the first subject discussed by delegates, and it was agreed that similar discussions should be a part of future Health Assemblies. In 1952, delegates to the Fifth World Health Assembly were treated to two addresses – "The economic values of preventive medicine" by Professor C.-E.A. Winslow, Emeritus Professor of Public Health, Yale Medical School, and "Economic aspects of health" by Mr Gunnar Myrdal, Executive Secretary of the Economic Commission for Europe – and participated in Technical Discussions on "The methodology of health protection for local areas".

Activities, 1953–1956

Appointment of new Director-General

Dr Brock Chisholm, who was Executive Secretary of the Interim Commission for

A noble aspiration: to love and serve all

"Economic values do not provide the only – or even the primary – inspiration for the worldwide campaign for public health. You are animated in your labours by what Matthew Arnold described as 'the love of our neighbour, the impulses towards action, help and beneficence, the human desire for reducing human error, clearing human confusion, and diminishing human misery, the noble aspiration to leave the world better and happier than we found it'. It is men and women who are fundamentally of importance, not dollars ... We can realize our dreams only in so far as we can convince our governments and the free peoples who control these governments that our goals can actually be attained and that their attainment will not put new strains on already strained economies ... Our experience during the last three decades [in the USA] has demonstrated that the investment [in public health] is a profitable one."

– C.-E.A. Winslow, Emeritus Professor of Public Health, Yale Medical School, addressing delegates during the Technical Discussions, Fifth World Health Assembly, 1952

two years and then Director-General of WHO, gave the following reason for not accepting the Fifth World Health Assembly's offer to continue for another three years after July 1953: "I believe that a permanent organization should not have the same head for too long, particularly at the beginning of its history. There is a real difficulty in too firm identification of a world organization with one person ... I feel that a change of Director-General bringing a fresh approach would be healthy."

In May 1953 the Sixth World Assembly confirmed the appointment of Dr Marcolino G. Candau (Brazil) as Director-General after Dr Chisholm. Dr Candau had served WHO for two years in Geneva and then became Deputy Director of the Pan American Sanitary Bureau (WHO Regional Office for the Americas) in Washington, DC. Paying tribute to his predecessor, Dr Candau said, "the name Chisholm means far more than just that of the first Director-General of WHO. It is a name that has become identified during the last few years with the basic ideals of the Organization: infinite respect for the dignity of man, wherever and under whatever conditions he lives; clear and serene vision of the forces which will decide his fate; and unbroken determination to devote every day's energy and work towards the creation of a peaceful world community in which the material, spiritual and cultural progress achieved by each nation will benefit all."

Maternal and child health

This was one of the special priority areas selected by the First World Health Assembly in 1948. Depending on the country, the approach to maternal and child health problems differed in WHO-aided field projects: in some countries, maternity care was the starting point, with an emphasis on training of midwives and traditional birth attendants; in others, auxiliary health visitors were considered the most practical and effective means of improving child care; in still others, health programmes for mothers and children were developed as part of a comprehensive public health service, particularly in the rural areas. The chief handicap, regardless of the approach, was the lack of trained personnel for

teaching as well as for supervisory and administrative posts. A large part of WHO's work at this time was therefore devoted to aiding the establishment or expansion of programmes for training professional and auxiliary workers.

Nutrition

One of the principal concerns of WHO in its nutrition programme, which covered all continents, was malnutrition and undernutrition in infants and young children. In the mid-1950s, the Organization made grants to nutrition institutes for the study of protein malnutrition, supported studies on the anaemias, particularly in relation to parasitism and dietary insufficiency, and promoted courses and seminars on nutrition and nutrition education for participants from many countries.

Communicable diseases

WHO's efforts against the major communicable diseases continued to be focused on controlling vectors, reducing animal or human reservoirs of infection, encouraging research, and providing training for essential personnel.

Malaria. Projects to control malaria continued with assistance to 21 countries in Asia, Africa and elsewhere in 1953. In addition, WHO offered training of various kinds to meet the increasing demand for strengthening national malaria control organizations. The problem of anopheline resistance to insecticides, which made 1953 an adverse turning-point in malaria control, assumed even greater significance in 1954 and interfered with control projects in Indonesia, Lebanon and Greece. To enable field workers and malaria institutes to carry out tests on the susceptibility of local anopheline species to the insecticides being used, WHO supplied test kits so that the necessary action could be taken to deal with the problem. Proposals were made for a new strategy in malaria control over a number of years, which called for more funds, more trained personnel, greater efficiency of operations, and better systems of epidemiological surveillance.

Tuberculosis. WHO's field work in tuberculosis continued with aid from UNICEF. The Organization established a standard approach for revealing cases of infectious pulmonary tuberculosis in large population groups at a relatively low cost. The examination included a tuberculin test, chest X-ray, and examination of sputum and laryngeal swab for tubercle bacilli. The advent of effective antimicrobial therapy against tuberculosis in the mid-1950s was a major step forward in the control of this disease.

Treponematoses and venereal infections. Control of these diseases was given high priority from the earliest days of the Organization. In the mid-1950s, WHO supported venereal-disease control projects in five Asian countries and two in Africa. Yaws control was the object of campaigns in several countries in Africa, south and south-east Asia, and central America. Efforts were likewise directed against endemic syphilis in a few countries.

Poliomyelitis. Considerable increase in the incidence of poliomyelitis in various parts of the world was a cause for concern in the mid-1950s. Through training courses, WHO assisted physicians and nurses in the management of poliomyelitis patients whose life was in danger. Vaccine development had been forging ahead at about this time and evaluations by experts of large-scale field trials of the Salk vaccine in the

USA in 1954–1955 and in Canada, Denmark and other countries in 1955, together with their recommendations, were published in a technical report by WHO in 1956.

Influenza. Studies on the worldwide epidemiology and control of influenza were continued by the WHO network of influenza centres. Besides training virologists in influenza techniques, the centres continued to watch for outbreaks of influenza, collect and study strains of influenza virus, and classify the virus type so that the appropriate vaccine might be prepared.

Smallpox. The elimination of smallpox from its region by protecting the entire population from the disease by vaccination was the aim of the Pan American Sanitary Bureau, which serves as the WHO Regional Office for the Americas. With this end in view, the Organization in the mid-1950s assisted national laboratories in the region by providing expert advice and equipment, fellowships to train technicians, and facilities for testing vaccine potency.

Other diseases. WHO was involved in helping countries to deal with several other communicable diseases, such as yellow fever, trachoma, onchocerciasis, leprosy, plague and cholera, as well as rabies, brucellosis and other zoonoses.

Cardiovascular diseases

In the mid-1950s deaths caused by cardiovascular diseases were increasingly numerous in all countries, contrasting with the decrease in mortality rates due to infectious diseases. One of the reasons for this was the effect of an increased life-span on the circulatory system. Mortality statistics published by WHO for 1954 from several developed countries showed that arteriosclerosis represented between 20% and 40% of all deaths for persons aged over 40. The main cardiovascular health problems were due to the rheumatic, hypertensive and coronary groups of disease. Between 1953 and 1956 WHO had convened experts on the rheumatic and ischaemic heart diseases to consider the public health aspects as well as etiology and prevention. However, as more attention was warranted at the international level, the Ninth World Health Assembly in Geneva (May 1956) called for an expert committee on hypertension, surveys of the incidence of the various etiological groups of cardiovascular disorders (congenital, rheumatic, syphilitic, bacterial, hypertensive, coronary, pulmonary and others), research on intrinsic and extrinsic factors in causation and prevention, education of the public, and training of specialists.

Nongovernmental organizations and WHO

Article 71 of the WHO Constitution enables the Organization to "make suitable arrangements for consultation and cooperation with nongovernmental international organizations and, with the consent of the Government concerned, with national organizations, governmental or nongovernmental." In 1956 there were 40 nongovernmental organizations in official relations with WHO. Their activities covered a wide range of subjects – biometry, pharmacy, sanitary engineering, leprosy, rheumatism, cancer, microbiology, health education, blood transfusion, gynaecology, physiotherapy, paediatrics, mental health, nursing, hospitals, etc. During this first decade, such organizations greatly assisted the Organization in the accomplishment of its tasks (see CIOMS, p. 29).

International Nonproprietary Names (INN) for pharmaceutical preparations

At intervals, from 1953, the *Chronicle of the World Health Organization* published lists of proposed and recommended INN (international nonproprietary names) for pharmaceutical preparations. Clearly defined procedures were followed so that corrections could be made where necessary, after which the "proposed" name was published as a "recommended" INN. Each name (in Latin and English/French/Spanish) was followed by its chemical name or description.

Activities, 1957–1960

Cancer

In the early years of the Organization, WHO's contribution to the study of cancer was restricted to the statistical analysis of mortality and morbidity data. In 1955 it was recommended that laboratories with special experience should be made responsible for maintaining collections of histological material to serve as reference standards for laboratories all over the world. The aim was to establish histological definitions that would facilitate the adoption of a uniform nomenclature.

In 1957 a WHO Study Group on Histological Definitions of Cancer Types recommended the designation by WHO of international centres to work in liaison with specialist institutes in various countries. Some countries – India, Norway, United Kingdom and the USA, for example – already had laboratories or registries that could be reference centres. Having established definitions of cancer types, in collaboration with specialists, the centres placed the histological preparations at the disposal of national institutes. WHO's role was to organize the distribution of information to governments and to collaborate with nongovernmental professional organizations.

The Tenth World Health Assembly in 1957 called upon WHO to undertake an important programme of research on cancer epidemiology (international statistics of mortality and morbidity, including cancer staging), organize an advisory centre on cancer registration, and promote research on the occupational and environmental conditions influencing disease which could help identify carcinogenic factors.

The spiritual and scientific legacy of Sir Ronald Ross

It was the spiritual and scientific legacy left by Ross [whose discoveries led to identification of the carrier and mode of transmission of malaria in 1897–1898] that inspired the World Health Organization when, in May 1955, it decided to "take the initiative, provide technical guidance, and encourage research and coordination of resources in the implementation of a programme having as its ultimate objective the worldwide eradication of malaria"

– *From an address by Dr M.G. Candau, Director-General of WHO, in June 1957 on the hundredth anniversary of the birth of Sir Ronald Ross.* In: *Chronicle of the World Health Organization*, 1957, **11**: 302.

Poliomyelitis: use of live virus vaccine

The development of inactivated poliomyelitis vaccine by Salk in the mid-1950s was a major step in controlling the paralytic form of the disease. The use of live attenuated polioviruses as immunizing agents was the next step and a number of trials were carried out, with WHO's support, between 1957 and 1959. The largest trial was in the USSR where several million children were successfully vaccinated with polio strains developed by Sabin. While other countries also confirmed that there was considerable protection, experts were examining closely the efficacy and safety of live poliovirus vaccines. These exciting developments opened up the prospect of the eventual eradication of poliomyelitis, but further intensive epidemiological and immunological investigations had first to be carried out.

Tenth anniversary of WHO

In May and June 1958 a special Tenth Anniversary Commemorative Session preceded the Eleventh World Health Assembly, which was held in Minneapolis, Minnesota, USA, with the participation of delegates from 85 Member States.

In his message President Eisenhower of the United States said, "We look to the World Health Organization with confidence as a proven instrument through which the nations and the peoples of the world can combine their efforts, in friendship, toward the building of true peace." In a message that was read out, the Secretary-General of the United Nations, Mr Dag Hammarskjöld, referred to the growing recognition of the political and economic value of the multilateral United Nations approach, and said that "such world institutions are essential to the nations in their efforts to cope with the great challenges of our times".

Other speakers described WHO's record of solid achievement and its methods to meet requests from governments, the prospects of balancing the rapid increase in world population (due to reduced infant mortality and increased life span) with food production and available natural resources, and WHO's success in cooperating with other specialized agencies, organizations and institutions, as well as individual workers in all parts of the world, because health, economic prosperity and social progress were all interdependent. The Director-General, Dr Candau, spoke of the precious contribution of countries, and their willingness, at whatever stage of their development, to make available skilled and specialized manpower. More than 1000 of the world's leading health experts were members of WHO expert advisory panels, and during a one-year period 1100 WHO fellows had been received by 577 institutions in 42 countries. As one speaker expressed it, "In the field of health we have passed the point of no return. International cooperation is not only sensible and desirable, it is absolutely essential."

Environmental sanitation

The importance of environmental sanitation had been repeatedly stressed for the attainment of WHO's objectives but, after 10 years, still more than half the world's population lacked safe water and adequate disposal of human waste. In the period 1947–1958 WHO awarded 807 fellowships to environmental sanitation staff for study abroad. Teaching and training projects included courses for sanitary engineers and assistants and auxiliary health personnel. Many technical articles and reports were

published by the Organization and, in 1958, there were 14 expert committee meetings on subjects related to environmental sanitation, including air pollution, water fluoridation, use of insecticides, and milk hygiene.

Unfortunately these efforts had no impact on the incidence of diarrhoeal diseases in Asian countries, where deaths from dysentery were alarmingly high and outbreaks of cholera – for example, in 1958 in India, Nepal, Pakistan and Thailand – showed that the control of such epidemics left much to be desired. Other examples of the shortcomings in environmental sanitation were reported in a review by the Director-General which was submitted to the Twelfth World Health Assembly in May 1959. The report concluded that, of all environmental sanitation activities, the only two that fulfilled several realistic and practical criteria for a future WHO programme were community water supplies and community sewerage. The first of these was recommended to spearhead the programme. The Health Assembly approved this recommendation and invited all multilateral and bilateral agencies to cooperate with WHO in carrying out a global water supply programme.

A different area of environmental sanitation had to do with atmospheric pollution. One of the consequences of industrialization in Europe and elsewhere was the uncontrolled discharge into the air of smoke, particulate matter and waste gases, and anxiety about the danger to public health due to air pollution had been steadily increasing. A Conference on Public Health Aspects of Air Pollution was therefore convened by WHO in Milan, Italy, in November 1957 with participants from several European countries. Several examples of the ill effects of air pollution on man, animals and plants were presented. Control measures, including legislation, had to be introduced if this hazard to the health and well-being of the community was to be reduced.

Atomic energy and health

A representative of the International Atomic Energy Agency (IAEA), which was established in Vienna in 1956 "to seek to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world", addressed the Eleventh World Health Assembly in 1958 and stressed the need for close cooperation with WHO and other organizations. Measures for the protection of health and safety of individuals and the population, methods for the disposal of radioactive waste, regulations for the transport of radioactive materials, and advice on the application of isotopes were some of the areas of common interest between the Agency and WHO.

Several delegates contributed to the discussion on this subject, after which it was decided that early attention should be given to methods for reporting the radiation exposure of individuals, research for determining the relationship between radiation dosage and congenital defects, and methods for notifying public health administrations of congenital defects which could be due to radiation.

Proposal for the global eradication of smallpox

The delegation of the USSR, in a submission to the Eleventh World Health Assembly in 1958, proposed that WHO should embark on a programme aimed at the total eradication of smallpox. It was pointed out that the disease continued, year after year, in endemic areas of Asia, Africa and South

America, and that cases were frequently imported into smallpox-free countries so that the problem was both national and international. As man was the only reservoir of the virus, eradication of the disease should be possible, especially since effective and inexpensive vaccines were available and immunity lasted for several years.

The proposal was warmly welcomed by delegations from many other countries, although it was realized that it would take years of intensive and coordinated effort. The Health Assembly requested the Director-General to submit a report on the financial, administrative and technical implications of such a global programme. This report was discussed at length in the Twelfth World Health Assembly in 1959. The urgency of achieving worldwide eradication was emphasized and the health administrations of countries where the disease was still present were asked to conduct eradication programmes using potent stable vaccine. WHO was requested to offer technical guidance and make provision in the budget for smallpox eradication activities in the years ahead.

Malaria eradication

In March 1957 there were 63 countries and territories in which eradication had been accepted as the goal of antimalaria activities. While eradication had practically been achieved in 10 countries, eradication programmes were well advanced in 15 others, had been initiated in 31, and were in the planning stage in the remaining seven.

On 1 December 1957, a Division of Malaria Eradication was established in WHO headquarters with the function of advising on eradication policies and techniques, and of directing and coordinating all the malaria activities of the Organization. There was a Planning Section to advise and assist on plans of operation, research work and pilot projects, and a Programme Section to provide technical guidance, follow the progress of eradication programmes, and deal with recruitment and training of staff for malaria eradication.

A WHO Special Account for Malaria Eradication had been set up in 1955 to receive voluntary contributions from governments and private sources for malaria research and to provide equipment, supplies and services for malaria eradication. With the establishment of the new Division, the US Government donated $5 million to this Special Account and another $2 million to the Director of the Pan American Sanitary Bureau (WHO Regional Office for the Americas) for the Special Malaria Fund of that region. In presenting the cheques for these amounts, Mr J. Foster Dulles, US Secretary of State, said, "If the world does not immediately seize this opportunity [to eradicate malaria], it may well be lost ... The campaign must be completed before the malaria-carrying mosquito becomes resistant to modern insecticides."

The WHO Expert Committee on Insecticides, in 1956, had called for international action and cooperation to deal with the serious problem of insecticide resistance. A year later, although the problem was increasing in terms of both more species becoming resistant and geographical spread of the affected areas, some notable advances had been made by research. For example, it was found that DDT resistance in the housefly and in *Anopheles sundaicus* and *Aedes aegypti* originated mainly from a single gene and was associated with the ability to detoxify DDT by dehydrochlorination. Dieldrin resistance in

Anopheles gambiae was also shown to be derived from a single gene. Other research on the susceptibility of species and on selection pressures from chemical compounds indicated the possibility of working out a practical means of counteracting insecticide resistance.

In 1960 the malaria eradication programme covered nearly 100 projects. To meet the demand for experienced malaria workers, which far exceeded the world supply, a number of persons were trained in malaria eradication techniques through courses that were held in selected countries on all continents in English, French, Portuguese and Spanish. Provision was also made to train national staff, who were indispensable for the success of any eradication project. ■

Editor's Note

Part 2 in this series will appear in the next issue of *World Health Forum*.

Publications for health development

One of the Organization's functions is to give information and counsel in the field of health, and publications are clearly one of the most effective mediums for this purpose. ...

The main outline of the publishing programme proposed by the Interim Commission was endorsed by the First World Health Assembly. ... It was necessary to expand the nuclear staff taken over from the Interim Commission; and to find suitably experienced staff, and train others less experienced, proved to be a long and arduous task. Moreover, in the earlier years financial limitations made it impossible to bring this staff to full strength. ...

The publishing of factual information involves problems of appraisal and selection similar to those encountered in national scientific and technical publishing, with the additional requirement that the material must have a clear relation to some established WHO field of interest. On the other hand, the publication under the imprint of WHO of opinion, counsel, and advocacy involves the far more difficult problem of ensuring that the recommendations communicated to the world at large in the name of an international health organization do truly represent an international consensus rather than a particular school of thought or practice. ...

The World Health Assembly and the Executive Board, at several of their earlier meetings, recognized these difficulties, but emphasized the importance to WHO of a sound and adequate programme of publications and urged the Director-General to expedite its full operation.

■ *The first ten years of the World Health Organization.* Geneva, World Health Organization, 1958: 430, 431.