1938

**History of the health organization of the League of Nations**

Georgia Dill  
*The University of Montana*

Follow this and additional works at: https://scholarworks.umt.edu/etd

Let us know how access to this document benefits you.

**Recommended Citation**

https://scholarworks.umt.edu/etd/8651

This Thesis is brought to you for free and open access by the Graduate School at ScholarWorks at University of Montana. It has been accepted for inclusion in Graduate Student Theses, Dissertations, & Professional Papers by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.
HISTORY

of

THE HEALTH ORGANIZATION OF THE
League of Nations

by

Georgia Dill

B. A. Dakota Wesleyan University, 1926

Presented in partial fulfillment of the requirement for the degree of Master of Arts.

Montana State University

1938

Approved:

E. E. Bennett

Chairman of Board of Examiners.

W. B. Bateman

Chairman of Committee on Graduate Study

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Development of International Co-operation through the Work of Technical Sections of League of Nations</td>
<td>1</td>
</tr>
<tr>
<td>II. The Health Organization of the League of Nations</td>
<td>8</td>
</tr>
<tr>
<td>III. Health Collaboration with National Governments; Health Interchanges</td>
<td>17</td>
</tr>
<tr>
<td>IV. Permanent Work of the Health Organization</td>
<td>33</td>
</tr>
<tr>
<td>V. Special Research Problems</td>
<td>57</td>
</tr>
<tr>
<td>Conclusion</td>
<td>80</td>
</tr>
</tbody>
</table>
CHAPTER I

DEVELOPMENT OF INTERNATIONAL COOPERATION THROUGH THE WORK OF TECHNICAL
SECTIONS OF LEAGUE OF NATIONS

Any study of the League of Nations convinces one that a description of the organization and work of one of its departments would be incomplete without at least a cursory survey of its general organization and major purposes.

Probably no institution has ever been so loudly condemned by some and praised by others; so grossly maligned by those, who without a knowledge of its power to deal with wide social problems, have considered it as merely a political agent; and so highly eulogized by its friends, who have proclaimed it a remedy for the ills of the world.

Arthur Sweetser says of it,

"...I am convinced that almost no one friend or foe understands actually what the League really is. Its friends are tempted to exaggerate it as a panacea for all ills; its enemies to misrepresent it as a superstate. It is in fact neither, but on the contrary a new link in the chain of human relationships made imperatively necessary by the annihilation of distance as a barrier between states."

Brave, indeed, is the man who in the year 1938, after the ineffective handling of the Ethiopian and Sino-Japanese affairs, the withdrawal of Germany, Italy, Japan, and other states from the League, still adheres to his former thesis that the League will permanently endure and make good. But such a man does not now require results from the League in exactly the same measure or manner he once did, yet still believes it may measure up, to at least some degree, the standard of President Wilson when he said,

"I pray God that if this contest have no other result it may at least have the result of creating an internal tribunal and producing some sort of joint guarantee of peace on the part of the nations of the world."

2. Sweetser, op. cit., p. 12-13 quoted from Speech of President Wilson at Des Moines, Iowa, fourteen months before we entered the war.
At least in many negotiations of the League which the world marks down as failures, we cannot truthfully say of them what Mr. Sweetser said of the lack of negotiation before the World War.

"The catastrophe began without a single conference... No meeting ground was available, no obligation for discussion existent." 3

Many international crises since the end of the World War have called forth no end of conferences, and just here is where the enemies of the League wax eloquent with the complaint that with all the paraphernalia for conference and convention which the League possesses, with all the conferences and conventions that have been held to prevent war, the sum total of workable results is of negligible quantity.

However, upon thorough investigation, do we not find that many of these judgments are made by the general public or by the press, which is influenced by the public, to print news without adequate knowledge of the facts, which can often be supplied only by those who are acquainted with the technical side of the question.

Mr. Godfrey Lias also speaks in this vein:

"Broadly speaking the eyes of the world are focused in so far as the League is concerned on the doings of the Council and Assembly. Not one person in a thousand ever gives a thought to the human side of the League—to the six hundred forty-six men and women of different nationalities who perform their daily round in the new building in Ariana Park at Geneva and who prepare the grist which is afterward milled by the politicians, and chewed over by the newspaper reading public all over the world." 4

The great mass of people are shockingly ignorant of the manner in which the League is organized, and especially of the immense wealth of material which has been amassed and the huge amount of post-war work accomplished by the various technical sections of the League. To this group, which is a large per cent of

the whole, the League is simply an organization for preventing war, a one unit institution growing up like a mushroom in a few weeks after the World War, and expected in a few short post war years to abolish the greed, economic distress, national and international misunderstanding, misdistribution of resources and resulting political disturbances, which have not only accumulated during the ages, but been greatly exaggerated by the greatest upheaval known to man.

The League is indeed an organization for preventing war, but it has a second function which is far more fundamental, one upon which war prevention depends, and that is the promotion of international cooperation before thought of war is necessary.5

"In four cases the League definitely stopped wars after hostilities had begun, and it is possible to affirm that without its mediation many other disputes might have developed into disastrous struggles.6

"Though its work in dealing with large political issues was not so uniformly successful as with the more technical and social activities, the League must be admitted to have justified its existence, and in no sense can it be said to have failed in its great and difficult work of teaching the peoples of the world to be reasonable in their dealings with one another."7

It is this greater function of international cooperation which I wish to enlarge upon in the following chapters, by describing the organization and work of one of the technical divisions of the League of Nations, the Health Organization.

"Disputes are only hitches in the work of organization, although they bulk so large in the eyes of public opinion, particularly just after the Great War. The essential meaning of the League is shown most clearly in the work of the technical and humanitarian organizations..."8

"Another trick of the grumblers is to ignore the offshoots and auxiliaries of the League and the beneficent work they are

3. This cannot be obtained by blind faith, but must be worked out by a thorough and technical knowledge of conditions in many countries.


quietly doing. The information about these is clearly set off in this book. These organs are not branches, but rather of coordinate rank; the founders wisely avoided centralizing them. In their own spheres they are largely autonomous, and the higher control is only of a general kind.\textsuperscript{9}

International thought has not as yet reached a high level of existence. Just as one individual can only with difficulty see the viewpoint of another from a different country because of different standards of living and traditions, so it is with whole countries made up of these individuals.\textsuperscript{10}

It is because of misunderstanding, not viciousness, that war exists and for the same reason misconceptions of the League exist. These misconceptions can be abolished only by a thorough knowledge of the health, standards of living, economic and financial status of a people, and a resulting improvement in these conditions, a knowledge which is gained by a trained group of workers in special fields who are constantly studying these special conditions.

The League is almost entirely dependent for success upon the sum total of the public opinion of its states members. The public opinion of each state is highly colored by its status economically and physically which determines its commercial and political rank among the nations of the world.

This public opinion of the states members of the League must be brought together and through clarification of controversial points in conference be made into a joint policy of all countries concerned.

Now to obtain clarification in conference there must be some basis beforehand, and as the League cannot take sides, there must be some basic means of establishing mutual action between countries besides the conference method.

Again we cite the studies made by the technical organizations which act as a


\textsuperscript{10} League of Nations, Secretariat, \textit{Ten Years of World Cooperation} (London, 1930) p. 399.
clearing house and form a foundation for international understanding before a gathering is made around the conference table to prevent war.

"Certain it is that if we can once get the nations of the world into the habit of cooperating with one another, we will have struck a great blow at the source or origin of almost all the world wars which have defaced the history of the world."

"Science and economics must precede political cooperation in international affairs. New methods for the eradication or control of disease... Then comes economics with industry and finance. Science has already brought the nations of the world together through the development of communication and a program of economic integration, world-wide in its scope is under way."

Probably the greatest obstacle which the League has to overcome, is that many people watch every movement of the League during a strained moment in international relations, but fail to watch even casually the day to day methods by which good will and cooperation are built up.

"The purpose of the League is so profound that it generates violent emotional feelings, both favorable and unfavorable, which render a cool, scientific analysis of its actual day-to-day difficulties most difficult."

It is this day to day working of technical organizations of the League which the following chapters will describe.

This seeming desire for the dramatic in international news, which often leads to misunderstanding of fundamental causes is not a little the fault of the interpretation of facts by the press in various countries, but in so doing it often expresses the choice of the people.

Nevertheless, in spite of the foregoing statements, judgments need not be inaccurate concerning League negotiations if one so desires, as all or practically all, of the operations of the League are carried on in the open.

The Assembly and its Six Commissions always meet publicly, the Council

usually does, and all the meetings even of a few commissions, such as the Mandate Commission, have their reports and minutes published. 14

The League has done everything possible to aid the press in bringing to the public the work of the entire organization to the extent that in 1930 correspondents from one thousand newspapers and periodicals from fifty different countries had been able to listen to the open meetings of the League since its origin. Besides this, reports of commissions, government observations, and assemblies are distributed to them; and chairman of League meetings often meet representatives of the press to explain and answer questions. 15

Not until recently has the League done more than give to the public plain facts through open meetings and official records.

At present the League is doing more to place its publications before an ever growing interested public.

"Offices of the Information Section have been created in Berlin, Paris, London, Rome, and Tokio as centers for journalists and others and a special system of liaison has been organized for Latin American countries. Publications and documents are mailed to appropriate persons and institutions; all are on sale, and there are League agents in most countries; the important reference libraries of the world receive complete League documentation; to many who desire it the official communiques and press articles are despatched by mail and an Overseas News Sheet in English, French, and Spanish mainly for newspaper purposes is distributed monthly and gives special attention to subjects more likely to interest different countries." 16

Because much of the information is published for an international public there must be no propaganda and often because of its official nature it is rather

14. A very large part of the material which was used for the writing of this article was obtained from the official reports and the minutes of the League and its technical divisions, all available to the public.


The League still further keeps in touch with public opinion in many
countries by visits of officials to their own and other countries. This is
especially true of the Health Organization, contact being made through a well-
planned system of "Intercchanges," a more detailed account of which will be
given later.

In the foregoing remarks concerning the work of the League and the
dissemination of information about its procedure, it has not been my purpose to
define the political achievements of the League in preventing war, but simply
to show that the building up of international cooperation by the whole League
depends upon the sum total of the efforts of its parts or departments in
cooperating with one another toward the same ends.

Just as it has been necessary to explain the purposes of the entire League
before explaining those of one of its parts, so I believe it is essential to
give at least a brief summary of the organization of the League in order to
understand the role which the Health Organization plays in developing internation-
al cooperation.

17. The most interesting publication of the League and perhaps the most informa-
tional is the Monthly Summary. Each month a clear account of the Leagues' work is described in this periodical so much space being allotted each of
the thirteen sections of the League.

This periodical, though published by the League is not considered
official although a comparison with the Official Journal, a record of the
minutes of the various sections shows that the Monthly Summary is an
correct publication and very interesting reading.

This Monthly Summary also contains supplements, Assembly Resolutions,
League Conventions, and agreements. At the end of each year a summary of
the year's work is published. This periodical gives one a good background before studying the Official Journal.
CHAPTER II
THE HEALTH ORGANIZATION OF THE LEAGUE OF NATIONS

The League of Nations is an association of sixty states with a membership open to any self-governing country, on the condition that it accepts the regulations of the League and is able to obtain consent of two-thirds of its members.

It is composed of:

(1) An Assembly whose delegates represent their governments, each state having from one to three delegates, each with one vote; meets in Geneva on the Monday before the tenth of September each year in general conference for three to four weeks; votes the budget; admits members; elects judges of the Permanent Court of International Justice in conjunction with the Council; and in general outlines the work for the auxiliary organizations.

(2) A Council, at present made up of fifteen members, four of which are permanent and eleven are elected by the Assembly for three years. Its member states have only one delegate, usually the foreign minister from the state. It meets four times a year. The work of the Council consists in settling disputes, supervising auxiliary organizations and the Secretariat by general resolutions of the Permanent Assembly.

(3) A Secretariat, a body of experts at present under M. Joseph Avenol, who succeeded Sir Eric Drummond first Secretary-General.

The members are appointed by the Secretary-General with the approval

1. Essential Facts About the League of Nations (Geneva, 1933) gives 58.
3. Ibid. The council and Assembly are the parts of the League that have the attention of the world and while, of course, they are very necessary, yet it is the Secretariat which carries on the larger share of the work of the League. Mr. Lias says, "Indeed in the great international civil service, which lives and moves and has its being in the great new Palace at Geneva there is being built up a really efficient instrument for the promotion of that cooperation which the framers of the Covenant presumed is the desire of the nations of the world." Godfrey Lias, op. cit. p. 5
of the Council. The Secretariat is made up of a Secretary-General, two deputy Secretaries-General, two under Secretaries-General, a legal adviser, treasurer, and the following international sections: political, legal, disarmament, minorities, transit, economic and financial, health, information, intellectual cooperation, mandates, social questions, opium traffic, and a number of individual officers such as the librarian, and a large clerical staff numbering altogether nearly seven hundred.

Let us now turn to a consideration of one of the Technical Sections of the League, the Health Organization, to see what relation it holds to the main body of the League of Nations.

Six Committees of the Assembly do a great deal of the work of that body; two of these are concerned with the Health Organization. The Second Committee recommends the report of the Health Organization for the year. This is given by a rapporteur who prepares a summary to be given directly to the Assembly. These reports are often presented to the plenary session of the Assembly so that the Organization possesses important relations with the Assembly. The Fourth Committee considers the Health budget.

A closer connection exists between the Organization and the Council as it approves the resolutions of the Health Committee before they become effective. A yearly report is also submitted to the Council.

The Health Section of the League Health Organization is an integral part of the League Secretariat and the Medical Director who is the chairman of this Section is an officer in the Secretariat.

4. *The Essential Facts About the League of Nations*, lists the four assistants as one Deputy Secretary General and three Under-Secretaries-General. p. 88.
8. Ibid.
Very often the Organization works jointly with various commissions such as the Mandates, Opium, and Transit Commissions.

It can readily be seen that the League Health Organization is not an entity by itself, but gains much benefit from its place in the League Organization as a whole.  

Origin and Organization of League Health Organization

"The mightiest danger to all humanity since the deluge," is the highly sensational description given to the after-war scourges now sweeping over eastern Europe and Asia which the League of Nations has been called upon to endeavor to check. And the description comes, not from a sensationalist, not from a person overbalanced by sympathy or panic, but from a hard-headed, unsensational New York banker, head of the American Red Cross, Chairman of the International Congress of the League of Red Cross Societies which met in Geneva in March, 1920, in short, Henry P. Davidson.

"Mr. Davidson does not conceal his alarm over the world over a year and a half after the armistice. The League of Red Cross Societies, he says is doing everything in its power, but it is impossible to check this danger by private means. It is a matter to be handled by governments. They handled the war and this is worse than the war."

"So again the League is appealed to for a form of international cooperation quite different from the political work so exclusively associated with it, yet probably far more vital and hopeful."

"Mr. Balfour, at the time President of the Council of the League of Nations, summarized the world's plight thus in a letter to Mr. Davidson: 'The ravages inflicted by disease upon the war-worn and underfed populations of Central Europe, to say nothing of the regions further east, have reached appalling proportions. Men, women, and children are dying by the thousands, and over vast and civilized areas there are neither medical appliances nor medical skill sufficient to cope with the horrors by which we are faced... for dealing with a calamity which following hard on war, seems almost worse than the war itself."

Those close to the after war scenes realized that this condition was not the problem of one nation, nor even of those who took part in the war, but that

9. The Health Committee has worked jointly with the International Labor Office in the study of anthrax and other diseases of industrial importance; the Opium Commission in inquiry into quantities of opium needed for scientific consumption; the Transit Committee in establishing minimum standards for Health Administration and waterways. Information Section League of Nations, The Health Organization of the League of Nations. (Geneva, 1923) p. 36-38.
10. F. C. Boutrous, op. cit., p. 868; See Appendix p. 12-14 for further information concerning League.
the whole world could easily be affected by the ravages of these diseases which knew no boundaries racial or political.

For the same reasons the organizers of the League of Nations gave recognition to the Red Cross only, among the many organizations that sought mention in the Covenant.

At the first business meeting of the Council of the League of Nations in 1920 the Health Organization was discussed. At this time the Brazilian representative M. da Cunha was given permission to develop plans. He believed that health above all else should be an international question and that any "national organization however perfect to be insufficient," without an effective understanding between the nations.

He believed there should be an international permanent organization following scientific research along public health lines, not an entirely independent organization, but one intended to supplement such existing health organizations as the Red Cross Society, and the International Bureau of Public Health, sponsoring international conferences of medical experts and carrying a well planned system of propaganda toward developing public opinion in the right direction. 13

The feeling of the Council toward M. da Cunha's opinion was reflected in its unanimous approval of his statements, and plans for a conference for forming such an organization were made. 14

But because of the dire need for action in Poland, due to the typhus situation, the Health Bureau was forced into being, without organization.


14. This organization has its foundation in three other international health organizations and conferences, the International Sanitary Convention of 1851 called by Napoleon III to combat yellow fever and cholera, a sanitary conference held by Turkey and Egypt in 1866, and the permanent International health body formed at Rome in 1907 called the Office International d'Hygiène publique. Clyde Eagleton, International Administration, (New York, 1932), p. 258.
Thus in 1920 an Epidemic Commission was set up by the League of Nations for the purpose of helping the government of Poland to care for the epidemics of typhus. Food, clothing, hospital and medical supplies were provided.

Later it became necessary to aid Russia and other Baltic States in the same way, due to the great number of refugees, who after the Russo-Polish war sought safety in Poland and the Baltic States.

Dr. Norman White, head of the Epidemiological work in Russia, because of the necessity for quick action due to dangerous conditions of cholera in Russia, asked that this needed Commission be permanently connected with the permanent Health Committee of the League so that rapid transmission of epidemiological information and collection of statistics might be had for the benefit of the greater number.

By 1924 the great work of this Commission was completed in Poland, but as the Assembly had already voted 50,000 francs on the regular budget of the Health Committee for this work it asked the Epidemic Commission to continue to collaborate with Russian health authorities in their work against typhus, cholera, and the plague.

In February, 1921, the Council of the League appointed a Provisional Health Committee and this Committee held a meeting in Paris May 5, 1921.

This Committee later to become permanent, was to work in common with the Office international d’Hygiène publique, but because each member of this international health organization must give his consent, it was impossible to carry out this scheme because the United States objected and a new commission

---

15. The great work of this Commission under Dr. Norman White will be described at some length in a later chapter.
Because of this delay, the first meeting of the Provisional Health Organization was not opened until August 25, 1921 by the League Secretariat-General, Sir Eric Drummond, who appointed Dr. Edward Stegman as acting Medical Secretary of this Committee.

Dr. Th. Madsen, Director of the State Institute of Serotherapy, Copenhagen, was chosen permanent Chairman, because of his great scholarship, and linguistic ability.

This Provisional Health Committee chosen by majority vote of the Council of the League of Nations, although temporary, was to carry on the duties of the Health Organization until a permanent organization was formed.

This Committee in no way ended the work of the Epidemic Commission appointed two years before as an emergency commission, and at the first meeting of the Provisional Health Committee, Dr. Ludwig Rajahm, of the Polish Health Administration, and Dr. Buchanan, Senior Medical Officer of the British Ministry of Health, expressed the desire that this Epidemic Commission be made permanent, its work extended, and its funds enlarged.

This first session revealed the cooperative feeling of other international health bodies. The League of Red Cross Societies offered the League of Nations use of all documents which its Medical Statistical Bureau had collected and a transfer of its staff to the League for the purpose of exchanging medical statistics.


Dr. Pulido, President of the Public Health Council of Spain, expressed the satisfaction felt by many at the collaboration the Health Committee had established between the Office international and itself without losing the independence of either.

The willingness to cooperate was expressed by the International Labour Office in a letter from its Director to the Provisional Health Committee asking it to appoint a representative to work with the Advisory Committee on Industrial Health Questions recently set up by the Labour Office.23

The question of coordinating a League Health Organization and the Office international d'Hygiène publique was considered in the first League Assembly, but not until 1923 was any decision concerning it made.24

In January, 1923 the Council of the League chose a mixed committee of equal numbers from the Provisional Health Committee and Office international d'Hygiène publique to plan a constitution for a Permanent Health Organization. This Committee met in May of the same year and adopted the following plan favorably considered by the Council, that the Permanent Health Organization should include:25

1. General Advisory Health Council. This to be the Permanent Committee of the Office international d'Hygiène

---


24. The Office international d'Hygiène publique was allowed to ratify the agreement with the League as proposed nearly four years before. Dr. C. E. A. Hinslow, op. cit., p. 311.

25. The Council of the League thanked the Provisional Health Committee in the following words: "The Provisional Health Committee has rendered important services to the League and earned the gratitude of the public health administration of all countries including countries which are not members of the League. The fact that several members of the Provisional Committee will be members of the new Committee is a source of general satisfaction to us and is a guarantee that the tradition of international cooperation in matters of public health which has already been established will gain in strength in the future. Minutes of Provisional Health Organization, Annex 2, (C.10M.7 III-10.1921) p. 61.
2. A Standing Health Committee made up of the President of the Permanent Committee of the Office International d'Hygiène publique and fifteen other health officers and experts. Nine of these to be appointed individually for three years by the General Advisory Council in such a way that each state which is a permanent member of the Council of the League would be represented on the Standing Health Committee. The remaining six men are appointed by the Council of the League after consultation with the Standing Committee for the same period of years. 27

This Standing Health Committee directs the Health work of the League of Nations. Members do not sit on this Committee as delegates of their governments. They are simply selected as health experts in their capacity of individuals, which explains the presence of members from countries which do not adhere to the covenant of the League.

3. A Secretariat made up of the Health Section of the League Secretariat. 28

The first meeting of the Permanent Organization took place in February, 1924 and Dr. Th. Madsen, Head of the Copenhagen Serum Institute was chosen Chairman.

In the remainder of this chapter the functions and work of the Permanent Health Organization will be outlined along broad lines for two reasons, the complex nature of the organization itself, and the more detailed explanation of each type of work in following chapters.

26. This Commission consists of representatives of 52 governments and supervises the application of the International Sanitary Convention of 1926, receives all reports in which opinion should be asked.

27. The number appointed by the Council has changed from time to time. "Members of the Health Committee do not sit on that committee as delegates of their governments. They are selected as health experts in their capacity of individuals, which explains the presence of members from countries, which have not adhered to the Covenant of the League."


28. Report of Health Committee to Assembly 1923, A.74 III-3; Publications Department, League of Nations Pictorial Survey (Geneva, 1929), p. 13; Judith Jackson and Stephen King-Hall, ed. The League Year Book (New York, 1933) p. 71; The Health Section is a part of the League Secretariat, a body of permanent officials, an international Civil Service, made up of physicians of different nationalities, and clerical assistants. Number has varied but usually about fifteen. Boudreau, Ibid. p. 866.
The functions of the Committee are:

1. To act as a connecting link between national health administrations.

2. To advise the Assembly and Council on all international public health questions.

3. To "promote the protection of public health by international cooperation."

Each of the three sections of the League Health Organization has its special duties and procedure which are developments of the basic duties laid down at the outset of the organization.

Just as the League leaves many of its arduous tasks to its technical sections so does the Health Organization do most of its work through the many expert committees which the Standing Committee "has the right to appoint...to consider any enquiry, research, or other public health matter."

The important part of the Health Secretariat known as the Epidemiological Intelligence Service created in 1922 with its Far Eastern Bureau at Singapore will receive treatment in a chapter devoted to this subject, along with other permanent work of the Health Organization.

29. Publications Department, Catalog of Publications, (Geneva, 1935) p. 112. As an official organization it does not concern itself with the internal affairs of the various countries unless they expressly ask it to do so. Its mission consists therefore, in giving its support to national governments and services responsible for the protection of health and in promoting their collaboration. Its resources are such as the national governments and institutions place at its disposal.

30. See Appendix, p. 1, for Duties Procedures of League Health Organization; also page 2, Appendix, for Reconstitution of League Health Organization in 1936.

CHAPTER III

HEALTH COLLABORATION WITH NATIONAL GOVERNMENTS; HEALTH INTERCHANCES

Although all of the work of the League Health Organization is of an international character, yet there are some phases which seem, at least on the surface, to be more universal than others. This is true of two phases of the work treated in this chapter: collaboration of the Organization with states in reorganizing their national health departments, upon written request from such states; and the interchange of medical personnel between countries and Health Organization experts.

The purpose of the Health Organization is to promote public health by international cooperation, but it does not concern itself with the internal affairs of countries unless they definitely ask it to do so. ¹

However, if a country does ask aid, it does not pause to consider whether the request accords with the work it is doing. ²

This particular phase of health work, collaboration with the health administrations, has been one of continuous growth and early origin within the organization itself.

Probably the first appeal was made by the Polish Government in 1920 in response to which the Epidemic Commission, appointed as an emergency health Committee of the League, aided the Polish Health Administration in checking a widespread epidemic of typhus which had continued for four years and had become so widespread that local agencies could no longer cope with the situation.³

In Russia where the epidemic situation was much worse, Dr. Nansen, Chairman of the Refugee Committee, already was at work in Moscow aided by the International

---

1. Essential Facts About the League of Nations, (Geneva, 1938) pg. 245.
and American Red Cross. In 1921 a medical officer was appointed to supervise the sanitary work under Dr. Nansen's authority. However in the fall of 1921 refugees from Russia had broken through the sanitary cordon established around Russia and were spreading typhus through the surrounding territory, especially in Poland and the Baltic States.

At this time the Polish Government realized that some study must be made of the situation, if the epidemic did not again get out of hand, and asked the League Council for further aid. It replied by inviting the Polish Government to call a Conference, which became the famous Warsaw Conference held in March, 1922, attended by all European members of the League, who were interested in the epidemic situation in the Near East besides representatives from Germany, Russia, Soviet Ukraine, Turkey and Hungary.

The decision of this Conference to attack the typhus center in South Russia by preventing migration of refugees, and aiding with hospital supplies and food was to be carried out by the Epidemic Commission. In the spring of 1922 this work was begun by this Commission, acting as the executive section of the Provisional Health Organization of the League in Eastern Europe, and was not completed until late winter of 1924.

It is questionable whether the importance of this work accomplished by the League Health Organization, collaborating with other countries, will ever be


5. These refugees were the result of the Russo-Polish War when hundreds of thousands driven from central Russia and Siberia in 1915 and 1916 by Russian Armies in retreat returned to Poland and Baltic Countries. *Ten Years World Cooperation* (London, 1930) p. 232.

fully realized. Thousands of people lacking food, clothing, soap, the barest necessities, wandered from Russia through Poland and other nearby countries spreading epidemics of typhus, cholera, and plague. Conditions too terrible for description are stated in the reports of members of the Epidemic Commission. And yet in spite of these dreadful conditions and lack of funds, when Dr. Rajehman, Medical Secretary, of the Health Organization, returned from a visit to Russia, he said that the scientific researches being carried on there would do credit to any country.

The story of the fight against disease in the Near East is not complete without a short history of the beginning of the Epidemiological Intelligence Bureau, through which many of these researches were rendered less difficult and more satisfactory.

This work was begun early in 1922. Twice a week the Provisional Health Organization published reports on sanitary conditions throughout the world, a great deal of the space at first being given over to the epidemic situation in the East.

These regular epidemiological reports published in a periodical called Epidemiological Intelligence by the Health Section of the League Secretariat gave such information as the number of cases of each kind of disease in Poland, Russia, Finland, Latvia, Hungary, and others; whether cases were decreasing or increasing.

9. "At Moscow where emigrants continue to pour in without interruption 10,000 to 12,000 persons were crowded together in one station; hundreds of corpses were removed each morning." Monthly Summary, II (1922), p. 39.
10. "In White Russia enormous numbers of refugees have sought shelter in the forests along the frontier and are now proceeding toward Poland.... Medical aid is doing its utmost... but the hospitals are over flowing; medical supplies are lacking; and food is insufficient." Ibid, p. 53.
increasing; death rate by disease; and condition of hospital facilities.

The reports of Prof. Tarashevitch, Russian medical expert, did much to help the Epidemic Commission to understand the epidemiological situation in Russia and were a splendid example of this type of report which has never ceased flowing from medical experts from various countries up to the present time. 14

The epidemic situation had been equally bad in Greece after the Turkish Grecian War. Dr. Haigh of the League Epidemic Commission was sent from Russia to Greece to aid Dr. Nansen. Here the Commission in collaboration with about eighty Greek doctors and health inspectors treated thousands of refugees for smallpox, cholera, and typhoid. This work continued till 1924. 15

Again in 1928 Greece, knowing full well the value of League Health aid sent a telegram to the League asking assistance in dealing with an outbreak of dengue, or break bone fever, a rare tropical disease, which had attacked several thousand of her population. Dr. Mackenzie of the League Health Section was sent to aid in caring for this serious situation. 16

By 1929 Greece felt the need for an entire reorganization of her health system and a third time appealed to the League for collaboration in this work.

A survey was made by a commission of the Health Committee and the Chairman of the Malaria Commission, which later made a set of recommendations to the Health Committee. These were accepted by the Greek Government and a very complete and unified health system was set up there on an entirely new basis, under the direction of Dr. Norman White, League representative, who gave five years of splendid service to this project. 17

Other requests from governments for collaboration with them in health matters may not be of such prominence because not brought into being by such


emergencies as the Polish typhus situation, the Greek refugee problem, or the
Chinese question. Nevertheless they are of great importance, and show that
governments are increasingly resorting to the League Health Organization for
medical aid.

Besides the collaboration with governments already discussed at some length,
in its seventeen years of service the League Health Organization has collaborated
with the Bolivian Government in 1929 in reorganizing her health service; the
government of Uruguay in 1927 in a study of systems of health insurance and again
in 1931 in regard to infant mortality and methods of serological diagnosis; the
Czecho-Slovakian Government in 1930 in making a health survey; the Chilean
Government in 1932 in making an investigation into public nutrition; the
Bulgarian Government in 1931 in stamping out certain infectious diseases; the
Romanian Government in studying causes of infant mortality; the Brazilian
Government in the creation of an International Leprosy Research Center in
Rio de Janeiro; the Chinese government in 1931 in an entire internal reconstruc
of the country; and the Spanish Government in 1935 and 1937 in making a
study of the general epidemiological situation, living conditions of the people,
and conditions affecting refugees. This increasing collaboration led Dr. Nansen
to say in the Sixteenth Session of the Health Organization in 1930:

"The Health Organization must develop its collaboration with
governments which ask it for advisory opinions, not only on
the organization of public health services, but also on the
methods to be employed and the technical schemes to be adopted in
dealing with the manifold administrative and medical problems
of public health. Such opinions represent a technical doctrine based
on analytical comparison of the pooled knowledge and experience of

18. Ibid. XII (1932), 328; XIII (1933) 228; League of Nations, In-
formation Section, Essential Facts About the League of Nations, (Geneva,
1933) p. 243.
9. Monthly Summary, XV (1935) p. 262; Ibid. XIII (1933) p. 228; XIII (1933)
p. 276; XVII (1937) p. 29; A special section at the end
of this chapter is devoted to the health reconstruction of China. "Bentley
S., XVII (1937), p. 89."
leaders in public health and medical research, so that the advice tendered by the Committee may constitute a declaration of the present state of practice and of knowledge in the various fields of public health. 20

Internal Reorganization of China Under Technical Supervision of League of Nations

The greatest task undertaken by the Health Organization in collaboration with a national government for the purpose of reorganizing its national health system was that in China.

Early in 1929 the Chinese Health Ministry invited the Medical Director of the Health Section to act with two others on an International Committee of three in advising the Chinese Health Ministry along medical lines. The invitation was accepted, endorsed by the Council, and approved by the Secretary General upon consultation with the President of the Health Committee. 22

The Committee as formed was made up of Dr. Ludwig Rajchman, Medical Director of the Health Section, Sir A. Newsholme of Britain, and Dr. Heimer, International Health Division of the Rockefeller Institute.

In 1929 this Committee went to Nanking to study with Chinese Health Authorities a plan for cooperation between the Chinese Government and the League Health Organization especially along the lines of maritime quarantine and port health. 23

The Committee on its return reported to the Council of the League that every part of the programme presented by China was in line with League health procedure, and recommended that the Council approve this scheme.

The feeling of those in authority concerning the adoption of this plan, the Council, and the Assembly is reflected in the interview given to

---

The Chinese Government's request for the advice and assistance of the League of Nations in building up its public health service is not only one of the most important developments in the history of the League's technical activities, but is a long step further towards establishing the position of the League as a world-wide, and not merely European association of states, of equal value to all of its members.

The Health Organisation has long been equally active in all five continents, but this is the first time that a great non-European state has realised that membership in the League affords it facilities in the solution of its own internal problems of reorganization and construction.

One of the purposes laid down in the Covenant is cooperation in matters of public health, and it is highly gratifying to us who believe in the possibilities of service of the League Health Organization that the Chinese National Government should have called upon us to give technical aid in its great work of building up a united, modern, and free China. This is, indeed, a privilege and a great opportunity, as the Council and Assembly were quick to appreciate and of which the League Health Committee has shown it fully aware.24

The programme of collaboration laid down by the Chinese followed the lines stated below:

(a) Quarantine service to be reorganized. Study to be made by Health Organization and Transit Organization of League as to method of building up a health administration for ports such that it would be recognized by other countries.25

(b) Organization and development of a Central Field Health Station under advice of a League technical officer, which later might be developed into a National Field Health Service.

(c) Building of first modern national hospital in China, and a large provincial hospital in Chekiang under technical assistance of Health Organization of League and provision for study abroad of senior staff of both hospitals.

24. Monthly Summary, X (1930), p. 56-57; C. Kuangson, "Republican China's Achievements", in Current History, XXXIII (1929), p. 210; Dr. Park was sent from the Health Section of the League to study China's quarantine conditions. He was to report to the Health Committee on these conditions and submit a plan later to be submitted to the Chinese Government for allowing some of the members of the Chinese Ministry of Health to take part in a future study tour of port health officers under auspices of the League Health Organization. He was also to submit the idea of the Health Organization training several officers in Europe for port health service. Monthly Summary, X (1930) p. 56-57.

(d) Development of modern health service in Chekiang province to be extended later from this base under advice of Health Organization.

(e) Advice and technical assistance to be rendered by League Health experts in such reforms as: special health plans, reforms in teaching of medicine, and campaigns against various diseases.

(f) Cooperation of medical experts from Singapore Bureau of League Health Organization in controlling cholera and smallpox in Shanghai.26

Dr. Rajchman, Medical Director, made a trip to China in the spring of 1931 and upon his return made a report to the League Health Organization, which showed the rapid development made along health lines in China over a very short period. He stated that a Central Field Health Station had been organized and would open shortly for the purpose of improving health conditions in and around Nanking; that Central Hospital, a model institution, had already been opened and was doing great service for the people of Nanking; that an anti-cholera campaign had inoculated 400,000 people; and that the National Government was to be commended for its carrying out of this three year plan in spite of civil war.27

By the end of 1933 the plan outlined by the Chinese Ministry of Health and sanctioned by the League had been carried well on its way, through the collaboration of the Chinese Health Administration and the League Health Organization.

The Central Field Health Station28 was completely reorganized under a plan recommended by the International Conference of Directors of Schools of Hygiene, and by June 1933 housed in a very complete modern building. Advanced medical instruction and post graduate courses for doctors are to be given here.

under the advice of Dr. B. Boraci, Director of the School of Hygiene at Zagreb, sent out as technical representative of the League Health Organization.

There were nine sections in this Central Health Station one of which, the section on Malariology has been very active in the malarial area, several of its directors having had training abroad at anti-malarial centers through the aid of the League Health Organization.

The Central Hospital at Nanking was opened in 1933 after much difficulty in securing public service facilities such as drainage, water supply, and electricity. Its staff includes a number trained abroad in hospital management through traveling fellowships granted by the League Health Organization.

A School of Nurses has also been opened under much the same conditions of training as mentioned concerning the hospital.

By 1933 the Quarantine Service provided for health supervision of all sea and river ports of importance in China which were connected with international trade.

One of the outstanding results of health cooperation took place in China in the method of dealing with cholera. Shanghai has always had much difficulty with cholera and has been unable through her three health administrations to successfully cope with it. In 1930 upon invitation of the Chinese Government, a committee was formed of representatives from the three health administrations of Shanghai and the League Health Organization, which adopted a plan for the following measures:

"Creation of a central cholera office attached to the national quarantine service; free vaccination offered to all; immunization of the groups most exposed to the risks of infection, such as coolies, lighterman, and the population of the junks;"

---

32. Ibid. p. 36.
33. Canton has a quarantine station of its own. Monthly Summary, XIII (1933) p. 275; C. A. McCartney, op. cit., p. 228.
accelerated manufacture of vaccine; employment of ambulances to which passers-by might come for inoculation; increase in number of isolation hospitals; free supply of pure drinking water to the poorer classes of the population in times of epidemic by means of public fountains or tank wagons; propaganda by posters, lectures, and the cinema; and organization of a *cholera day*.

As a result of this plan 530,000 vaccinations were made in 1930; 760,000 in 1931; 1,062,000 in 1932; and about the same for 1933. The importance of this work is shown by the fact that in 1933 cholera did not appear in Shanghai.

Meanwhile in 1931 came the great flood in China affecting about 50,000,000 people and flooding areas equal to that of England, bringing with it the greatest danger China had ever known.

Epidemic conditions became so bad that the Red Cross could not deal with them. China again appealed to the League, and it in turn appealed to all countries for contributions, and invited the Health Organization to answer the request of the Chinese Government to coordinate the international campaign against epidemics. Dr. Huang, Member of the League Health Section, was lent to the National Flood Relief Commission and aided greatly in bringing together efforts of many countries to deal with the flood situation.

The manner in which the League appealed to all members to coordinate efforts in the way of aiding the Health Organization to avoid a similar experience to that of Poland in the typhus epidemic after the war, shows the vast inclusiveness of the interests of the League.

In 1931 because of the success in applying the cooperative health plan, the Chinese Government applied to the Council of the League to extend aid to the newly organized Chinese Economic Council, which planned an economic reconstruction of China. This was very favorably received in League circles and later in

34. Monthly Summary, XIV (1934) p. 36; C. A. McCartney, op. cit., p. 228.
the same year, the Council of the League which at this time included a Japanese member, voted favorably upon a plan for the economic reconstruction of China. 38

It would be entirely out of place here to discuss the economic reconstruction of China were it not for the fact that Dr. Ludwig Rajchman, Medical Secretary, of the League Health Section, was the first general liaison officer sent to China to oversee this plan and was the one who later was under fire by the Japanese press. 39

The Chinese Government planned to have a general liaison officer from the League in China to give the Government information on the technical organization and methods of bringing them into service; experts from the League were to carry out special projects; technical commissions were to approve plans suggested by the Chinese Government; Chinese officers were to receive training by help of the League if necessary; and education experts were to be had under League selection to effect exchanges with other countries. 40

Several experts were sent from the League and Dr. Rajchman as general liaison officer, who supervised a survey of medical education. 41

Although the Japanese representative in the League Council had given his approval to the plan, Japan opposed the plans recommended by the agent of League reconstruction in China just after Dr. Rajchman's report was published in May. They believed Dr. Rajchman had overreached his authority and hinted at his discontinuation of services. China, of course, did not wish to abandon the plans. 42

38. This was practically the same plan outlined in the Lytton Report. Tenth Proposal, Report of Lytton Commission. (G. 653 W. 320, 1932-III) p. 131.
40. Ibid. p. 27; Ibid. p. 170; Trans Pacific, Tokyo, Thurs., May 17, 1934, p. 16.
41. Dr. Rajchman Health Section; Sir Arthur Salter, Economic and Finance Section; H. Robert Hase, Transit Section, Essential Facts About the League of Nations, p. 287.
42. Dr. Rajchman's position as general League Adviser gave him the right to cooperate with other phases of reconstruction and in spite of Japanese contentions he believed his proposals were entirely technical; Europe (I, 1935) p. 72-73.
Dr. Rajchman's report showed the marked achievements of the National Economic Council in many ways, and the splendid results obtained from collaboration between Chinese and experts sent out by the League of Nations. It has been necessary to go to some length in describing the situation in China because of the way in which the Health Organization was tied up with the entire internal reorganization of China.

Japan believed the technical undertakings would take on a political significance due to the fact that because of the great aid they were rendering the Nanking Government the technical officers were obtaining undue respect and influence.

Mr. Ireland in a recent book says:

"The cooperation between Dr. Rajchman and T. V. Soong was highly irritating to Japan. Mr. Soong is the most outspoken opponent of Japan at Nanking, as well as a strong advocate of assistance to China from the Western Powers. From the time of the League's China Commission in July, 1933, and the appointment of Dr. Rajchman to head its work, intense efforts developed on the part of Japan to have their influence dominate over that of the League in Nanking."

Dr. Rajchman was not sent back to China after August, 1934, not because of any failure on his part but because of the increasing antagonism of Japan.

Since Dr. Rajchman's return to Europe, Dr. Boracic has remained in China as technical adviser with the National Health Administration of China.

---

44. T. V. Soong was Chinese Minister of Finance at this time.
46. "It has been announced that Dr. Rajchman, who happened to be in Nanking advising the Chinese Government when the Manchurian crisis arose and was therefore known to the British to be disliked and distrusted in Japan, will not return to continue his reconstruction program in China. Despite the fact that his work in China is regarded by the British as magnificent, he will not return to China to carry on the League work there." Ibid. p. 61.
In October 1937 China again requested aid from the League in combating epidemics due to war conditions. It was finally decided by the Health Organization to form three mobile medical units properly staffed to be set up in certain areas to be financed by the sum of 2,000,000 Swiss francs voted by the Assembly.

An epidemic Commission was formed of the Head of the Chinese Health Administration, the League's Technical Adviser, and three Epidemic Commissioners. Periodical reports of progress of this Commission were to be sent to the League of Nations.48

The leaders of the three medical units began work in January 1938 operating under the Chinese authorities. This work has been assisted financially by the Danish Government, the firm of Bayer in Germany, the Lord Mayor's Fund, Peninsular and Oriental Steamship Company, the firm of Jardine, Matheson and Co., of Hong Kong, and the Government of the Netherlands.49

**Interchange of Medical Personnel**

Another phase of work undertaken by the League Health Organization which is without doubt universal in its scope is that of interchange of medical personnel between countries and Health Organization experts.

When the Health Organization was first established after the war, it was not easy to obtain the cooperation of governments who had lately been at war, and yet it was necessary to have this cooperation to cope with the epidemic situation at that time.

One of the means of obtaining this cooperation in health matters was the system of interchanges of health personnel or study hours, which have formed one of the most promising League activities.50

---

49. A bill for contributing to this fund had been introduced by the French Government according to the last Monthly Summary available. Monthly Summary, XVIII (1938), p. 46; Essential Facts About the League of Nations, (Geneva, 1938) p. 289.
The system had its beginning early in the history of the Organization at first by Health Conferences such as those held in London and Warsaw to enlist the cooperation of national health administrations to help combat the Epidemic situation in Europe, an end in view, extension of these interchanges throughout the world with a twofold objective.51

(1) Improvement of health services of each country, especially where services were less highly organized.

(2) Possible unification of the methods of health administration; at least changes made by influence of knowledge obtained through interchange of opinions.52

The results of the first interchanges were so successful that the Health Organization in its second session adopted the following resolution:

"The Committee is of the opinion that the interchanges of medical officers of health have proved their practical utility and ought to be continued systematically."53

It is impossible to indicate the exact nature of these interchanges without using a specific case. Let us use, for example, a general interchange carried on in the United States for purposes of studying state health administrations. Circular letters were sent to all countries. In response medical officers of public health administrations from eighteen countries attended, three of whom came from countries which were not members of the League.

The general plan was to spend two weeks in Washington, a month in the southern states studying State Health Administrations in wide rural areas, a month in industrial northern states studying municipal methods, and a final period in New York.

53. Minutes of Second Session Permanent Health Organization, Official Record, (G. 215 M.69-III-15) 1924, p. 18; In the fifteen months following the inauguration of these interchanges, 104 medical officers from 27 countries had taken part in exchanges.
The subjects studied on this tour were: foreign and interstate quarantine systems, public relief activities, social hygiene work, stream pollution, research questions, rural health work, reports and statistics, Washington water supply, and study of the Hygienic Laboratory.

On the return of the group to Geneva, reports from various members were read and discussions held. These reports were often published and have formed an "International Exchange Library," for the benefit of those who could or did not attend.54

As the idea of the interchange grew, the meetings included sanitary engineers, as well as medical or health officers, and the interchange became more specific in purpose.55

"The system of interchanges or study tours since its inauguration five or six years ago has exhibited a tendency to evolve into study tours on special subjects, an evolution which has its advantages, though those of the general interchange were fully recognized."56

Out of these interchanges International Health Courses developed such as those for the study of malaria, or the study on nutrition. These courses lasted about seven weeks and consisted of lectures, discussions, and practical demonstrations.

The subjects of these courses covered a wide range, but special emphasis was given to recent public health science and research.

Sir Ramaswami Ayyar, League Rapporteur, from India says:

"It may not be out of place to emphasize that these interchanges furnish a conspicuous example of international cooperation and emphasize and carry into practice the ideals of universality,

56. Monthly Summary, VIII (1928), p. 280;

The study tours on special subjects were of interest to a special group such as, port health officers, sanitary engineers, malaria or leprosy experts, or quarantine officers.
embodied in the Covenant of the League. By this means and the
dissemination of intelligence as to epidemics and research
into epidemics, the administrations and the peoples of distant
countries are brought into close touch with the central
organization of the League and the mutual benefit derivable
from the contacts thus established cannot be overestimated. 57

A concrete example of the value of study tours is afforded by the work of
the Malaria Commission. It has traveled extensively into malarial countries
studying special conditions which have become the basis for discussions of
unestimable value to malaria experts in these countries.

At first the programs of these tours were too heavy and preparation was
not made far enough in advance, but these first defects have been altered. 58

One could go on indefinitely with interesting comments on this subject,
for since 1923 nearly 500 public health officers and medical experts from fifty
different countries have taken part in study tours and forty countries have
been visited. 59

Mr. Boudreau, American Member of the Health Section League of Nations, has
summarized the value of the interchange as follows:

"I think no one would deny that these interchanges have fostered
a splendid esprit de corps* among the health services of the
different countries. Perhaps this is the greatest benefit of all,
and I am convinced that the cordial relationships established
between health officials of different nationalities is of itself
well worth the time and money spent for the purpose. But there
are other and more practical advantages. There is the more
general diffusion of knowledge concerning modern public health
methods; there is more uniformity in public health practice, for
the better methods are bound to be copied; and there is the
accumulation of a common fund of knowledge as a result of friendly
international comparison of experience and results. The interchange
is a powerful means of bringing about a reform of public health
administration, and its results along this line have fully
justified the expense involved." 57

57. Sir Rameswami Ayyar, Rapporteur, "Report on Work of Health Organization", pre­
    sented to Eighth Ordinary Session of Assembly, Official Journal, Annex 141
    (A 69-III) p. 56.
59. Dr. C. E. A. Winslow, "The Health Organization of the League of Nations,"
    excerpt from Progress in American Review of Reviews, LXIV (1926) p. 211-212.
60. Dr. F. G. Boudreau, "International Health", in American Journal of Public
    Health, XIX (1929), p. 873. Dr. O. R. Eichel, "The Health Committee of the
    League of Nations", an interview of Surgeon-General Cumming, U.S. Representa­
CHAPTER IV.

PERMANENT WORK OF THE HEALTH ORGANIZATION

Permanent Biological Standards Commission

"Ever since the method of immunization—and cure by serum injections was discovered, great practical difficulties have been met with owing to the fact that the methods for measuring and testing the strength of sera had been built up in different ways, often on entirely different principles in the bacteriological laboratories of different countries, sometimes even in those of the same country. Thus for instance it would be impossible to check introductory statements as to the effect of any particular serum, since if the statements emanated from different laboratories, there was, so to speak, no common denominator by which to compare products prepared by each.

Introducing uniformity into the methods of different laboratories would allow of fuller exploitation of the great achievements in the problem of immunization for the purposes of curative and preventative medicine and would facilitate further research work in the same field."

There was a certain degree of agreement on these points before the World War but as Dr. Madsen, Medical Director of the League Health Organization says:

"...this agreement ceased to be operative and an effort should be made to re-establish it."2

During the war the use of French anti-tetanus serum by English and American doctors, differing greatly in titre3 from home products caused no end of trouble.4

The League Health Organization felt because of its close cooperation with national health administrations, and its connection with the Office international d'Hygiène publique that it was especially well situated to deal with this important international health problem.5 It therefore called a Conference of

3. Titre, The strength of a solution or concentration of a substance in solution as determined by solution.
scientists of ten powers for the purpose of standardizing certain serums, and formulating a plan to be followed by other conventions and laboratory work in many countries.

The League Health Organization had already appointed Dr. Madsen, Pres. of the State Serum Institute, in Copenhagen, to act as director of Research and he had given his sanction to the use of this Institution by a Standards Commission as a central laboratory for the League Health Organization.

Dr. Madsen had previously made a proposal to the Health Organization that the principal medical research institutes of the world investigate jointly in order to come to an agreement on the standardization of anti-toxic sera. This proposal was accepted in view of the fact that the Health Organization was not capable of beginning nor financing anything so scientific, but could lead joint laboratory investigations which otherwise would not be carried on by separate countries.

At the outset the Permanent Standards Commission was confronted by two tasks.

1. Establishment of common sera and biological standards.
2. The more difficult task of exercising practical scientific control over the sale of these standards in international trade.

These two aims have to a large extent been realized, that is, as far as it is possible to complete any problem based upon an ever changing knowledge of scientific principles:

8. Rose, op. cit., p. 79.
9. "With the advance of science new therapeutic agents gain acceptance and require to be assayed in terms of some common standard; moreover, certain of the standards already adopted may be open to improvement, while others, being of a composite nature are liable to be replaced sooner or later, by the active substance in pure form; finally in the case of yet other standards, physical or chemical titration may be expected to oust the biological method of assay-possible in the near future." Monthly Summary, XVII, (1937) p. 63-64.
At the London Conference in 1921 Dr. Madsen was asked to prepare a detailed program which placed his Copenhagen Institute at the disposal of the Standards Commission and any national institution which carried on research for the purpose of coordinating results of different laboratories. These institutes were also ensured of necessary standards and re-agents.

Investigations into methods for testing potency of certain sera, and standardization of other sera were assigned to sub-committees.

By the time of the second Conference of the Permanent Biological Commission, in Paris, 1922 these investigations had been completed and arrangements were made so that a competent institute in any country might apply to the Copenhagen Institute for a re-testing of diphtheria serum.

In 1923 representatives of Institutes in Europe taking part in the investigation of special sera met in Copenhagen to compare results. After fifteen days of conference and laboratory work with technical assistants and directors of institutions on material brought by various institutions, a special report was made with no definite conclusions, but showing an agreement concerning tetanus anti-toxin in sight, and a united desire to proceed further with other sera.

These investigations were again examined and others proposed at another Conference in 1926 at which time an international standard for insulin was adopted in agreement with conclusions made by the Conference on Biological Products.

10. Representatives from the following institutions were present: Great Britain (Medical Research Council), France (Pasteur Institute), Italy (State Institute), Warsaw (State Epidemiological Institute), Basle (Hygienic Institute), Brussels (Pasteur Institute), Japan (Kitasato Institute), United States (Hygienic Laboratory, Washington), Vienna, Rockefeller Institute.

11. Dr. Madsen opened the Conference in four languages, French, English, Italian, and German.

12. Reagent—Any substance which, because it takes part in certain reactions, is used in detecting, examining, or measuring other substances.


16. A report has been published by the Health Organization giving tests on the basis of which the unit (of insulin) value was settled and method for determining value of insulin preparation by comparison, with the standard. Monthly Summary VI (1926), p. 249.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
American, British, and Polish Institutes requested permission to study new methods for the treating and administering of scarlet fever sera in collaboration with the Copenhagen Institute. 17

By 1928 a decided advance had been made in the widespread adoption of sera standardization by the Permanent Standard Commission. The Health Committee reported that the international unit now called the League unit, had been adopted all over the world; that the international standardization for pituitary extract had proved satisfactory; that standardization of anti-tetanic and antidiysenteric sera was nearly completed; and that progress was being made in the standardization of anti-diphtheritic sera.

The confidence of the medical world in the findings of the Permanent Standards Commission was shown by the fact that at a recent International Pharmacopoeia Conference it was decided that the acceptance by this Commission of any product was a test of its satisfactory quality. 18

By 1935 the work had reached such an advanced stage that an Inter-Governmental Conference was called where a proposal was adopted to have similar meetings every three years. This Conference was called for the purpose of confirming results of biological standardization.

The Health Organization through its Permanent Standards Commission has established standardization for twenty-one therapeutic substances. 19

At this time it was considered possible to carry forward the second task of this Commission; namely, to make compulsory the use of these standards and supervise their use in a national centre for each country, the League to provide through special funds for the free distribution of standards.

17. Ibid.
19. This list is printed in the United States in the latest edition of *Pharmacopoeia* which is not yet available.
The Inter-Governmental Conference of 1933 expressed the same idea in two
recommendations:

(1) The international standard should be made effective by the
competent authorities of all countries.

(2) National centers should be put up in all countries to hold
and distribute the international standards.

Early in 1937 replies from governments indicated that forty-one countries
have or are about to adopt the international standards recommended by the Perma-
nent Committee of Biological Standardization, and thirty-one governments have
created or are about to create national centers. This will greatly simplify the
work of the Institute at Copenhagen.

Besides the Commission for Serological Research there is also one for
Biological Research. Dr. Dale of the National Research Institute of London
is Director.

This group has been carrying on investigations similar to those of the
Serological Research and comparing results at various conferences, but the work
of both commissions is of such similarity and of such cooperative nature,
both commissions often passing jointly on the same standards that it seems
superfluous to repeat.

21. The following countries have adopted or are about to adopt international
standards: South Africa, Argentina, Australia, Austria, Bolivia, Great Britain
Bulgaria, Canada, Chile, China, Czechoslovakia, Denmark, Ecuador, Estonia,
Finland, France, Greece, Guatemala, Hungary, India, Iraq, Irish Free State,
Italy, Japan, Latvia, Mexico, Netherlands, Netherlands Indies, Norway, Phillipi-
nees, Poland, Portugal, Spain, Sweden, Switzerland, Turkey, U.S.S.R.,
United States, Uruguay, and Yugoslavia.

The countries whose names are underlined have or are about to establish
national centers for keeping international standards. Ibid. p. 63-64.
22. These two commissions are parts of the Permanent Standards Commis-
23. Biological preparations are kept in London, as well as Copenhagen; Dr. F.
Gl. Pedersen, "Microbes Know No Frontiers," in Rotarian, II (1937) p. 27.
Let us now summarize the actual results of the work of the Permanent Standards Commission. The first unit adopted was that for diphtheria anti-toxin; then followed tetanus anti-toxin which was the subject of a great deal of controversy. Anti-pneumococcus serum was the only anti-bacterial preparation adopted.

According to Dr. McCoy, American representative on the Permanent Standards Commission in 1937, the tetanus unit and one other, the diphtheria toxin for the Schick test, were the only immunological preparations adopted with which he did not agree.

Standardization of certain drugs has also been completed; digitalis, salvarsan, certain hormones; for example, insulin, and all of the vitamins.

It is interesting to note that the Inter Governmental Conference on Biological Standardization to which were invited representatives of practically all of the countries of the world has adopted without appreciable modification, the standards established by the Permanent Standards Commission.

One can only agree with Dr. McCoy when he says that much of the success of this Commission has been due to the labors of Dr. Th. Madsen, Medical Director of the League Health Organization for many years and head of the State Serum Institute in Copenhagen, who has been Chairman of the Permanent Standard Commission since its birth—a man who is not only an eminent scientist but a linguist and diplomat as well.

25. There was no difficulty in agreeing on the Ehrlich unit as it was used universally throughout the world. Dr. George McCoy, "International Standard of Biological Products by the League of Nations", in American Journal of Public Health, XXVI, (1937), p. 1215.

26. The controversy concerned adoption of one of two units, the old German unit which was 66 times the size of the American unit. The German authorities adopted a unit half the size of the American and this was adopted by the League Commission. Dr. George McCoy, ibid., p. 1215.

27. Dr. Felton’s F-146 was used as a basis for standardization; all others were based on toxin in serum neutralization tests. Dr. George McCoy, ibid., p. 1217.

28. Ibid. p. 1215.

29. Ibid. p. 1218.
The Epidemiological and Public Health Statistical Service

Previous to the forming of the Provisional Health Organization in 1921, the Epidemic Commission had been set up to help care for epidemics in eastern Europe. When the Provisional Organization began work, it found that the Emergency Commission needed assistance in making known to the other countries of Europe at some distance from the stricken areas just how serious the epidemic situation was to the whole of Europe and even to other parts of the world.

For this purpose the Health Organization late in 1921 started the publication of health reports giving the sanitary conditions of the world. At first these appeared once, and occasionally twice a week and dealt largely with the epidemic situation already mentioned in eastern Europe. This first material did much to aid the Epidemic Commission and the national health administrations of the stricken countries both financially through increased contributions from countries who became interested in the reports, and technically through interchange of ideas by experts.

The periodical collection and publication of epidemiological information and the collection of public health data and vital statistics by a part of the Health Secretariat of the League Health Organization became known as the Epidemiological and Public Health Statistical Service.

At the inauguration of this service, Dr. Rajchmann, Medical Director of the Health Secretariat, warned the Bureau concerning over development of statistics and emphasized the fact that it should be rather "a clearing house" of epidemiological information for international use.

His report pointed out the lines of development which he thought it should follow:

30. Monthly Summary, II (1922) p. 51; No. 5. "Epidemiological Intelligence," No. 5 was especially helpful.

(1) Development of cooperation of technical epidemic and statistical offices in national health administrations without directing the activities of these administrations.

(2) Prompt exchange of current epidemiological intelligence information relating to sanitary organization legislation, and public health activities.\(^\text{32}\)

(3) Collection and utilization of medical statistical records in the study of specific disease, or on the periodicity of epidemics.\(^\text{33}\)

Dr. Bajchman believed that the exchange of current epidemiological information could be developed very quickly, but pointed out that the special study of disease through data would take much time and research to be carried out by technical staff at Geneva in cooperation with epidemiological and statistical officers in many countries.\(^\text{34}\)

In 1922 the International Health Board of the Rockefeller Foundation had made arrangements with the League to finance the Epidemiological and Public Health Statistical Service of the League Health Organization, contributing $30,000 a year for five years.\(^\text{35}\)

In 1923 the Board had placed Dr. Edgar Sydenstricker, a statistician in charge of the United States Statistical Bureau, Washington, in Geneva to take charge of public health statistics in the Health Secretariat.\(^\text{36}\)

When the group of experts under Dr. Sydenstricker undertook to unify the methods of collecting and tabulating vital statistics of various countries, he found that the difference in method of recording births and deaths, diagnosing diseases causing death, and the classification of such causes was so great that an investigation had to be made into the reasons behind the differences in various countries. Some work had already been done along this line and although

\(^{32}\) This point was carried out in many periodical epidemiological publications afterward published by this Bureau. See Appendix.

\(^{33}\) The second point was carried out in the study of special infectious diseases which has grown to enormous proportions covering a great many of the infectious diseases that are problems in most of the countries of the world, and forms a major part of the work of the Health Organization at the present time.

\(^{34}\) Ibid., p. 90-91.

\(^{35}\) Monthly Summary, II (1922), p. 179. See Appendix for later gifts.

\(^{36}\) Monthly Summary, III (1923), p. 11.
some of it was extremely faulty, yet much help was found in Bertillon's *International Classification of Deaths*, work of the French Government along this line, work of the International Institute of Statistics, that of the League of Red Cross Societies, and also of individuals from certain countries.\textsuperscript{37}

Therefore the International Health Board of the Rockefeller Foundation made an additional grant of $10,500 for 1923 and $21,000 for 1924 for the purpose of bringing together medical men who carried on this particular phase of health work so that unified methods of compilation might be effected.\textsuperscript{38}

As a result a meeting of health statisticians from a number of southern European countries met in Geneva from October to December 1923, where methods of collecting and classifying statistics of notifiable diseases in Sweden, Holland, France, Switzerland, and London were studied; and information concerning methods in use in each country, and lectures on the work of the Epidemiological Intelligence Service of the League Health Section in gathering and tabulating data were heard.\textsuperscript{39}

By 1935 statistical handbooks had been prepared for the following countries: Netherlands, Belgium, England and Wales, Spain, Austria, Scandinavian and Baltic Republics, Portugal, Czechoslovakia, France, Hungary, Irish Free State and Northern Ireland, Switzerland, Scotland, and Canada.\textsuperscript{40}

The rapid development of this service has been in great measure due to the valuable services of Dr. Edgar Sydenstricker, Chief of the Statistical Service of the League Health Secretariat, who has been very successful in obtaining qualified technical advice for the purpose of establishing personal contact with

\textsuperscript{38} *Monthly Summary* III (1923), p. 146; Minutes of First Session, Ibid. p. 111.
\textsuperscript{39} *Monthly Summary*, IV (1924), p. 250; Annex 5 (C.10.II-7) op. cit., p. 113.
\textsuperscript{40} Catalog of League of Nations, "Health, Social Questions, Traffic in Opium", (New York, 1935) p. 23-24; these handbooks describe the public health administrations.
national health officers responsible for vital health statistics, and unifying methods of recording these, and the Rockefeller Foundation which has made his services to the Health Secretariat possible through its splendid contributions.

Meanwhile the Epidemiological Intelligence Bureau had published fifty-three separate epidemiological reports. At this time it was decided to publish these in periodical form as the Monthly Epidemiological Report for the convenience of Ministers of Health, followed by an annual summary at the end of the year.

These monthly reports covered infectious diseases from many countries, with reports of previous months to show the trend of each disease in each country; mortality rates from cities all over the world; and special health statistics in many countries.

All of this information was carefully tabulated, a separate sheet being used for special diseases in each country for years, with morbidity and mortality tables indexed for reference. Thus any unusual occurrence of infectious disease is readily seen and given special investigation.

The second point emphasized by Dr. Rajchman in his outline of work for this Service was the utilization of medical statistical records in the study of specific diseases and as has already been mentioned, this work has grown beyond the fondest expectations of the founders of this Bureau.

It is of enough significance to warrant study of a special case to show the general procedure of this type of study.

The disease in question is influenza selected as one of the first by this

43. By 1924 epidemiological reports were being returned periodically from twenty-nine countries in Europe, nineteen countries in Africa, seventeen in South and Central America, ten in Asia, and two in Australia and New Zealand besides numerous others where reports are not available for the entire country. Minutes of the First Permanent Session, Annex 5, Official Journal, (C.10.K.7, 1924-III-10), p. 113.
44. Monthly Summary, III (1923), p. 147.
Bureau because the manifestations of the disease at this time were universal, making it of interest from an international point of view. 47

First epidemiological statisticians working with this disease were contacted; survey of all literature was investigated; establishment of methods for obtaining required results by comparison of statistical records in various statistical offices was made, and preparation for a report in collaboration for submission to the Health Committee was planned. 48

As soon as sufficient information was collected and correctly tabulated concerning the health of each country, it was published in a special handbook so that by 1935 special material was available concerning the following countries: Australia, Austria, Bulgaria, Czechoslovakia, French Colonies, Germany, Hungary, Latvia, Netherlands, New Zealand, Norway, and the Kingdom of Serbs, Croats, and Slovenes. 49

A later development of the Epidemiological Service at Geneva 50 was the establishment of a Bureau at Singapore whose work follows the same lines of procedure for the Far East as the Bureau at Geneva does for Europe and other countries of the world, a description of which follows immediately.

Singapore Bureau

From an economic as well as health standpoint there has been no single work of the Health Organization which has achieved greater success than the Leagues' Health Bureau at Singapore. Thousands of dollars annually have been saved for the world by wireless notification of outbreaks of contagious diseases which has prevented ships from heavy loss because of quarantine charges. 51

This Bureau is an extension of the Epidemiological Bureau at Geneva which

47. Ibid. p. 105.
48. Ibid. p. 108.
50. This Bureau has already been described.
has carried on the work with contagious diseases since the Temporary Epidemic Commission fulfilled its mission.

Plague and cholera have always been common in the countries of the Far East and the more extensive communications in recent years have made them dangerous sources of infection to every country coming in contact with them.

In 1922 Dr. Miyajima, Japanese member of the Health Committee, recommended that a mission be sent to study epidemics in the Far East in view of the fact that this problem was of such vital importance to so many countries.

This recommendation was approved by the Council and Dr. Norman White was consequently sent to carry on a health investigation in the chief ports of the Far East in November, 1922.

"The precise object of the enquiry is to ascertain the incidence of the more important epidemic diseases, the methods employed for the notification of cases and deaths for the control of the diseases, for the prevention of the spread of infection by ships, as well as the possibility of securing uniformity in the methods of collecting and publishing information and of making it speedily and readily accessible."  

Dr. White stayed in the Far East seven months during which time he visited twenty-two countries and ports and with the assistance of the governments and health authorities of the countries visited collected much data concerning cholera, bubonic plague, pneumonic plague, smallpox, and other diseases.

He also studied public health administrations, and methods of recording vital statistics.

This investigation led up to the establishment of the Epidemiological Intelligence Bureau at Singapore in 1924 by a Conference of Health officials from the League Health Organization.

---

52. League of Nations, Secretariat, Ten Years of World Co-operation, p. 237-238.
54. Ibid, p. 287.
The general purpose of the Bureau is to act as a clearing house of information on epidemics especially in ports and to carry out in the Far East the work of the Epidemiological Intelligence Service of the Health Section of the League of Nations. 56

Its special duties are: 57

(a) To distribute information such as quarantine notifications, movements of livestock and presence of animal diseases, legal health requirements, and important weather statistics.

(b) To act as a center for coordinating investigation in the Far East as the Geneva Bureau has in Europe, especially in the case of diseases of especial interest to this part of the world.

(c) To distribute literature concerning international health work.

One representative from each of the following administrations: Australia, China, India, Indo-China, Japan, the Japanese Colonies, Dutch East Indies, Siam, and one British Colony make up its membership and any state associated with the Bureau may send an observer to meetings. 58

The Advisory Council meets once a year, but all questions between meetings are answered by correspondence. The Chairman and Vice Chairman are chosen by the Bureau from its own members for one year.

On the request of five or more members, of the Advisory Council or of the Health Committee of the League Health Organization an extra session of the Council may be held.

Two months before meetings the health administrations of all member states are informed of the time and place of meeting and a complete program is sent to them. The direct contact which the Bureau has with the Health Committee at

58. Sessions of the Advisory Council have been held in Singapore, New Delhi, Bandung (Java) where views are interchanged. Jackson-King Halls, ed. op. cit., p. 75.
Geneva is shown by the fact that all resolutions and minutes of the Bureau are sent to it. 59

The means of communication for distributing information employed by the Bureau are wireless, cable, and radio. Broadcasts are sent out by ten Eastern stations 60 daily; those stations without radio are sent a weekly telegraph report. 61

The method of control of epidemic diseases by the Bureau is unique. Governments are to report diseases, weekly or oftener, concerning the number of cases of disease and deaths from the disease, also of the course and departure of vessels infected. The Bureau in turn then notifies other ports so that they will be able to take every precaution, such as medical examination of passengers and crew and disinfection of vessel. Another precaution is taken in informing ships at sea concerning infected ports. 62 This does away with quarantine restrictions on sea trade and also gives added security. 63

The area now covered by this Bureau is bounded by Panama, Vladivostok, and Suez, and weekly telegraph service has been established at one hundred and eighty-six ports, covering all eastern ports of entry except certain Chinese ports in disturbed areas. 64

Several health authorities have placed their wireless stations at the disposal of the Bureau for this work. 65

59. Ibid. p. 77.
60. Saigon, Malabar, Sandakan, Hong-Kong, Shanghai, Tokio, Madras, Tananrivo, Karachi, and Nauen.
63. Nearly 200 ships were reported to this Bureau in 1932 as having infections diseases on board. Ibid. p. 238.
64. 26 in Africa, 109 in Asia, 49 in Australia and 2 in America. Of course, it is difficult to determine how many of these in Asia at present have irregular service due to disturbed conditions in the Orient.
65. Ibid. p. 238; Jackson, Hall Smith, ed. op. cit. p. 76.
An enormous amount of work has been accomplished by this Bureau since its establishment in 1925, not only in the reporting of epidemiological intelligence, but in the research field. The survey system has been much employed for the purpose of gaining information concerning circumstances favoring the beginning of epidemic diseases.

Annually since 1934 it has organized a course in malariology. Expert malarologists from other countries as well as the East, instruct young doctors of public health administrations to deal with this disease, probably the greatest problem of the East. In the spring of 1934 an International Conference on Malaria was held at Singapore at which time twenty-eight officials attended from Australia and the east and south ports of Asia; and availed themselves of laboratory study in Singapore and field work in combating malaria in Netherlands, East Indies, Indo-China and Malay.

Interest in research the last few years in Singapore has centered about the preparation for a meeting of an international Conference on Rural Hygiene. In 1932 Indian and Chinese delegates jointly proposed an Inter-Governmental Conference on Rural Hygiene for Eastern Countries. The Health Committee of the League proposed that it be held in 1937 in Bandung (Java), by invitation of the Netherlands' Government, and a commission of three men made preparations for this Conference at which all but three countries were represented.

A visit was made in 1936 by the Commission to India, Burma, Malaya, Siam, Indo-China, the Philippines, Dutch East Indies, and Ceylon to investigate conditions preparatory to study at the Conference.

66. In the research field the Bureau has carried on investigations of plague, cholera, port quarantine, and seasonal prevalence of epidemics. Dr. F. G. Foudreau, "International Health", in American Journal of Public Health, XIX (1929), p. 871.
69. Dr. Offringa, Director General of the Public Health Services of the Netherlands Indies, was made President of the Inter-Governmental Conference of Far Eastern Countries on Rural Hygiene. Monthly Summary, XVII, (1937), p. 109.
Not only health experts, but sanitary engineers, veterinaries, and educational experts attended the Conference in August 1937, to discuss the following five point program:

1. Health and Medical Services.
2. Rural reconstruction and collaboration of the population.
5. Measures for combating certain diseases in rural districts.

This International Conference was considered a great success in "awakening public opinion, showing the urgency and complexity of the problems being dealt with, and enlisting the cooperation of all those who, in various capacities, are to assist in the practical application of the recommendations." 71

The greatest factor in the success of this great Eastern undertaking, voluntary contribution of information and service, by national governments for the benefit of all has been emphasized by Dr. Boudreau:

"All the information received at Geneva, all the cables sent to Singapore, are voluntary offerings of the health administrations concerned—no health administration is obliged by any international law or agreement to go to the trouble and expense of collecting and transmitting this information to Geneva or Singapore.

This will serve to emphasize the fact that the League has provided in the field of international health a means of giving practical expression to the desire, nay, to the need, of the various governments for collaboration in the prevention of disease." 72

Malaria Commission

The study of special epidemic diseases as a part of the work of the Epidemiological Intelligence Service could not be discussed under a general history of that service because of the technical nature of these various diseases.

70. Ibid. p. 67.
and also because of the fact that the investigations of most of them has not
been considered a permanent work of the League Health Organization.

The work of the Malarial Commission, however, is an exception. It has
covered such a long period of time, and its investigations have been carried on
in so many countries that it is considered along with the Epidemiological
Intelligence Bureau and the Permanent Standards Commission as a permanent
Commission of the Health Organization. 73

Malaria, as every other disease, increased during and after the war due
to cessation of many health measures, migrations of people, general lowering of
vitality caused by under-nourishment, and lack of quinine. The increase was
so great that it affected countries that had been without the disease for fifty
years. 74

A sub-committee of the League Health Committee was appointed by that
Committee in 1923 to study the distribution and character of the disease. 75 The
Commission decided to study the following phases of malaria:

(1) Anophelism 76 without malaria. 77

(2) Anophelism in heavily infected countries. 78

(3) Production and sale of quinine.

73. Malaria was the first social disease to be considered by the Health Committee
due to its economic as well as health aspect. Essential Facts About the

74. In Italy malaria increased 20%; in Greece the deaths from the disease doubled;
in Russia the per cent of deaths far exceeded those in Italy. Monthly
Summary, XIV (1934) p. 71.

75. This sub-committee was made up of the most eminent malaria experts in the
countries concerned and later became permanent. Essential Facts About the
League of Nations (Geneva, 1938) p. 249; Annual Report of the Health Organi-
zation for 1930 (A. 7, 1931-III.3) p. 35.

76. Anophelism-Study of anopheles, a variety of mosquito which transfers the
malaria germ.

77. Countries such as Holland and Great Britain are infested with the anopheles
without malaria, thus these countries were studied to discover reasons for
the absence of malaria.

78. Study tours were sent to Albania, Persia, Greece, Siam, and Bulgaria
where anopheles and malaria both are present. Monthly Summary, XIV (1934)
p. 72.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
The work of the Commission has been carried out in three ways, namely by study tours, collective and individual, into malarial countries where peculiar conditions of the disease could be studied on the spot; collection of data through general inquiry; and international malarial courses.

One of the earliest study tours was made into the Kingdom of the Serbs, Croats and Slovenes, Greece, Roumania, Bulgaria, Russia, and Italy. The same group of experts made observations at the same time in countries which differed greatly in regard to conditions favoring malaria.

Conclusions made in 1925 by this group favored opinions of both schools of malarialogists in using methods to get rid of larvae and mosquito at the same time that intensive treatment is given patient along with the use of quinine.

Because of the fine results obtained through drainage in prevention of malaria in Palestine and Syria, a Commission was next sent into these countries. The result of this tour was to confirm in the minds of the experts the value of an efficient campaign against malaria through proper drainage.

Still another factor in the spread of malaria infection was brought out by the tour in Spain in the fall of 1925. There is in Spain a seasonal migration of laborers from rice fields. It has often been noted that there is a spread of malaria whenever groups migrate from one district to another. This principle was confirmed in the minds of the experts by this example in Spain.

In order to complete the study of malaria in Europe a study was made of malarial conditions in Corsica, at the request of the French Government, at the conclusion of which reforestation, which would be followed by regularization of rivers, and regular cultivation of arable land were suggested as measures of

---

80. Ibid., p. 19.
81. This extremely noticeable after the war when refugees were moving from one country to another.
malarial prevention. 83

Extremely interesting observations were made by Dr. Pittaluga on the delta of the Ebro River to the effect that small domestic animals attract the malaria carrying mosquito much more easily than do birds, and whitewashing walls produced a minimizing effect on the presence of the mosquito. 84

At the conclusion of these numerous study tours in malarial countries in Europe a report of findings of the Malarial Commission was made to the Health Committee, covering anti-malarial measures, methods for the study of malaria, and prevention and control. 85

It is impossible to describe in sufficient detail more than a few of the many study tours made. The tours described above were followed by others in Bulgaria, Greece, Italy, Albania, Roumania, Russia, Yugoslavia, India, Siam, and the Mississippi Basin of the United States. 86

These study tours culminated in a conference at Geneva in 1923 at which time a summary of ten years study of the malaria problem was made for the purpose of publishing the findings to be used by public health administrations. 87

It is interesting that many of these findings are the same as malarialogists have always believed in, but the many examples afforded by these studies under various conditions have helped to establish these principles on a much firmer basis. The general conclusions arrived at merit repetition:

"The combination of general and specific factors renders coordinated international research almost indispensable. The Malaria Commission representing all the various schools of malariology, is able to coordinate and pool the information and experience acquired by experts all over the world. There are certain research problems,

83. Ibid. p. 21.
86. Brief descriptions of these tours are scattered throughout the Annual Reports of the Health Organization from the years 1925-1938, but there is not sufficient space to indicate name and page of each, due to excess numbering of documents.
moreover, which cannot be studied except on international lines. Some strains of malaria, for example, are virulent in one country and mild in another. Cross experiments are necessary and a careful checking of the factors governing the disease. The comparative studies made in the different countries require a coördinating center, and the League Organization fulfills this purpose. 88

A second method of obtaining information employed by the Malaria Commission is the collection of data through general inquiry.

One example will suffice. In 1931 circular letters were sent to more than one hundred public health administrations to ascertain a number of facts concerning the prevalence of malaria, the number of cases treated annually, the amount of quinine required annually to treat cases of malaria, and the legislation governing sale and distribution of quinine.

One hundred eleven health administrations answered, ninety-three of which considered malaria a problem.

Of course this survey is somewhat inaccurate but allowing for errors it was estimated that nearly 18,000,000 89 cases were treated annually; thirty-seven countries showed an increase in the disease; and twenty-eight showed a decrease. 90

Important conclusions arrived at from this questionnaire are: that an increase in the amount of quinine used produces a decrease in cases of malaria, and world consumption of quinine is far below the minimum required for treating all cases. 91

One of the greatest handicaps of malarial countries is the lack of medical staff to carry on malarial campaigns.

Arrangements were made in 1926 by the Health Organization to fill this need

88. Monthly Summary, XIV (1934), p. 73.
89. Of course the number of cases of malaria far exceeds the number treated.
90. Increase of cases of malaria probably means that there was an extension in health services and the increased number of cases reported indicate increased number of treated cases.
for national health administrations by establishing malarial courses in
institutions capable of suitably carrying on such a course. The courses consisted
of laboratory work followed by practical studies carried out in malarial regions
by expert guidance. 92

Several of these courses were held at Hamburg, London, Rome, and Singapore;
and great interest was shown even in the Orient where health administrations are
often prone to let things take their course. 93

These courses are especially fine for young doctors who wish to become
malarologists in their own health administrations, on account of the opportunity
afforded to study the disease in several countries. The League has granted over
one hundred scholarships to doctors attending these courses and seventy-five
have been granted by the International Health Bureau of the Rockefeller Foundation
and by health administrations. 94

In 1934 a malarial course took place in Rome in the new Malarial Institute.
One has also been held in Singapore as malaria in non-European countries presents
entirely different features and problems for the malarologist. 95

A study of malaria is incomplete without more than mention of quinine. Much
study has been made by the Commission concerning the use of quinine. It has
been estimated that in eighty-eight countries less than one half the amount of
quinine required is actually used.

Alkaloid mixtures of cinchona 96 as a substitute for quinine have been
extensively studied through researches carried on in hospitals in Algeria,
Bulgaria, China, France, Italy, Malaya, Morocco, Rome, and Spain. The use of
totacuina, 97 a total alkaloid mixture, has been fairly successful, although

94. Monthly Summary, XIV (1934) p. 72.
95. Ibid. p. 73.
96. Cinchona is the name of the tree from the bark of which quinine is extracted.
quinine and atebrin are still considered better and there is no drug which will prevent a relapse. 98

The work of the Malaria Commission is so extensive that only a separate volume can do it justice and of so much human interest, because of its connection with the social and economic life of a people, that a study of it seems at times more romance than science.

Opium Commission

It is estimated that nearly forty tons of dangerous drugs are necessary annually for medical and scientific purposes throughout the world.

Distribution is made legitimately by about sixty licensed factories and many times that number of wholesalers and pharmacies. This amount of drugs represents a dozen kinds from which are derived several hundred pharmaceutical preparations. 99

International Drug Conventions have acted as barriers to the illicit sale either of drugs needed for medicine and science or dangerous drugs not needed for these purposes. However, in spite of these Conventions, much illicit traffic has always been carried on.

In 1920 the League through three of its bodies the Opium Advisory Committee, the Health Committee, and the Secretariat undertook to work out a system by which each country might know the requirements of every other country so that exporting countries might know just how much might be legitimately sent by them into each country. 100

Previous to 1920 the Hague Convention of 1912 was entrusted with this task, but only six countries had ratified the Convention and as the legislation

98. Plasmoquine, atebrin, and totaquina are recently developed synthetic drugs. Monthly Summary, XV (1915) p. 2.
100. Ibid. p. 2.
both national and international on this question was negligible, no country knew its requirements nor that of any other country. Besides if there had been legislation there was no administrative power to carry it out and nothing of value had been done along this line.\textsuperscript{101}

The League saw at the outset that there must be uniform national laws in regard to the control of opium if the countries were to be governed by one international law.

Because of the necessity for extremely close coordination between the departments of national governments and practically universal application of strict measures to ensure control of dangerous drugs, one can see how difficult the problem was.\textsuperscript{102}

At first the Secretariat was charged with the collection of all possible data on the subject and to appoint an Advisory Commission on the Traffic in Opium and Dangerous Drugs. This Commission has worked on the problem from its beginning in 1920 up to the present time, and is made up of representatives from twenty-five countries all over the world.

The League outlined at the first the plan which the Commission was to follow and has quite rigidly adhered to it.

Progress of course was slow as it depended on cooperation and in many cases public opinion, but as some particular country worked out an efficient plan for coping with the problem it was adopted by the Commission.

Two things have been preeminently responsible for the success of the opium control, first, the use of the system of "import certificates" and "export authorization,"\textsuperscript{103} and the setting up of a Permanent Central Opium Board whose task it is to watch the international trade in opium, using the statistics

102. Ibid. p. 3.
103. This system regulates import and export of drugs in each country. They act as a check on one another and have eliminated the discrepancy between import and export. Ibid. p. 5.
of governments provided in the Convention.

This control was established by the Geneva Conference of 1925 and has been added to by the limitation of manufacture adopted in the Limitation Convention of 1931.\textsuperscript{104}

The estimate system carried on by a Supervisory Board is universal in application and by 1933 the amount of fifteen dangerous drugs necessary for medical and scientific purposes was sent to all the countries of the world, and by 1934 it was of much encouragement to know that excesses of export and import have not been great.

The difficulty faced in 1920 by the League in this regard is shown by the following example:

"In 1920 one country alone—Japan—had available through manufacture or import the colossal figure of about forty tons of morphine, heroine, and cocaine—an amount which is almost equal to the estimated needs of the whole world for the year 1934, not only for these three drugs, but for twelve others in addition."

It is now possible to say that after 1930 "the appalling gap between the output of the licensed factories and legitimate medical consumption has been narrowed down to a small fraction."

So far our discussion has only mentioned the Health Organization of the League, but it is necessary to survey the opium situation as a whole under League control before one can understand the work of the Health Committee in regard to opium control.

The Geneva Opium Convention of 1925 provides the procedure which it is necessary for the Health Committee to take in cooperating with the League Opium Board.

\textit{Article 8 of the Convention states:}\textsuperscript{105}

\textsuperscript{104. In 1934 there had been 58 ratifications to the Hague Convention; 52 to the Geneva Convention; and 49 to the Limitations Convention. \textit{V.S. XIV} (1934), p. 5.}

\textsuperscript{105. Article 8; Application of the 1925 Opium Convention, in \textit{Monthly Summary}, \textit{XI} (1931), p. 289.}
"When the Health Committee of the League of Nations, after having submitted the question for advice and report to the Permanent Committee of the Office international d'Hygiène publique in Paris, finding that any preparation containing any of the narcotic drugs referred to in the present chapter cannot give rise to the drug habit on account of the medicaments with which the said drugs are compounded and which in practice preclude the recovery of the said drugs, the Health Committee shall communicate this finding to the Council of the League of Nations. The Council will communicate the finding to the Contracting Parties, and thereupon the provisions of the present Convention will not be applicable to the preparation concerned."

Article 10 of the same Convention outlines the same procedure except that it applies to drugs that do give rise to the drug habit.

From these articles one can see that the work of the Health Committee in regard to Opium control is merely advisory, carried on by experts respecting the content of drugs, their effect, and at times a technical interpretation of certain articles in the Conventions of 1925 and 1931.

The Health Committee has since 1925 given its opinion through a sub Opium Committee in connection with eucodol and diocodide, dilaudide, benzoyl-morphine and the morphine esters generally, percaine, heroin pills under the name of anti-opium pills, and a standard method for titrating morphine in raw opium.


CHAPTER V.

SPECIAL RESEARCH PROBLEMS

Because of the extremely technical nature of the investigations made by the Health Organization concerning special diseases, it will be necessary to sketch the procedure of the various commissions and the general results obtained. Much of this work has not been considered as permanent work of the organization, but as the need arose, or as requests were made by various countries, special studies have been carried on by many expert commissions.

I should like to call attention to the fact that this work is often unfinished, and therefore it is impossible to render a satisfactory and complete description of it, as the Health Organization rarely drops a problem until at least some important conclusions are arrived at. If success in one direction is not attained by a certain method of procedure, it adopts others, that may more efficiently lead to attainment of the desired ends. Each research is not as it may appear, an isolated activity, but a distinct step along the road of progress toward a well defined and ultimate goal.

Sleeping Sickness

"In every single territory under British administration from Gambia in the northwest to Zululand in the southeast, the tsetse-fly has been encountered." ¹

It is this fly which carries the germ which causes the disease known as sleeping sickness or encephalitis. This disease attacks both animals, especially cattle, and people although the organisms causing the diseases are slightly different.

The number of people who die from this disease is not nearly so great as from many other diseases but the consequences to the native inhabitants do not stop at the death of many of the natives. Whole sections of Afrīca have become

de-populated because their herds of cattle upon which they depend for their living have been killed off by the inroads of this disease. For this reason it is both a veterinary and medical problem.  

For many years African Governments and health administrations have been making a more or less detailed study of the methods of prevention of the disease. In 1924 an Expert Commission on Sleeping Sickness was appointed by the League Health Organization. At a meeting held in London that year it decided that a mission should be sent to some country where sleeping sickness is prevalent, to make an extended study of the disease.

At a conference held in London attended by representatives of the Colonial Ministries from Belgium, France, Great Britain, Italy, Portugal, and Spain decisions were made to send the Expert Commission to Entebbe, Uganda, Africa because of its favorable situation for study of the disease and the offer of the Government of Uganda of the use of its laboratory.

This Committee met in Entebbe in February 1925 and carried on extensive research for one year under great difficulties. At the end of this time they asked for a six months' extension of time and an increase of contributions as the work had not been completed. These requests were granted and they remained another six months.

As an outcome of the survey and research of this Commission in Africa, a very extensive report was made and later recommended by the Second International Sleeping Sickness Conference in Paris, 1928, to be followed by governments where

---

2. Ibid. p. 15.
3. The Commission consisted of Dr. Duke, Head of the Entebbe Laboratory, Chairman of the Commission; Dr. Lavler, of the Parasitical Laboratory of the University of Paris; Dr. Van Hoof, Head of the Leopoldville Laboratory (Congo); Dr. Prates, Head of the Lorenzo-Marques Lab. (Mozambique) and Professor Kleins of the Robert Koch Institute, Berlin.
close supervision could be made.

The work of the Committee was warmly welcomed by many of the African Governments; many sharing in the expense as evidenced by the farewell message sent to the Commission by Sir William Gowers, Governor of the Uganda Protectorate:

"The work of the Commission will undoubtedly mark a new era of international co-operation among all the Powers possessing territory in Africa, and I trust it will lead to standards of methods for control of sleeping sickness... The results of the Commission's labors will be of the utmost value to African administrations as well as to science."\(^6\)

The members of the Conference in Paris, 1928 felt that it was unnecessary to form another International Commission, but decided the work could be carried out by the national health administrations in Africa with the help of the Health Organization which might act as contacting agent for these administrations by using the following methods:

1. Reports by these national administrations in Africa who are working on trypanosomiasis\(^7\) to a small Expert Commission of the Health Organization once a year, giving an account of work done. The Committee would make a summary and circulate it to the health administrations and centres interested.

2. Encouragement of cooperation between different institutes. This Commission might make recommendations to the Health Organization once a year for an individual award enabling a member of the staff to visit special work on this disease in some other country.

3. Individual "interchanges" enabling research workers in African laboratories to study sleeping sickness investigations in other laboratories.\(^8\)

These recommendations were approved by the Health Committee at their next session and their services were placed at the disposal of the various health administrations in Africa.\(^9\)

---

6. Ibid. p. 46.
7. Trypanosomiasis, a fever caused by the presence of parasites in the blood which eat up the red corpuscles introduced by the bite of an insect; in this case the fever is sleeping sickness.
Leprosy

Definite work in connection with leprosy was not undertaken by the Health Organization until 1928. In that year it decided to give a place on the program to a study of this disease.

A commission was appointed to plan for an international investigation of this disease in consultation with leprosy experts.10

The Commission met in Paris of the same year and came to the conclusion that much more information was necessary before an international study could be arranged and that an expert should be sent to a suitable leper institution such as one in Brazil.11

The next year a technical secretary was appointed and sent to Latin America to make the suggested investigations.12

Before leaving for America, Dr. Burnet, the Technical Secretary of the Commission, discussed the problem with experts in England and Sweden. Upon his return from Latin America where he studied the question in ten countries, he made a personal investigation in India, Japan, Netherlands, East Indies, the Philippines, and Honolulu.13

Dr. Burnet's report to the Commission in 1930 contained "a digest of the information collected on the prevalence, treatment, and prevention of leprosy in the countries of Europe, Latin America, and Asia."14

He found less standardization of method in the treatment and legislation

---

12. Ibid. p. 45.
of this disease in countries where it is a problem than exists for any other infectious disease.

In view of this condition he stated:

"...the Commission will have to act not only as a centre for the exchange of information and workers, but also as a centre for international action.

It may be said that leprologists throughout the world expect the Commission, backed by the prestige of the League of Nations, to give a decided impetus to the prophylaxis of leprosy."

This report made a number of suggestions by which this impetus to the treatment of leprosy might be given:

2. Promotion of agreement of leprologists on the program of treatment.
4. Extension of scholarships at centers of research.
5. Study tours.
6. Relations with national centers and scientific societies.
7. Collection of necessary data concerning leprosy for publication in an International Year Book.

A second Conference was held in Bangkok in 1930. While there the Commission worked in close contact with the Congress of the Far Eastern Tropical Medical Association. The next year it cooperated at a conference held in Manila at the Leonard Wood Memorial Leprosy Institute.

All the investigations and conferences seemed to lead to the necessity of standardization of treatment and legislation, segregation of patients, early treatment, special measures for caring for recovered patients, a centre for research study in each country, study of leprosy in medical schools, suitable

15. Ibid. p. 42.
16. Ibid. p. 42.
17. Monthly Summary, X (1930) p. 263.
diet and sanitary conditions, and properly applied chaulmoogra oil treatment.\textsuperscript{19}

At the conclusion of these Conferences, leprologists were of the opinion that progress against leprosy must from then on be the result of new scientific discoveries. It was therefore decided that the Commission should work in connection with the several other Institutes of Leprology and concentrate on some important problem. It was for this very purpose that the Centre was established in Rio de Janeiro.

The Centre started work in 1934 and has given a great impetus to research in this field. It is a very complete institution, autonomous but carried on under the auspices of the Health Committee of the League, one member of which together with K. Quinl, who aids in financing the institution along with the Brazilian Government, form the Governing Body of the Centre.\textsuperscript{20}

**Cancer**

When the Cancer Commission of the League Health Organization took up its work in 1923 the first outstanding fact concerning cancer which appealed to it was the great difference between rates of cancer mortality in different countries, and so it was decided to make a study of cancer in the countries showing the greatest differences, namely; England, Wales, Italy, Holland and later Switzerland.\textsuperscript{21}

The mortality statistics of certain forms of cancer which were commonest and those which could be detected earliest were studied first.

Investigation followed two lines: one based on mortality figures for Italy, Holland, England, and Wales, and that based on enquiries into the history of


living cancer patients. Study of 45,000 cases in Italy was made by use of
death certification. 22

Clinical studies were made in several ways, by study of cases which had
been operated on previously and questionnaires given by doctors in general
practice, and control cases of people who did not have cancer. The results of
this study were much the same for each country excepting that for certain types
of cancer the mortality rate was highest in England and Wales, the lowest in
Italy. 23

The relation between rate of death and age exploded the popular theory
that age 45-55 is the highest in point of cancer deaths. 24

The most interesting information deduced from this study was that published
in a monograph by Professors Pittard and Nicefaro, members of the Sub-Committee
of Statisticians which took into consideration the racial characteristics in
different parts of Europe in comparing the mortality statistics for cancer.
The decisions made in Italy, England and Wales, and the Netherlands by the
Commission seemed to be explained by inherent racial differences. This was
also borne up by evidence from the study of immigrants from different countries
into the United States. However, the Commission will not consider these
conclusions fixed because the investigation has not been sufficiently extensive. 25

It is very difficult to summarize the results obtained by this
Commission in certain research problems because they are based on certain
medical knowledge too technical to admit of fair treatment in this account.

Nevertheless, there is one generalization of interest from the point of

view of the lay reader. Almost the entire study was carried on through the

---

22. Sir George Buchanan, Report on the Work of the Cancer Commission of League
23. Ibid. p. 5.
24. Ibid. p. 7.
25. Ibid. p. 10.
combined effort of clinicians, statisticians, surgeons and health authorities, the valuable results of which is shown in the following statement:

".....the Commission considers that one of the most fruitful results of its work has been to obtain a demonstration of the utility of this national or local expert cooperation for purposes of research into or reduction of the mortality from cancer. In its opinion, the organization of group study of this kind might with advantage be undertaken or extended in many countries and applied to all varieties and sites of cancer." 26

The statistical work of the Sub-Commission of Statistics has carried over into the work of the International Labour Office. These findings were of interest to that Office in connection with a study of occupational cancer. Special studies of occupational cancer were made in 1929, of skin cancer in England, or lung cancer in Austria and Czechoslovakia, as well as certain types of cancer occurring in men of the same occupation in various countries. 27

The extensive use of radium treatment for cancer led the Commission in 1926 to make an investigation into the most practical methods of using radium, by obtaining the opinions of experts. This investigation was made in three institutions, the Fondation Curie, Paris, the Universität Frauenklinik of Munich, and the Radiumhemmet of Stockholm by three experts one from each institution, who collected statistics from radium institutions in various countries which had had long experience in this line. 28

In 1929 these three experts reported on the methods used in their clinics and the various methods found impractical, and explained the way in which radium should be used and distributed. 29

As a result of this report, standard requirements were laid down by the

---

26. Ibid. p. 10.
28. Ibid. p. 36.
29. Ibid. p. 31.
Health Committee, to be carried out by countries that wished to obtain successful results in the use of radium. Fourteen countries responded by arranging for investigations of this question.30

Sir George Buchanan, British Ministry of Health, represented the Cancer Commission at the International Radiological Congress meeting in Zurich, in 1934. A conference of four experts arranged by the League Health Organization presented the plan that was adopted by the Cancer Commission in 1928. This plan provided for the study of radium treatment of certain types of cancer by standardizing a method of record for each individual case. It was proposed to make a collection of annual statistics from these records from 1936 on for publication in order to make available definite information for radio-therapists and Health Administrations, under proper and standardized measurement, and later to evaluate the different methods used.31

**Smallpox**

A special committee meeting for the first time at the Hague in 1926, was established by the Health Organization for the study of vaccination and epidemiology of smallpox. Three lines of work were followed by this commission:

1. Establishment of contact through the Health Section with all health administrations to ascertain how many cases of encephalitis had followed vaccination for smallpox.

2. Sending out of a questionnaire to government-owned or controlled institutions concerning the methods of examination, distribution, and use of vaccine lymph.

3. Undertaking of a research of laboratory methods used in establishing strength of vaccine lymph.34

---

33. Encephalitis - sleeping sickness.
A great many cases of post-vaccinal sleeping sickness were reported from Great Britain and the Netherlands which instigated an investigation of this situation in various countries which brought out the facts, that this is a different disease than the sleeping sickness ordinarily found; that it is not due to any particular accident in the preparation of the vaccine, but to some unknown factor as yet undiscernible; and that there was no reason for discontinuance of the use of vaccine for smallpox.

Results of the study on the potency of vaccine for smallpox were not collected until the following year. At this time a report of the findings of these laboratories was made, the most important point of which was the decision to investigate the possibility of adopting a common standard. This committee did not recommend any one particular method of vaccination, but believed that whatever method was used in any one country should be defined by expert authority and all results carefully recorded.

**Infant Mortality**

A somewhat extensive program has been carried on by the Health Organization since 1926 in regard to the question of infant mortality. In that year the Netherlands' Government suggested to the Sixth Assembly that this problem be investigated. The same year the suggestion was acted upon by a committee of experts and investigation was carried out in several countries in Europe, the main purpose of which was to gain information as to the exact cause of infant deaths. This was gained through doctors, hospitals, public health officials, public health nurses, and other sources; and later issued to various organizations.

---

36. Ibid. p. 39.
whose object is the prevention of infant mortality, such as the joint Commission on Public Health Administration and Health Insurance of the Health Organization.\(^{39}\)

In 1927 upon request of the Uruguayan\(^{40}\) Government this research was carried into Latin America where the member of the Health Section who had supervised the work in Europe helped to organize a similar survey in several countries of South America, using the methods and plans for study adopted in the European investigation.\(^{41}\)

Results of the survey in South America were reported at a Conference in Lima in 1930 attended by a representative from the Health Organization. This meeting was followed by a tour taken by the Organization’s representative and one of the European experts, to Santiago, Buenos Aires, Montevideo, Rio de Janeiro, and Sao Paulo to discuss the findings of the Conference and a general application of them.

A similar enquiry in 1928 was made in Austria, France, Germany, Great Britain, Italy, Netherlands, and Norway and national reports were heard from these countries at a Conference in Rome in 1929, covering the deaths of 7,503 infants. The reports revealed the reasons for deaths and measures of prevention.

The effect produced upon the people or the regions where the investigations were conducted was admirable and this effort was followed by others undertaken by Czechoslovakia, Roumania, Spain, and Yugoslavia.\(^{43}\)

---

40. South America is intensely interested in this subject as infant mortality is as high as 461 per thousand in parts of Bolivia and 144 per 1,000 in Venezuela. Annual Report of the Health Organization for 1927. A. 9. (C.H. 682) p. 31.
41. Ibid. p. 32.
Leishmaniosis

In 1925 attention was drawn to the prevalence of this skin disease in Mediterranean countries and some time later the Office International d'Hygiène publique and the Health Committee coordinated a study of it which later developed into a report concerning the diagnosis and treatment of the disease which has been very helpful to physicians. This report has been published as several monographs in the Quarterly Bulletin of the Health Organization.

An epidemiological study of the disease in Spain reported later indicated that many factors in the problem of this disease must be known before success can be attained in its treatment. 45

Statistical study has also been carried out in France, Italy, Portugal, and North Africa and a study of topography in order to ascertain the location of the parasite in relation to land and animals carrying it.

Rabies

The International Rabies Conference meeting in Paris in 1927 offered suggestions for the treatment of rabies. Through an investigation into thirty-one thousand cases of the disease in seventeen countries 46 and the treatment used the Conference was able to show that no one preventive treatment is better than the one now commonly used. 47

An important conclusion as to reasons for fatalities from this disease in non-European countries was arrived at from a study of 69,707 cases of rabies treated by Pasteur Institutes and collected in a report in 1929.

44. Monthly Summary, XIV, (1934) p. 192.
46. Lt. Col. S. J. Kendrick, Director of the Laboratory of the Royal College of Physicians in Edinburgh drew up a report of the findings of these countries in 1930. Annual Report of Health Organization for 1930, p. 57.
Non-Europeans are at a much greater risk from rabies because the bite of the animal affected often penetrates more deeply; the animal is often more rabid; and the victim does not commence treatment soon enough. 48

Tuberculosis

Very incomplete statistics for the study of tuberculosis were available before 1925. This, of course, was very important for purposes of comparison. Professor Rosenfeld at this time made a very comprehensive study of tuberculosis statistics with a view toward making them accurate and thus of value in making international comparisons. 49 This report was made use of by a Tuberculosis Commission of the Health Organization in carrying out an investigation of tuberculosis taking as a basis the increasing, stationary, or diminishing death rate from this disease in Denmark, Sweden, and Norway. 50 A final report was given in 1929 drafted from national reports by a tuberculosis expert.

The study considered essential factors in the life of persons afflicted such as food, milk, industrial work of patients, anti-tuberculosis measures adopted, housing, alcoholism, and conditions of labor.

In 1928 three Commissions made up of bacteriologists, clinicians, and veterinary surgeons met at the Pasteur Institute to consider results of vaccination with BCG 51 in laboratory animals, cattle, and man. 52 The results of the investigations of each of these Commissions were collected by the Health Committee were submitted to a second Conference of experts and in 1927

50. These countries were chosen because the statistics are fairly accurate and cover a long period of time. Ibid. p. 30.
51. BCG are initials standing for the names Bacillus Calmette-Guerin, a vaccine adopted by Calmette and Guerin.
valuable reports on Tuberculin which was later standardized by the Permanent Standards Commission\textsuperscript{53} were made on tuberculosis mortality in Japan,\textsuperscript{54} and the relation between tuberculosis mortality and work in overcrowded factories.

Probably the most comprehensive study of this disease was made in Scandinavia by experts and very important factors brought to light by them in a report made in 1929.\textsuperscript{55}

Besides the research studies of special diseases described at some length in this chapter, the Organization has made partial studies of alcoholism, trachoma and its resulting blindness, typhus, dangers resulting from use of X-rays, deafness, health and welfare of the merchant marine, pellagra, and various industrial diseases.

**Nutrition**

The Health Organization has been studying the subject of Nutrition since 1925. In that year a delegate from Jugoslavia requested the Organization to study control of manufacture and distribution of food supplies from an international point of view.\textsuperscript{56}

In 1926 Professor Saiki, Director of the Imperial Institute of Nutrition of Tokyo, published a pamphlet or collection of data called "Progress of the Science of Nutrition in Japan", under the auspices of the Health Organization.\textsuperscript{57} Nutrition lectures were given through the Organization by Professor Saiki in 1927 concerning nutrition in the United States, Argentina, Brazil, and Chile.\textsuperscript{58}

\textsuperscript{55} Annual Report of the Health Organization for 1929. p. 43.
\textsuperscript{58} \textit{Ibid.} p. 3.
The next year the French Government asked that the subject of nutrition be placed on the agenda of the League Health Organization and in consequence the Medical Director prepared a document for the next session. The first interchange in connection with the study of nutrition was one organized by the Health Section to investigate the milk supply of the United States, and the information accumulated by this group was added to by the observations made by Professor Parisot in France.

However, these were only preliminary studies and it was not until 1934 that intensive work with certain definite aims was started. This was the direct result of a request from Chile in 1932 to the effect that the Organization collaborate in a study of the popular nutrition in that country.

Dietary standards and a scale of family co-efficients for international use in order that comparisons of inquiry into state of nutrition might be made were drawn up at a Rome Conference in 1932.

A joint commission of experts met in Berlin in 1932 to study methods for detecting malnutrition, the reports of which defined plans used in several European countries and the United States through social enquiry and clinical examination in order to compare the state of nutrition in families partially unemployed and those who had full time employment. A statistical study made by the Health Organization showed the fact that so far the depression had nowhere increased the general mortality rate.
Following the requests that had previously been made by Chile, France, and Jugoslavia, that the subject of nutrition be placed on the agenda of the League Health Organization, twelve governments repeated the request in 1935. In consequence an Expert Commission on Nutrition was appointed by the Health Committee under the chairmanship of Professor Mellanby, Professor of Physiology and Biochemistry, at Sheffield University and Secretary-General of the Medical Research Council, London.

This Commission drew up a plan for the study of nutrition around which the complete investigation has centered. The plan was drawn up according to the scientific principles governing dietaries of certain groups such as infants and adolescents. Two sub-Commissions made studies of food from the standpoint of energy produced, that is energy-producing foods and non-energy-producing foods such as those containing minerals, salts, and vitamins. 67

A Mixed Committee was appointed by the Council to investigate the problem in relation to economics and health by surveying every phase of it social, medical, economical, agricultural, and financial. 68

At their first session in Geneva in 1936 a very thorough discussion of the whole question from every angle was given, using the London Report as a basis. 69 Lord Astor, president, made the opening speech, quoting from many authorities and experts concerning the value of the study of nutrition by national governments. An excellent statement from the standpoint of health from one of the members of the committee was quoted by Lord Astor: 70

68. The International Labor Organization and the International Institute of Agriculture at Rome are represented on the Mixed Commission. Some members were named by the Health and Economic Organizations of the League. Monthly Summary, XVI (1936), p. 47.
69. This also formed a basis for a chapter, "Nutrition and Public Health", in a report by the Health to the Assembly. Monthly Summary, XVI (1936) p. 298.
70. Dr. McCollum, American member of the Committee.
"The researches in the field of nutrition have a greater value in preventive medicine in relation to raising the vitality of mankind, with all that this implies, than they have in the prevention of the occurrence of the deficiency diseases. This fact has never been sufficiently appreciated.

"It is the gradual operation of more or less constant, but unperceived causes rather than of great exposures of an accidental nature which in most cases is responsible for undermining the health of the individual. Of these causes it now seems certain that the consumption of an improperly constituted diet is one of the most important. It is one of the causes of inferiority in physical development, instability of the nervous system, lack of recuperative power and endurance, and a consequent cumulative fatigue and lack of resistance to infections such as tuberculosis and other types where specific immunity is not easily developed by the body. In addition to this, the rate of development of senile characteristics, and consequently the length of the span of life, are greatly influenced by the type of diet to which one adheres."71

The London Report entitled "The Physiological Basis of Nutrition," for the first time gave national administrations a series of principles for their guidance, recommended by some of the most eminent specialists of the world. It was communicated to various learned societies and social institutes in many countries in order to obtain through them the advice of specialists interested in nutrition, and to health administrations of all countries who were informed of its importance in the scheme planned by the League to improve nutrition.

Further study of certain new problems arising from the application of the principles of the report has been carried on by the Kellanby Commission72 through information gathered from bulletins of various institutions and members of public health administrations and the Commission has been confirmed in its belief that the

"main idea underlying the report, the expression of the new science of nutrition in regard to protective foods and supplementary energy producing foods, special requirements during maternity and growth, and the adoption, not of the indispensable minimum, but of the optimum diet as the standard now held to be necessary has met general approval."73

---

71. Dr. McCollum, quoted by Lord Astor in Monthly Summary, XVI (1936) p. 47.
72. This was the Technical Commission which was responsible for the London Report, an outline of which can be found at the end of "Report on the Physiological Basis of Nutrition," drawn up by the Technical Commission on Nutrition, (London, 1935) p. 13–27.
73. Technical Commission on Nutrition, op. cit., p. 11
The work from this point on is a matter of collaboration between national governments and the League. In December, 1936 experts met to agree upon technical methods to be used to find the state of nutrition for various ages. Three methods were chosen:

1. Practical inquiry over a large group of children by clinical examination of teeth, skin, muscles, and signs of fatigue to be recorded with other particulars of physical appearance.

2. More thorough survey of smaller groups "to apply tests for latent non-apparent vitamin deficiency," which would include a very careful clinical internal examination of each child and its environment.

3. Complete medical and psychiatric examination with purpose of determining what effect deficient diet has on the functions of the body.

The record of the child's progress in school was a required element of all three examinations.

Food requirements for the first year of life were also discussed and a meeting for investigation of this very important problem was called in December 1936, at which time experts defined these requirements in terms of calories, protein, vitamins, and iron, and duration of periods for each kind of food in the child's first year.

The work done by this Commission has covered problems in the science of nutrition many of which have never been defined, and in the inquiries of diet and nutrition of many peoples. Reports have been made on,

"the place of nutrition in public health; recent trends in food habits; agriculture and nutrition; food prices and consumption; factors influencing food prices; and the relation of income to nutrition."

Much of the work on this subject has been done by the Economic Section of The International Labor Organization after working with the Health

---

75. Ibid. p. 377.
76. Ibid. p. 378.
Organization because of the economic and financial aspects of the problem. Much as we admit of a necessity of their consideration in treating the whole topic of nutrition, we are dealing in this work mainly with the medical side.

It is not out of place, I believe, to give a quotation which summarizes the great importance of the economic aspect of nutrition and its relation to health:

"Production, distribution, and consumption have hitherto been considered mainly as economic problems without sufficient regard to their effect on public health, but the effect of the economic depression has directed attention to the gap—which almost everywhere exists between dietary needs as determined by physiology and the means of satisfying them under existing conditions. The general problem of nutrition as it presents itself to-day is that of harmonizing economic and public health development."  

In the last few years nutrition has been an important question in the Far East and has been discussed in the Eastern Bureau of the Health Organization at Singapore. Lack of proper diet has always been an outstanding cause of great waves of disease in the Orient and it has now caught the spirit of the crusade for production, correct distribution and consumption of better food by the masses.

The question is by no means settled and is of such magnitude that only future generations can appraise the value of the work done by pioneers in this field.

78. ".....the success of a policy to improve nutrition depends upon agriculture, transport, wages, tariff barriers, import quotas, exchange restrictions, national security, and armament policy just as it depends upon the efforts of public health specialists." P. C. Boudreau, "International Cooperation in Hygiene," American Journal of Public Health, XXXVII (1937) p. 1104.


The discussion of the economic aspect of the question centered around the paradox of a glutted market for the farmer and the insufficient nourishment in the protective foodstuffs (meat, milk, fruit, green vegetables) for a great proportion of man. Mr. Bruce, Australian delegate expressed the remedy in a terse phrase, which sums up the coordination of efforts to remedy both evils by "marrying agriculture to health."
Rural Hygiene and Housing

Of no less significance than the study of nutrition is that of rural hygiene and housing. This question was introduced by the delegate from the Spanish Government in 1930.

A preparatory committee consisting of a sub-committee appointed by the Health Committee of the League Health Organization and a representative of the International Agricultural Institute, Rome, selected three groups of experts to discuss questions of sanitation, medical care and organization of health services in rural districts, at a Conference to be held in Geneva in 1931.80

Separate conferences of the three groups took place at different times for consideration of the various topics relevant to the question.

The group dealing with sanitation considered water supply; sewage and refuse disposal; housing not only private, but public such as schools, hospital, villages, and the economic aspects of them.81

Experts in medical practice, administration hygiene, and social insurance considered the question of medical care in rural districts from the standpoint of the distribution and number of doctors, nurses, other medical personnel such as pharmacists and medical institution, and the methods to be followed in supplying the demand for them.82

Organization of health services in rural districts was considered from the angle of state and local administrations. Both the old and modern forms, part time health officers with restricted powers and full time officials with full responsibility were investigated, as were also health problems in the particular area; infant and maternal welfare; campaigns against tuberculosis and social diseases; sanitation and popular education in hygiene; and first aid

81. Ibid., p. 13.
82. Ibid., p. 13.
and transportation of accident and emergency cases. 63

A partial investigation of these questions revealed the necessity for the presence of sanitary engineers, agriculturalists, and experts in economy on the Committee for study of rural hygiene.64

At the first Conference in Geneva in July, 1931, delegates from the International Labour Organization, German Social Insurance Companies, and observers from non-European countries were present, besides delegates from the Health Committee of the League Health Organization.

A truly international spirit was manifested in this Conference as expressed by Professor Miyaji-m of Japan:

"I am sure," he said, "that the Conference marks a great step forward in the organization of medical assistance in rural districts. For the first time medical officers, engineers, agricultural experts, and administrators, have come together to discuss the question of organization of rural life and the welfare of rural population."65

In April, 1932 the work was carried a step farther when a sectional meeting was held under the direction of Institutes and Schools of Public Health from certain countries. A consideration was given by this group to certain problems of the farmhouse and farmyard such as milk, typhoid in country districts, supply and purification of drinking water, and treatment of refuse in view of destruction of flies.66 As the eradication of flies is a very great problem from a health standpoint in many countries of Europe, a group of entomologists was selected who later held a conference, at which time great stress was placed on the necessity for educating the population in regard to the danger attending the presence of house flies, and an extensive program was planned to formulate practical methods for the purpose of eradicating flies from rural

63. Ibid. p. 13.
homes of this well known carrier of typhoid. 87

The Health Committee decided to carry on an investigation in housing by letting up national committees in several countries to make technical investigations leading up to the forming of general principles of modern hygiene in town and rural housing. Commissions were formed in France, the United Kingdom, Netherlands, Poland, Spain, United States, Sweden, and the U. S. S. R. 88 These countries will attempt to work out these principles through a joint investigation of health and industrial experts. 89

Plans were made to give publicity to housing at the Paris Exposition in 1937, and preliminary to this in 1936 the Secretary-General sent a plan for an International Housing Exhibition to national governments asking for ways by which their administrations might be represented in this plan. 90

The program of this Committee is extensive, scientific, and technical, but its object is to "arrive at a definition for various climates, customs, and regions of standards of what might be called healthy urban and rural housing and healthy town and country areas. " 91

In 1932 delegates of British India and China asked the Assembly of the League for a conference similar to the European one on Rural Hygiene to be held in the Far East, and consequently commissions were set up by the Health Committee and a tour was made into India, Burma, Siam, Malaya, French Indo-China, the Philippines, Netherlands Indies, and Ceylon. The work in this

87. The fly problem in the Far East has different aspects than that in Europe and will be one of the problems discussed at the Conference of Rural Hygiene to be held in Eastern Countries in 1937. Monthly Summary, XV (1935), p. 332.
89. I use the future tense here as these plans are being carried out at present.
90. Monthly Summary, XVI (1936) p. 34.
A request from thirteen Latin American countries was also received concerning the summoning of a rural hygiene conference there. In response to an invitation from the Mexican Government to hold this Conference at Mexico City, the International Labour Office, the United States and Canada, and eleven South and Central American countries signified their intention to attend. The Mexican delegate expressed the interest of his country in this work and also in the international cooperation fostered by the health work of the League in the following terms:

"Whilst having a sincere and complete confidence in the political ideals of the League, we are fully aware of the complexity of the problems, and it is for that reason precisely that we feel it is a duty and a necessity to strengthen international collaboration in a technical field where passions are not aroused; and not only for the results obtained by such cooperation itself, but also as a promise for a better future - as a spark from which a flame will ultimately arise."

Much of this work on Rural Hygiene and Housing is at present in the process of making, but definite conclusions will probably be arrived at in the General European Conference to be held in 1939 which will be a continuation of the Rural Hygiene Conference of 1931. The plan of the League is that the Economic and Financial Organization shall act as a clearing house for all the findings of the different League bodies on this subject and then deal with rural health in the light of its relation to economic and social problems.

All of the information collected by various Commissions will be reviewed and combined with that coming from national governments to form the basis for the discussions and final conclusions of this Conference to be held in 1939, and the practical advantages gained from seven years study of this far reaching problem in providing better living conditions for rural life will be evaluated.

Conclusion

In the preceding chapters the purpose has been to acquaint the reader with the partial and outstanding achievements of a part of the League's machinery for consultation and cooperation.

The Health Organization whose constitution although provided few in the Covenant, came into being in answer to a great emergency, has grown from this Emergency Commission with a limited sphere of activity to a great organization whose field is bounded only by the seven seas.

The Assembly has indicated the important features of its activities: continuity, practical utility, and universality.¹

Its continuity is established through the medium of its regular publications especially the Quarterly Bulletin which records the work of various commissions, expert investigations, collection of data and liaison between public health administrations, and certain permanent services established very early in the life of the Organization; the Epidemic Intelligence Service in 1921, the Permanent Biological Standardization Commission in 1922 the Interchange System of Public Health Personnel in 1922, and the Malaria Commission, 1924.²

The practical utility of the work achieved is self evident.

International standards for nearly thirty therapeutic agents have been established by the Permanent Standardization Commission which have been accepted by forty-one countries of the world.³

The Epidemiological Intelligence Service supplies information to over seventy-two per cent of the world's population concerning the situation of epidemics and received information from the Far Eastern Bureau at Singapore.

2. Ibid. p. 216.
3. These agents consist of eleven therapeutic sera, one bacterial extract, four vitamins, three hormones, five gland preparations, and five other therapeutic agents. Monthly Summary, XVII (1937) p. 29. Monthly Summary, XVII (1937) p. 63-64.
the center of a vast epidemic area, by means of ten wireless stations.

It has been estimated that malaria has been and still is the cause for more deaths in the world than any other disease, but it has become vastly less of a menace because of the investigations made by the Malaria Commission in its twelve years of existence.

Leprosy too which has been a menace to civilization since ancient times, is being scientifically cared for in one of the best equipped institutions for the study and care of the disease ever established.

Necessity often is a great source of power. The needs resulting from the recent economic depression emphasized the demand for better food and homes which resulted in an intensive study of nutrition, better housing, and rural hygiene in several continents.

Every continent under the sun has at some time or other borne evidence of the ministrations of this organization and proved its claims to universality.

Sleeping sickness in Africa, leprosy in South America, typhus in Poland, plague in Russia, study tours in the United States, investigations of innumerable diseases in Europe and Asia barely suggest the universal contacts it has made. Truly of this Organization one can say, "From Greenland's icy mountains to India's coral strand."

No finer summary of the work of the League Health Organization can be made than that written by Dr. Victor Heiser, whose years of medical research and practice in many parts of the globe, and whose association with the Organization entitle him to first rank among international medical authorities:

"It is not too much to say that great success has attended its efforts in practically every field with which it has concerned itself."

"The health work quickly justified itself. Great epidemics have been checked. Re-settlement programs for thousands of refugees have been carried out. Adequate protection for the ports of the world and ships entering therein, have been secured through quarantine measures."
National health administrations have reaped the benefits of mutual understanding and increased appreciation of each other's efforts. An international esprit de corps has been broadened to a degree otherwise almost impossible. Joint action in emergencies such as epidemics has been simplified and made more quickly effective. One cannot reflect upon the wide scope and results of the Health Organization's work without asking the question: If the League can do so much for the cause of the world's health through international cooperation, may we not hope that similar concerted efforts will someday cause the much desired world peace to appear on the horizon? Immediate success is not nearly so important as is the development of the will and the means of success. The health problem of the nations is by no means solved, but its solution can be greatly aided by the Health Organization of the League of Nations. On humanity's behalf the League is attempting to banish both disease and war forever from the earth.4

## APPENDIX

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duties of the League Health Organization</td>
<td>1</td>
</tr>
<tr>
<td>Reconstitution of Health Organization - 1936</td>
<td>2-4</td>
</tr>
<tr>
<td>Divisions and Numbers* of Departments of League</td>
<td>5</td>
</tr>
<tr>
<td>Official Numbers and Lettering in Official Documents</td>
<td>6</td>
</tr>
<tr>
<td>Present Health Organization Officials</td>
<td>7-12</td>
</tr>
<tr>
<td>Typical Years' Work Done by Health Organization</td>
<td>13-16</td>
</tr>
<tr>
<td>States Members of the League at Present</td>
<td>17</td>
</tr>
<tr>
<td>Officials of the Secretariat</td>
<td>18</td>
</tr>
<tr>
<td>Aid from Rockefeller Foundation</td>
<td>19</td>
</tr>
</tbody>
</table>

* The Roman numerals attached to each division are used in all official documents to indicate that special section. III for instance, in League documents indicates the Health Organization.
APPENDIX

THE DUTIES OF THE HEALTH ORGANIZATION OF THE LEAGUE

1. Authority.

Article 23 (f) of the Covenant Resolutions on the Assembly and Council.

2. Duties.

(a) To advise the League of Nations on matters affecting health.

(b) To bring administrative Health Authorities in different countries into closer relationship with one another.

(c) To organize means for more rapid interchange of information on matters such as epidemics, and to simplify methods for acting rapidly on such information where it affects more than one country.

(d) To furnish a ready organization for securing or revising necessary national agreements for administrative action in matters of health.

(e) To cooperate with the International Labour Organization in regard to measures for the protection of the worker against sickness, disease, and injury arising out of employment; the Labour Organization to act in consultation with the Health Organization in regard to all health matters.

(f) To confer and cooperate with the International Red Cross Societies and other similar societies under Article 25 in the Covenant.

(g) To advise when requested other voluntary organizations in health matters of international concern.

(h) To organize missions in connection with matters of health at the request of the Council of the League of Nations, and with the concurrence of the countries affected, under the International Convention signed at Rome, December 9, 1907.*

The Health Organization of the League of Nations shall consist of:

A. A Health Committee.—The technical advisory organ of the Council and of the Assembly.

B. A General Advisory Health Council—The Permanent Committee of the Office international d'Hygiène publique, set up at Paris by the Rome international arrangement of December 9, 1907, will act as the General Advisory Health Council.

I. Health Committee

1. The Health Committee consists of twelve members, including the President of the Permanent Committee of the Office international d'Hygiène publique, who will be vice-chairman, ex officio, and eleven other members appointed for three years by the Council of the League of Nations. These members must include one national of each state having a permanent seat on the Council.**

2. In accordance with paragraph 4 of the General Regulations on Committees, when the Committee holds its first session after each general appointment of its members by the Council, it will draw up and submit to the Council a general programme of work for the duration of its term of office, taking into account the recommendations of the annual assembly.*

3. The internal work of the Committee is governed by the General Regulations on Committees, as amplified by the Rules of Procedure of the Committee.

II. General Advisory Health Council

1. In accordance with the provisions of the scheme approved by the Assembly of the League of Nations in 1923, the General Advisory Health Council:

   (a) will consider, discuss, advise or report on any questions which may

---


** This was amended to read: "These members necessarily including the representatives of the principal national health administrations." Monthly Summary, (XVI, 1936) p. 261.
be submitted to it by the Health Committee of the League of Nations;

(b) Will transmit to the Health Committee a question which it thinks desirable for the Health Committee to study.

2. The annual assembly of the General Advisory Council shall be held in Paris at the end of one of the sessions of the Permanent Committee of the Office international d'Hygiène publique. An account of the work done by the Health Organization during the past year and an outline of the programme proposed for the following year shall be submitted to this meeting by the Health Committee. The members of the Health Committee shall be entitled to attend this meeting.

The States Members of the League of Nations which do not participate in the Office international d'Hygiène publique, and which did not accede to the international agreement of December 9, 1907, shall be invited by the President of the Permanent Committee of the Office international d'Hygiène publique to send representatives to this meeting. They shall defray the traveling expenses and subsistence allowances of their representatives.

The subsistence allowances of the members of the Permanent Committee of the Office international d'Hygiène publique during this special meeting shall be defrayed by the Office international d'Hygiène publique. The expenses of the members of the Health Committee, unless they are members of the Permanent Committee of the Office, shall be defrayed by the League of Nations.

The detailed agenda of the meeting and its duration shall be fixed by common agreement between the President of the Permanent Committee of the Office and the Chairman of the Health Committee.

The records of the meetings shall be sent to the Secretary-General of the League of Nations.
The executive details shall be fixed by agreement between the Secretary-General of the League of Nations and the President of the Office international d'Hygiène publique.

3. The Health Section of the Secretariat of the League of Nations and the Office international d'Hygiène publique will keep closely in touch. Each will communicate to the other all documents relating to its work.

A copy of each of these documents will be sent direct to every member of the Committee of the Office and of the Health Committee of the League of Nations.*

DIVISIONS AND NUMBERS OF DEPARTMENTS OF L.A.N.U.

I. A. Administrative Commissions.
   B. Protection of Minorities.

II. A. Financial Section and Economic Intelligence Service.
   B. Section of Economic Relations.

III. Health.

IV. Social Questions.

V. Legal Section.

VI. A. Mandates.
    b. Slavery.

VII. Communications and Transit.

IX. Disarmament.

X. Financial.

XI. Traffic in Opium and Other Dangerous Drugs.

XII. A. Intellectual Cooperation.
    B. International Bureau

XIII. Refugees.

* Key to League of Nations' Documents Classification, p. 13, placed on sale by Marie Carroll, 1920-29—World Peace Foundation, Boston.
OFFICIAL NUMBERS USED IN OFFICIAL DOCUMENTS

A. I. 1921 = Assembly document number one distributed to 1921 Assembly.

C. I. 1921 = Council document number one distributed to members of Council only.

C. 15 M. 10. 1921 = It was the 15th document distributed to the Council in that year and the tenth to the member states.

C. L. = Circular Letters sent by Secretary General to members of League.

Roman Numeral = Indicates the department of the League.

C. 92 M. 47—1922 = 92nd document issued by Council to Members of Council and 47th issued to Member States in 1922.

C. I. C. I. 141 = International Commission on Intellectual Cooperation, 141 signifies the 141st document distributed to that committee. These committee and conference numbers are continuous for the life of the body to which they are distributed.

Official Numbers in parenthesis as C. 190 (1) means the edition usually a revised form.

Official Number with parenthesized lower case letter indicates a supplement to a previous document.

C. 73 (a) = Contains matter supplementary to C. 73.

PRESENT HEALTH ORGANIZATION OFFICIALS

Constituted by the first Assembly in 1920; reorganized on a permanent basis by the third Assembly in 1922; ten of the members of the Health Committee are nominated by the Committee of the Office international d'Hygiène publique and six members are appointed by the Council. The Council may appoint Assessors who rank as members.

1. The Health Committee

<table>
<thead>
<tr>
<th>Name</th>
<th>Nationality</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROF. G. BASTIANELLI</td>
<td>(Italian)</td>
</tr>
<tr>
<td>PROF. W. BRONNER</td>
<td>(U.S.S.R.)</td>
</tr>
<tr>
<td>DAME JANET CAMPBELL</td>
<td>(British)</td>
</tr>
<tr>
<td>DR. H. CARRIÈRE</td>
<td>(Swiss)</td>
</tr>
<tr>
<td>DR. WITOLD CHODZKO</td>
<td>(Polish)</td>
</tr>
<tr>
<td>DR. DENIS J. COFFEY</td>
<td>(I.F.S.)</td>
</tr>
<tr>
<td>SURG.-GEN. H. S. CUMING</td>
<td>(American)</td>
</tr>
<tr>
<td>PROF. J. G. FITZGERAID</td>
<td>(Canadian)</td>
</tr>
<tr>
<td>DR. J. HENG LIU or DR. F.C. YEN</td>
<td>(Chinese)</td>
</tr>
<tr>
<td>DR. HUSEMETTIN KURAL</td>
<td>(Turkish)</td>
</tr>
<tr>
<td>DR. N. M. J. JITTA</td>
<td>(Dutch)</td>
</tr>
<tr>
<td>DR. HELA JOHAN</td>
<td>(Hungarian)</td>
</tr>
<tr>
<td>PROF. RICARDO JORGE</td>
<td>(Portuguese)</td>
</tr>
<tr>
<td>DR. LASNET</td>
<td>(French)</td>
</tr>
<tr>
<td>DR. A. LUTRARIA</td>
<td>(Italian)</td>
</tr>
<tr>
<td>DR. TH. MADELSEN</td>
<td>(Danish)</td>
</tr>
<tr>
<td>DR. M. T. MORGAN</td>
<td>(British)</td>
</tr>
<tr>
<td>PROF. JACQUES PARISOT</td>
<td>(French)</td>
</tr>
<tr>
<td>PROF. CUSTAHO PITALUGA</td>
<td>(Spanish)</td>
</tr>
</tbody>
</table>
2. Committees in Relation with the Health Committee.

(a) Malaria Commission.

Chairman:

DR. A. LUTRARIO (Italian)

Vice-Chairman:

PROF. G. BASTIAMELLI
DR. W. C. HOCKETT
DR. HUSAMETTIN KURAL
COL. S. P. JAMES
PROF. RICARDO JORGE
DR. LASNET
PROF. G. PITTELUGA
BT-COL. A. J. H. RUSSELL
PROF. E. SERGENT

Experts:

M. DONAMICO, Chief of the Bureau of Civil Engineers, Rome.
DR. F. BOYD, International Health Board of the Rockefeller Foundation.
PROF. BRUNET, Faculty of Medicine, Paris.
DR. SADI DE BUEN, Central Malaria Commission, Madrid.
LIEUTENANT-COL. S. R. CHRISTOPHERS, Central Research Institute, Kasauli (India)
MAJOR C. COVILL, I. M. S., Asst. Director, Malaria Survey, 
Kasauli (India)

DR. J. H. FIELD, Senior Malaria Officer, Institute for 
Medical Research, Kuala Lumpur (Fed. Malay States).

DR. R. GREEN, Medical Research Institute, Kuala Lumpur 
(Fed. Malay States).

DR. I. G. KLIGER, Health Department, Jewish University, 
Jerusalem.

PROF. LANCHEUX, Pasteur Institute, Paris.

DR. A. MISSIROLI, Director of the Experimental Station for 
Anti-Malaria Work, Rome.

PROF. D. OTTOLENGHI, Royal University of Bologna.

PROF. SCUINFNER, Director of the Tropical Section of the 
Royal Colonia Institute, Amsterdam.

MAJOR J. A. SINTON, Director, Malaria Survey of India, 
Kasauli.

PROF. M. H. S. HELLEMREBEL, Institute of Tropical Hygiene, 
Amsterdam.

SIR MALCOLM WATSON, Ross Institute and Hospital for Tropical 
Diseases, London.

DR. C. M. MANNON, Director in Chief, Wellcome Bureau of 
Scientific Research, London.

Corresponding Members

DR. ANGSTEIN, State Health Institute, Warsaw.

DR. M. BALFOUR, Health Center, Athens.

DR. A. BARBER, Rockefeller Foundation, New York.

DR. C. A. BENTLEY, Director of Public Health, Calcutta.

DR. FERRCL, Rockefeller Foundation.

PROF. CARLOS C. HOFFMAN, Biological Institute of the National University, Chief of the Dept. of Parasitology of the Health Institute, Mexico.

PROF. MAKATO KOIZUMI, Faculty of Medicine of Keio University, Japan.

DR. A. LA BRANCA, of the Italian Public Health Service.

DR. K. MARKOFF, Inspector of Malaria attached to the Bulgaria Public Health Service.

PROF. MOLLOFF, Faculty of Medicine, Sofia.

DR. PELTIER, Health Service of the Colonial Troops, Marseilles.

PROF. CLAUS SCHILLING, Robert Koch Institute, Berlin.

PROF. P. C. SERGEIEV, Director, Institute of Tropical Medicine, Moscow.

DR. R. SOESILLO, Chief of Anti-Malaria Service, Batavia.


DR. SENIOR WHITE, Chief Malarialogist, Bengal-Nagpur Railway, India.

DR. L. L. WILLIAMS, Chief of Antimalaria Section, U. S. Public Health Service.

DR. WARRINGTON YORKE, Prof. of Tropical Medicine, School of Tropical Medicine, Liverpool.

PROF. G. ZOTTA, Professor of Parasitology, Serological Institute, Bucharest.
New Corresponding Members:

DR. BARBIERI
MR. CARTER
DR. MIRA
DR. LIVADAS
DR. DE MUILLON
DR. MORIN
DR. RANKOV
DR. SCHWARTZ
DR. YAO

(b) Opium Commission of the Health Organization:

DR. H. CARRILHE (Chairman)
DR. CHODZKO
SFG. G.N. CULLINGO
DR. NUSAMETTIN KURAL
DR. J. HENG LIU
PROF. RICARDO JORGE
DR. T. MORGAN
DR. N. TSURUMI

1. "Europe, I (1937), p. 7-8"

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
OFFICERS OF FIRST PERMANENT HEALTH COMMITTEE

Appointed by Council:

- Professor Nadsen (Danish)
- Professor Lebn Bernard (French)
- Professor Ottolenghi (Italian)
- Dr. Jitta (Dutch)
- Dr. Bitteluga (Spanish)
- Dr. Chagas (Brazilian)

Appointed by the Office international d'Hygiène publique:

- Surgeon-General Hugh S. Cummings (American)
- Dr. Raynauld (French)
- Sir George Buchanan (British)
- Dr. Intrario (Italian)
- Dr. Carriere (Swiss)
- Dr. Granville Pasha (Egyptian)
- Dr. Ricardo Jorge (Spanish)
- Dr. Mimbola (Portuguese)
- Japanese representative
Typical Year’s Work Done by Health Organization of League of Nations

Below will be found an outline of the work of the League’s Health Organization for the year 1928. This may be considered an average year as the Organization had been in operation seven years and it is now ten years since this report was made.

International Health Studies and Conferences.

1. Conference of Far Eastern Health Officers in India.
3. Session of Cancer Committee.
4. Second Laboratory Conference on Serodiagnosis of Syphilis.
5. First Interchange for Study of Rural Hygiene.
8. General Interchange of Public Health Officers, Italy.
11. First Session of Sub-Committee on Preventive Medicine, Paris.

Service of Epidemiological Intelligence and Public Health Statistics.

1. Publication of Weekly Record in which was given the official communiqué of Office international d’Hygiène publique, according to International Sanitary Convention, 1936.
2. Substantial increase in amount and importance of the information submitted to Singapore and Geneva in telegraphic form.
3. Epidemic of influenza in United States late in 1928 fully reported in *Weekly Record* owing to kindness of Surgeon General Cummings.

4. Improved method of presenting material in *Monthly Epidemiological reports* from various countries.

**Eastern Bureau at Singapore.**

1. New ports added.
   a. Pnom-Penh, Indo-China.
   b. Kenjum, Persian Gulf.
   c. Jask, Gulf of Oman.

2. Progress made in securing information from Chinese ports.

3. Epidemic information now received from chief quarantine officer regularly by telegraph, Bushire, Persia.

4. Presence of plague-infected rats reported from twelve ports.

5. Five additions to list of countries reporting regularly by post made in 1928.

6. A summary of the weekly message is now broadcast in clear by Bandoeng, Madras, Karachi, and Tokio for the benefit of shipping.

7. Information distributed by Far Eastern Bureau in 1928 in 143 ports.

8. 160 ships reported as having on board patients suffering from one of eight infectious diseases. Bureau notifies next part of call in cases of smallpox, cholera, or plague.


10. President of Sanitary Commission of Egypt and Director of Far Eastern Bureau exchange information concerning pilgrims. If cholera breaks out Bureau is notified at once.
Public Health Statistics.


Statistical Publications.

1. International Year Book.
2. Two new handbooks added.
   a. Public Health Services in New Zealand.

Interchanges.

1. India.
2. Six European countries.
3. Italy.

Technical Cooperation with Public Health Administrations.

1. Latin American Countries.
   a. Infant Mortality.
   b. Leprosy.
   c. Relations between Public Health Services and Health Insurance Institutions.
   d. Study of interchanges in Latin American Countries.
   e. Establishment of International School of Public Health in Rio de Janeiro.

Work in Greece.

1. Cooperation against tuberculosis among refugees.
2. Cooperation against epidemic of dengue.
3. Cooperation in reorganization of Health Administration in Greece.

India.

1. President of Health Committee attended Session of Advisory Council
of Eastern Bureau at New Delhi and Far Eastern Association of Tropical Medicine at Calcutta.

2. Inaugurated interchange in India.

Alcoholism.

1. Collection of full statistical information regarding alcoholism for Sweden, Finland, and Poland.

Yellow Fever.

1. Cooperation with Belgium concerning disease in Congo region.

Welfare of Blind.

1. Obtained information from various countries on welfare of blind.

2. Cooperated with International Labor Office in this work.

Study of Dangers from X-Ray.

Nutrition.

1. Collection of information.*

---

<table>
<thead>
<tr>
<th>Country</th>
<th>Country</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>France</td>
<td>Norway</td>
</tr>
<tr>
<td>Albania</td>
<td>Great Britain</td>
<td>Panama</td>
</tr>
<tr>
<td>Argentina</td>
<td>Greece</td>
<td>Paraguay</td>
</tr>
<tr>
<td>Australia</td>
<td>Guatemala*</td>
<td>Peru</td>
</tr>
<tr>
<td>Austria</td>
<td>Haiti</td>
<td>Poland</td>
</tr>
<tr>
<td>Belgium</td>
<td>Honduras*</td>
<td>Portugal</td>
</tr>
<tr>
<td>Bolivia</td>
<td>Hungary</td>
<td>Rumania</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>India</td>
<td>Salvador</td>
</tr>
<tr>
<td>Canada</td>
<td>Iran</td>
<td>Siam</td>
</tr>
<tr>
<td>Chile</td>
<td>Iraq</td>
<td>South Africa</td>
</tr>
<tr>
<td>China</td>
<td>Irish Free State</td>
<td>Spain</td>
</tr>
<tr>
<td>Columbia</td>
<td>Italy*</td>
<td>Sweden</td>
</tr>
<tr>
<td>Cuba</td>
<td>Latvia</td>
<td>Switzerland</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>Liberia</td>
<td>Turkey</td>
</tr>
<tr>
<td>Denmark</td>
<td>Lithuania</td>
<td>Uruguay</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>Luxemburg</td>
<td>U. S. S. R.</td>
</tr>
<tr>
<td>Ecuador</td>
<td>Mexico</td>
<td>Venezuela</td>
</tr>
<tr>
<td>Estonia</td>
<td>The Netherlands</td>
<td>Yugoslavia</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>New Zealand</td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>Nicaragua*</td>
<td></td>
</tr>
</tbody>
</table>

---

v. Europe I (1937), p. 3. States Members of the League make up the Assembly. Ibid. p. 3.
* No longer members.
+ Names of countries underlined in red indicate permanent members of Council.
× Names of countries underlined thus indicate countries elected by Assembly for three years, three retiring each year.
SECRETARIAT OF THE LEAGUE

Officials:

Secretary-General: JOSEPH AVONAL (French)

Chief of Cabinet, M. NOELM (French)

Deputy-Secretaries-General:

1. In charge of Intellectual Cooperation Section, M. PILOTTI (Italian)

2. SEAN LESTER (Irish)

Under-Secretary-General

In charge of Political Section, F. P. WALTERS, (British)

Central Section: J. W. WILSON (New Zealand)

Mem. of Section, A. SWEETSER (American)

Legal Adviser to Secretariat: L. A. PODESTA COSTA (Argentinian)

Treasurer: S. F. JACKLIN (South African)

Librarian: DR. T. P. SEVENEMA (Dutch)

Sections:

See page 5 Appendix. The classification with the numbers and letters attached are given in all League of Nations' publications. Those marked III indicate Health; those marked VI A. indicate Mandates, etc. Carroll, op. cit., p. 13.

The classification in Europa I (1937) is slightly different as it uses Sections of work rather than sections based on publications, with the numbers and letters attached are given in all League of Nations publications. Publications marked III indicate Health; those marked VI A. indicate Mandates etc; Carroll, op. cit., p. 13.
AID RECEIVED FROM THE ROCKEFELLER FOUNDATION

1922

The Foundation agreed to support the disease-reporting service for five
years and the international exchange of health personnel program for three
years.*

Amount contributed - $15,020.

1923

Supported through League of Nations interchange, institutes for 54 public
health officers from twenty-seven nations. Appropriations made for
special course for health officers under auspices of League Health Organiza-
tion. Three years provision by International Health Board of Foundation
for interchange of public health officers.**

Amount contributed—$98,940.89.

1924

Aided Epidemiological Intelligence Service and international study tours
of 99 officials from twenty countries.***

Agreed to aid Singapore Bureau for a five year period not to exceed
$125,000.***

Amount contributed - $151,400.60**

1925

Annual contribution - $176,405.68

1926

Helped League Health Organization conduct international study tours for

---

** All following information comes from the Yearly Reports of the Foundation,
thus only year will be stated. 1923. p. 121.
*** 1922, p. 293.
**** 1924, p. 8.
***** 1924, p. 155.
****** 1928, p. 293.
1927

In February the Foundation renewed for a period of seven years beginning in 1928 an agreement with the Health Organization to promote special activities relating to the advancement of vital and public health statistics.**

This grant assisted in the organization of a center of public health documentation in Geneva.***

Annual contribution = $126,942.14.

1928

In collaboration with Organization contributed to three interchanges of health personnel, one in India; one in Europe; a third in Italy. oo

Annual contribution = $94,864.15.

1929

Pledged an annual sum to extend over three years to continue international exchange of health personnel. v

A revolving fund of $723,979 was established in 1929 therefore annual contribution was not listed.

1930

The same is true of 1930, 1931.

1932

During year a representative of the Foundation attended a Conference at Cape Town, Africa, called by the Health Organization where the subject of
risk of transmission of yellow fever by aircraft was discussed.\textsuperscript{xx}

Annual contribution - $129,457.86.\textsuperscript{#}

1933

$263,170.45.\textsuperscript{##} - Annual contribution.

1934

Annual contribution - $143,425.15\textsuperscript{*}

1935

Three fellowships granted League of Nations.

Annual contributions - $105,220.56.\textsuperscript{**}

1936

Annual contribution - $96,692.\textsuperscript{***}

\begin{tabular}{ll}
\textsuperscript{xx} & 1932 p. 42-43. \\
\textsuperscript{#} & 1932 p. 352. \\
\textsuperscript{##} & 1933 p. 373. \\
\textsuperscript{*} & 1934 p. 311. \\
\textsuperscript{**} & 1935 p. 389. \\
\textsuperscript{***} & 1936 p. 353. \\
\end{tabular}

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Bibliography

"A Watch on Disease", quoted from The London Times in Science N.S., LXVII (1928), 482-485.


Dr. Boudreau was a Member of the Health Section of the League Health Organization at this time.

Boudreau, Dr. F. G. "Microbes Know No Control", in Rotarian LX (1937), 27


Buck, Pearl S. "China and the West", in Annals of American Academy, CLXXIII (1933)


Eagleton, Clyde. International Administration, New York, 1932.


Dr. Eichel, was at this time Director of the Division of Vital Statistics of the League of Nations.


Book on Constitution of League. Little given concerning technical departments.


Contains information concerning the epidemic situation in Russia, Poland, and surrounding countries.


Manley Hudson until last year was Professor of International Law at Harvard, now American Representative in World Court.


Deals with the Sino-Japanese situation from 1931 on.


Seymour Jacklin, Secretary of the League of Nations.


"Leagues' China Education Mission", in *Pacific Affairs*, August, 1932, 723-726.


A handbook published by the Information Section of the League Secretariat, not an official document. Contains over 300 pages of general information about the League as a whole and its various sections. The most concise and at the same time informative publication of the League; revised nine times up to 1938.


General information about the League for ten years after its organization. Gives considerable material concerning the Health Organization.


Contains classified list of all publications of the League of Nations which are for sale, with prices in terms of English, American, and Swiss money.


One of a series of pamphlets published by League of a report by League Health Organization.

A collection of pictures and descriptions of interesting features of the League.


Review of the early years of the League's work.

"Leagues' Technical Aid to China; Dr. Rajchman and T. V. Soong", in China W. R., LXVII (1933), 126-8.


Contains information as to existing organization and working of League, activities during 1932, members of its Committees, and a bibliography and facts of importance concerning the League.


Resume of outstanding activities of the League for two or three years before 1933.


Dr. McCoy was American member of the Biological Commission of League Health Organization, in 1937.

Monthly Summary of the League of Nations, publ by The League of Nations. 17 volumes, Jan. 1921 to April, 1938.

See page in this work.


The Official Journal appears monthly and contains the publication of the Minutes of each department of the League and of all League reports and other documents. Minutes of the Health Organization appear in this publication up to 1931, the Annual Reports of the Health Organization are published in the Quarterly Bulletin of the Health Organization.


This is a regular publication of the Health Organization, is published four times a year; contains extensive documentation collected by the Organization hitherto scattered in many publications; and all reports of Commissions of researches, study tours.


Dr. Rose was a Member of the Medical Advisory Board of the Red Cross War Council and for ten years general director of the International Health Board.


Swain, R. E. "Science in International Affairs", in *Institute of World Affairs*, Proc. 10 (1933), 225-226.


Mr. Sweetser was Assistant Director, Information Section League of Nations Secretariat for the first three years.


Trans Pacific, Tokyo, May 17, 1934.

Japanese Daily Newspaper.


Dr. Winslow was actively connected with the Health Organization previous to his writing of this article.


Each year a report is sent by the Health Organization to the Council.