A REVIEW OF THE PRESENT-DAY CONCEPTS OF LEPROSY CONTROL
WITH SPECIAL REFERENCE TO THE
ROLE OF THE LOCAL HEALTH SERVICES

by

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1. PROGRESS IN LEPROLOGY AND CHANGE OF APPROACH TO LEPROSY CONTROL

Progress in leprology in recent years has been considerable and has developed along the following lines:

1. By means of dermatological and neurological examinations, a confident diagnosis of early cases can be made in the absence of positive bacteriological findings.

2. The lepromin reaction has been shown to give useful information on the prognosis of the disease in patients and on the immunity status of healthy persons. "A positive lepromin test is regarded as an expression of a certain amount of resistance to M. leprae directly proportionate to the degree of positivity." Contacts with a positive lepromin test (2+ and 3+) do not require to be kept under surveillance. Seventy per cent to eighty per cent of the population may be lepromin positive and their exclusion from surveillance greatly reduces the amount of work to be done and permits concentration on the 20% - 30% of contacts who are more susceptible to infection and more prone to develop the lepromatous type.

3. Importance of indeterminate leprosy, considered as the "matrix" of leprosy cases. The lepromin negatives, if not treated, have a tendency to develop the lepromatous (contagious) type of leprosy. The control of leprosy in the majority of countries is therefore chiefly based on detecting indeterminate cases and establishing early treatment.

4. Discovery of the importance and frequency of tuberculoid leprosy, the benign type of the disease. Reactional states of this type were previously confused with lepromatous leprosy, which explains why many useless drugs were reported in the past as giving excellent results in some cases, thus erroneously raising hopes of a new miraculous drug.

5. Epidemiological studies have indicated that, in many endemic areas, children and young adults are most often infected, and that males are more often infected than females. It has also been found that the attack rate in contacts, particularly in household contacts, is much higher than that in the general population. Studies on indeterminate and tuberculoid leprosy show that, in most countries, they were not usually contagious, although in Africa it is supposed that they may play some role in the spread of the disease.

6. Advent of sulfones and other drugs. Even if sulfones are not the ideal drugs in leprosy, as penicillin is in treponematosis, they prevent the evolution of indeterminate leprosy to lepromatous leprosy, and may render lepromatous cases bacilli-negative in the course of one or several years, according to the phase of the disease, thereby reducing the load of infection in the community. Thiosemicarbazone, thioura

1 VI International Congress of Leprology, Madrid, 1953
derivatives and long-acting sulfonamides are useful and may be used when DDS therapy is unsuitable. The results obtained with cycloserin, thio­cethy compounds and derivatives of ethyl mercaptan, suggest that they have some activity against *M. leprae*.

7. BCG vaccination may cause conversion of the lepromin reaction. Its value in the control of leprosy should be determined in field trials.

8. Noteworthy advances have been made in rehabilitation.

9. The transmission of *M. leprae* to the footpads of mice is active but limited, facilitating the screening of new antileprosy drugs and of possible immunizing agents.

The progress achieved, especially in chemotherapy, has changed extensively the control measures.

1. "Leprosy is not a disease apart; it is a general public health problem in the countries where it is endemic." 1

2. Leprosy control has been "humanized" in the sense that isolation became non-compulsory and contagious patients could be treated at home.

3. "Current treatment, which effectively reduces the infection in leprosy patients, and therefore their infectiousness, is regarded as the most potent generally applicable weapon now available in the control of the disease." 2 "The principal arm of the modern antileprosy campaign is chemotherapy." 2

4. Out-patient clinics and mobile units have become of fundamental importance in campaigns.

5. The importance of hospitals and sanatoria for in-patient care has been greatly reduced.

6. Legal restrictions on patients were reduced as countries began to avoid special legislation concerning leprosy: "... all legislation, and regulations relating to the control, prophylaxis and treatment of communicable diseases in general, should also apply automatically to leprosy." 3

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2 Committee on Epidemiology and Control, VII International Congress of Leprology, Tokyo, 1958

3 WHO Leprosy Conference, Istanbul, 1961
2. PRESENT-DAY MEASURES IN LEPROSY CONTROL

The control of leprosy has evolved continually so that it is now based on the following measures:

1. Health education;
2. Early diagnosis;
3. Early treatment, especially of those who may become contagious, but also of tuberculoid patients in order to prevent deformities;
4. The reduction or elimination of infectiousness of open cases by regular treatment;
5. The reduction of the number of in-patients to the absolute minimum;
6. The follow-up of those discharged patients who are most prone to relapse and again become infectious;
7. The protection of the susceptible population;
8. The training of medical and para-medical personnel.

All these activities are usually carried out by specialized services with their own personnel working in out-patient clinics, sanatoria and preventoria, but the need for the co-operation of the public health services and the integration of leprosy control activities into these services has gradually developed. This point will be considered later.

2.1 Health education

The fundamental importance of educational measures in leprosy has been repeatedly emphasized. No leprosy campaign should start without health education, which must be continuously and patiently stressed during the development of the activities. Health education should be directed towards:

(i) medical students, physicians and auxiliary personnel;

(ii) the patient and his family;

(iii) the general public. It should not be forgotten that in the population not considered to have been exposed to leprosy the total number of patients is higher than the total of known contacts (in whom the incidence rate is higher). Therefore, the
general public must be made aware of the cause, early symptoms, treatment, control measures and the possibility of being rid of the disease.

Health education must reach every section of the population, particularly students from primary school to university level, so that the new generations will be better prepared to reduce and remove the stigma attached to the disease. This will lead to society changing its views and feelings regarding leprosy, and to acceptance of the idea that patients should continue in their posts in accordance with the decision of the authorities.

Another purpose of health education is to impress on every person that he should seek medical advice as soon as a suspicious lesion begins to appear.

It is important that the education given should not cause fear of, or increase the prejudice against, leprosy. Care should be taken not to show pictures of the most advanced lepromatous cases or of deformities in patients with intense neurological lesions, as these can intensify the fear of leprosy and increase the age-old stigma.

2.2 Early diagnosis

Early diagnosis depends on the periodical and systematic examination of contacts, by means of school surveys and the examination of certain population groups. School surveys are particularly important in highly endemic leprosy areas, but in these areas total population surveys should also be undertaken.

2.3 Early treatment

The early treatment of indeterminate cases prevents the development of the lepromatous type of the disease. Therefore, the key to leprosy control is the discovery of all potentially infectious cases and the institution of adequate treatment. Early treatment of tuberculoid patients reduces the frequency of disabilities. Patients with lepromatous leprosy usually derive greater benefit from treatment the earlier it starts.

2.4 Reduction of the infectiousness of open cases

Lepromatous patients under regular treatment improve clinically and their infectiousness is gradually reduced, so that after a variable period they become bacilli-negative. It is of the utmost importance in a leprosy campaign to keep these patients under regular treatment because, as has been said above, they are the usual source of infection. As the proportion of lepromatous and other infectious cases under regular and prolonged treatment increases, the risk of the spread of infection in the community will decrease.
Unfortunately, sulfones and other drugs used in leprosy are far from being as effective as penicillin in yaws and syphilis and treatment must be continued in lepromatous and borderline patients for a long period, even after they become bacilli-negative. It has been shown that more than three years are required to obtain a bacilli-negative result in 73% of lepromatous patients under regular treatment; about 20% of lepromatous patients remain positive, even after six years of regular treatment. This gives an idea of the relative success of treatment and of the difficulties of a leprosy campaign. It is commonly observed that the regularity of treatment decreases the longer it continues: 70% or 80% of patients may be regular in the first year but, as the years go on, this proportion drops very greatly.

2.5 Reduction of number of in-patients to absolute minimum

With the relative success of chemotherapy, the number of in-patients has been gradually reduced and hospitalization is reserved for patients with leprosy reaction, for those requiring reconstructive surgery or rehabilitation, and for those whose treatment has been neglected or ineffective. Monetary savings from the reduction in the number of cases hospitalized should be applied to the treatment of out-patients of skin clinics, mobile units, etc.

"Although out-patient care is stressed, facilities for in-patient care are necessary for patients in reaction and they can play an important part in the control of leprosy. In countries with adequate facilities, as many infectious patients as can be accommodated should be induced to enter leprosaria on a voluntary basis. The period of hospitalization, however, should be only sufficient to effect clinical regression. A prolonged series of negative smears should not be required. From the epidemiological point of view it is more advantageous to reduce infectiousness in many patients than to eliminate infectiousness in a few."

2.6 Follow-up of relapsed cases

Lepromatous patients whose disease becomes inactive may relapse if they do not continue treatment for a period not less than five years. Many leprologists think that the treatment should be continued even longer. In the light of these facts, lepromatous patients, as also borderline cases, should be carefully followed up and treated for a considerable period.

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1 WHO Leprosy Advisory Team -Report on Survey in Thailand, 1962

2 Committee of Epidemiology and Control, VII International Congress of Leprology, Tokyo, 1958
2.7 Protection of susceptible population

Epidemiological studies taking into consideration the lepromin test have shown that about 20%-30% of the population are more susceptible to the disease than those with positive tests. The lepromin test should, wherever possible, be performed on household contacts, especially the contacts of infectious cases. Attempts to protect the susceptible contacts have been made by means of chemoprophylaxis and vaccination with BCG. Up to now, no definite opinion regarding their preventive value has been established.

2.8 Training of medical and para-medical personnel

It has been more widely recognized that very good training of medical and para-medical personnel is necessary and special attention has been devoted to it. It is appreciated that the best programme and organization for controlling leprosy will fail if the staff are not properly trained to undertake the work.

3. RESULTS THAT MAY BE EXPECTED IN LEPROSY CAMPAIGNS AND RESULTS OBTAINED. DIFFICULTIES IN LEPROSY CAMPAIGNS.

Present methods may lead to the control of leprosy in a shorter period than before, provided they are correctly applied and that favourable conditions can be found to do so. Leprosy can be controlled if all leprosy cases are detected in an early phase and properly treated, and if - at the same time - other correlated work is carried on. In the countries or areas in which the recommended measures are gradually and correctly applied, the incidence of the disease greatly decreases and, subsequently, the prevalence; the number of lepromatous cases become fewer and fewer. While in some areas the results are good, in others the incidence of the disease remains unchanged and the prevalence increases. This is not because the concepts of control are wrong but because of the practical difficulties encountered - the need for prolonged treatment, the social and environmental problems, the state of development of the health services, political instability, and so on.

Other factors which influence leprosy control are:

1. With the progress of the leprosy campaign, due to the accumulation of leprosy cases, the prevalence increases significantly year by year during a variable period because:

   (a) leprosy is a disease of chronic evolution;

   (b) there is an increase in the number of new cases detected;

   (c) years elapse before a patient can be discharged;

   (d) the number of deaths has been greatly reduced by the use of sulfones.
2. The detection of new cases, each one necessitating the control of five or more contacts, increases the volume of work and the total expenses for drugs, doctors, para-medical personnel, out-patient clinics, mobile units, equipment, etc., which most governments are not able to meet. Nor is the leprosy medical service able to control all the patients and all the contacts in extensive areas with large populations because of the lack of doctors and other staff.

Governments working on limited budgets gradually realize that they are burdened with leprosy campaigns whose results are not achieved as quickly as those against some other diseases. As it is impossible to increase leprosy budgets proportionately, the speed of work is reduced, to the great detriment of the development of the campaign.

3. Lack of doctors in the country, or lack of doctors interested in the leprosy campaign. The salaries paid in leprosy campaigns are often not satisfactory and doctors prefer to work in other public health services where they are not touched by the leprosy stigma. In many countries, this affects not only the patients and their families but also the staff dealing with them; therefore, doctors choose other fields or go into private practice and, in this way, many good workers are lost to leprosy control.

4. The appointment of doctors, directors and para-medical personnel not well trained for their jobs usually causes a decrease in the performance of existing staff.

5. Medical schools in many endemic areas do not give enough attention to leprology or even to dermatology. Students, when they graduate, may be able to diagnose rare disease but are often unable to diagnose typical cases of leprosy. Because of this inadequate teaching, the leprosy campaign cannot count on the support of new doctors in private practice capable of detecting leprosy cases, particularly the early ones.

6. Every contagious case has been in contact with a certain number of persons and about 3%-5% or even more of these may contract leprosy in a 3-5 year period. If untreated, many of these new patients may develop the lepromatous form of the disease and establish a new chain of infection which is subsequently extended to other persons. The "lost sight of" contagious cases and the relapsed lepromatous cases may also create new foci. It should also be pointed out that 40%-60% or even more of the new cases have no knowledge of exposure to leprosy patients.

7. "Lost sight of" patients

Ten per cent or more of the registered patients are lost sight of, even in good pilot areas. They may spread the disease to other persons.

8. Incubation period

The incubation period, usually long, makes the discovery of new infected cases difficult, especially those not infected at home.
9. Ten to twenty per cent of lepromatous patients, including those regularly treated, continue to be bacteriologically positive after six years of treatment. Even the lepromatous cases which are regularly treated and which show improvement continue to be infectious for at least 1-2 years before becoming bacteriologically negative.

10. Surveillance of contacts

This is essential for the good development of leprosy control. Nevertheless, only in a very few areas is it properly done; often, only some of the contacts are examined and the proportion of those re-examined is very reduced or relatively small.

4. WHAT SHOULD BE DONE TO IMPROVE LEPROSY CONTROL AND TO OVERCOME THE DIFFICULTIES. PRIORITIES IN THE CONTROL OF PATIENTS, SURVEILLANCE OF CONTACTS, ETC.

With all the above-mentioned unfavourable factors and with existing means and resources, a satisfactory result in the control of leprosy in most countries is usually delayed for decades until there is a general rise in the standard of living of the population. Perhaps the most effective means of overcoming these difficulties would be the discovery of a new and more effective drug to treat leprosy, as efficient as penicillin in syphilis and yaws, and/or to discover an immunizing agent.

Recognizing the impossibility in many areas of overcoming all the difficulties at the present time, and taking into account the social, economic, hygienic, cultural and political factors, we have to try to control leprosy by a list of priorities based on the limitations of each area, adapting the control programme as required. Countries with an adequate budget and a good leprosy service, whether or not integrated into the public health service, should diagnose and treat as early as possible all patients, maintain surveillance of all contacts, rehabilitate all patients with deformities, and examine all the population groups most prone to acquire leprosy, particularly, school-children. At the other extreme, countries with reduced budgets, with only a few doctors and facing different and more serious problems, should treat first of all the lepromatous and other contagious cases and the indeterminate lepromin negative; they should survey child household contacts, and try to help patients in the prevention of deformities. The control of leprosy must be practical, rational, economical and flexible, adapted to the conditions of each country.

Social, economic, cultural and political conditions are obviously not the sphere of action of the public health services. The activities of public health services in which is included that of the leprosy service can indirectly improve some of these conditions since, by improving the health of the population, there will be an increase in manpower, and an increase in the economic level, standard of living and education, which are essential to the control of communicable diseases.
1. Control and treatment of leprosy patients

If it is not possible to treat all patients, give priority to lepromatous, borderline and reacting tuberculoid with positive bacteriology. It is obvious that if a minor tuberculoid patient comes to a treatment centre, he will be examined and treated, but in his field work a doctor must not occupy himself looking for minor tuberculoid cases if this means leaving the lepromatous patients without control.

2. Surveillance of contacts

Even in good leprosy projects, rarely more than 30% or 40% are regularly examined. Therefore, for preference, examine lepromatous contacts and household contacts under fifteen years old. If possible, the lepromin test (with diluted antigen) should be performed to select the negative or doubtful (20% or 30%) who should be examined, thus reducing by 70% or 80% the surveillance of contacts.

3. Defaulters or absconding patients

Even in the best organized leprosy service many patients default or abscond (10% or more). Leprosy services should trace all contagious cases. Personnel should not spend time going after a tuberculoid case when there are defaulters in the lepromatous group, or while hundreds of child household contacts of lepromatous cases remain to be examined.

4. Surveys of schools and other population groups

If the surveillance of known contacts is already satisfactory, a survey could be made in certain population groups, especially those more liable to acquire the disease (in many countries leprosy has been observed more often in young people and in males). Surveys of school children and of other population groups (labourers, recruits, etc.) may be very useful, particularly in highly endemic areas, priority being given to school children.

School surveys, at least in some areas, would allow a higher detection rate of early cases of the disease. Treatment would prevent these children from becoming open cases and developing disabilities, and the contagiousness would be reduced. In this way, future generations of adults would be gradually rid of the disease and its consequences, and new generations of children less exposed to infectious adults.

5. Teaching of medical students, doctors, nurses, etc.

Special priority should be given to teaching leprology to medical students as it is of the utmost importance to give adequate and proper instruction to the newly-graduated doctors. In order to do this, the department of dermatology, in conjunction with the department of preventive medicine, should have a small dispensary
for leprosy patients so that the students learn how to diagnose, treat and follow them up and keep contacts under surveillance.

When the number of doctors is very low or there is no medical school, the teaching of para-medical personnel should have priority as these people have been doing good work in leprosy campaigns; they can be very useful even in countries where the number of doctors may be considered satisfactory.

Next in priority should be the teaching of leprosy to doctors working in the public health services, so that they can carry on leprosy control, and the integration of leprosy units into these services can gradually be achieved.

6. Co-operation with public health services – integration

This subject will be considered in item 5, Role of Health Services in Leprosy Control, in view of the emphasis given to it in the title of this paper.

7. Incentives for research

Only research can furnish the elements capable of controlling leprosy, even in unfavourable local conditions, as is possible in yaws campaigns. All types of research are important, but priority should be given to those which can bring immediate improvement to leprosy control, for instance, drug trials, immunizing agents and chemoprophylaxis. Research should be undertaken not only by leprologists but also by doctors working in related branches of medicine. University and other institutions should give the co-operation of their staff and equipment.

8. Full-time, adequately paid work for doctors and para-medical personnel

First-rate work is usually not possible unless personnel work full time and receive adequate salaries adjusted to inflation. Otherwise, doctors turn to private practice which reduces activity in leprosy control.

9. Appointment of personnel

The appointment of personnel - both medical and para-medical - should be made entirely on technical ability. Many leprosy campaigns have been hampered by the appointment of personnel, even in directing posts, who have lacked the necessary technical qualifications.

10. Establishment of a committee for the planning and execution of the campaign

The purpose of the committee would be to establish a leprosy programme and to keep it up-to-date, and to maintain uniformity in the programme and execution of the service no matter what changes might
occur in the direction of leprosy control. This committee could be useful in certain countries.

11. Hospitalization of leprosy patients in general hospitals

General and university hospitals should be encouraged to treat and hospitalize leprosy patients suffering from intercurrent diseases. No restrictions should be applied to tuberculoid and indeterminate cases. Lepromatous patients should also be hospitalized, depending on their clinical condition and hospital facilities. Different departments, particularly those of dermatology, neurology and orthopaedics, could make important contributions to leprosy control and rehabilitation.

12. Rehabilitation

Present sanatoria should be progressively adapted for rehabilitation, according to the possibilities of each country and the development of leprosy control. Special rehabilitation services should only be created when the means, equipment and necessary personnel have already been provided for the development of basic activities in leprosy control, since the most effective prevention of deformities is the prevention of the disease. Pending development of such rehabilitation centres, dispensaries and sanatoria could use some simple physiotherapy methods and treat plantar ulcers.

Rehabilitation should also be vocational in order to provide the patient with a profession or trade appropriate to his physical condition and in order to prevent further deformity.

13. Health education

This subject has been considered in Item 1.

14. Social measures

In endemic areas, the number of poorer inhabitants who contract leprosy is very high. Leprosy constitutes a social problem because of itself and because of the disabilities it may cause; thus, financial aid to patients and their families is very often necessary. However, prevention of disabilities and rehabilitation of patients would reduce this need.

15. Voluntary organizations

The co-operation of all non-governmental antileprosy organizations, and others not directly connected with leprosy, is important. Missions may give effective collaboration and should gradually be fitted into the organization of the campaign, keeping their autonomy but subject to the same supervision as the leprosy treatment centres, and using the same treatment schedules and records, and providing similar statistical data.
5. ROLE OF THE LOCAL HEALTH SERVICES

With present facilities, it is almost impossible for a leprosy service alone to control the disease in endemic areas because of the usually limited number of doctors, personnel, clinics and equipment available. Even if better means were available for controlling the disease, the co-operation of health services would be desirable and necessary, as experience has shown for some diseases that no lasting control was possible without the active collaboration of a capable health service. In view of this and other unfavourable conditions, it is essential to combine the activities of the leprosy service with those of public health in a joint effort to control leprosy and other diseases. Their efficiency will be increased, work better co-ordinated, and costs decreased. This should be done as early as possible and, if possible, at the very beginning of the campaign. Wherever practicable, this co-operation and even integration of the leprosy service into the public health service should be established in the attack phase of leprosy campaigns, so that public health units can take over treatment of new and old cases and, later on, case-finding, surveillance of contacts and surveys of population groups.

WHO has for some time been recommending this co-operation as well as the gradual and progressive integration of leprosy services into public health services. (See Annex 1)

Effective co-operation of each health centre is of the utmost importance in leprosy control. They should at first help in the treatment of leprosy cases and follow-up of patients reporting irregularly for treatment. This co-operation should be gradually enlarged in such a way that where the health centre is capable it can, little by little, assume full control of the disease within its own area. In this way, the activities connected with leprosy control will be gradually and progressively undertaken by each health centre. However, if these activities are handed over all at once to personnel not well prepared, or unwilling to undertake such obligations, the development of leprosy control could be ruined.

The development of this co-operation will follow a different rhythm according to the capabilities of each health centre. It is not possible to pretend that all the health centres are concurrently capable of taking over the same range of activities. This process should be slow and progressive.

Because of the desirability of such co-operation, medical and para-medical personnel of health centres should receive adequate training in leprosy; inversely, staff of leprosy campaigns should also be trained in other diseases in whose control their co-operation may be given when integration of the leprosy service into the public health service is accomplished.

The co-operation with health centres will face many difficulties varying from one public health unit to another; it depends largely on the human approach, training and personal qualities of the leprologists.
and the public health doctors. Newly-graduated doctors are better trained to collaborate in the prevention of various endemic diseases, because preventive medicine now has a more important place in the medical curriculum. Thus, a natural and increasing co-operation would follow. When the integration is achieved, the leprologist should be responsible for the teaching and training of staff, supervision and assessment of the leprosy campaign, and should continue to establish the guiding lines of control.

In countries where there is no leprosy service and the control of the disease is about to be initiated, leprosy control activities should be undertaken by the health service and therefore by each health centre from the very beginning. The control of leprosy can also be associated with the control of other diseases, for instance, yaws, leprosy, syphilis, leishmaniasis, blastomycosis, depending on the epidemiological importance of each one and of the control methods and techniques applied.

In countries where there is a special leprosy service or a leprosy mass campaign in operation, its integration into the public health service could be tried in a pilot area and then, with the experience gained, gradually extended to other areas.

Obviously, in order to implement either of these suggestions, it would be necessary to have funds, the required trained staff, equipment, etc.
WHO'S RECOMMENDATIONS ON CO-OPERATION OF HEALTH SERVICES
AND INTEGRATION OF LEPROSY SERVICES INTO THE FORMER

Ser., 189) 1959

"When health centres have been sufficiently developed, the treatment of leprosy patients should become part of their work.

At the beginning case-finding and re-surveys should be carried out by the specialized leprosy personnel, but when integration is complete, these functions should be assumed by the general health services, working from health centres."

WHO Conferences

1. Tokyo, 1958 (WHO/Lep.Conf./21, p.4)

"It was agreed that in countries where leprosy represents a public health problem, a special leprosy control service is essential in the early stages. Such a leprosy control service should be attached to the Directorate of Health Services.

The aim should be progressive and complete integration into the general public health services when the prevalence of the disease has ceased to present a special problem and when the local health services are in a position to do so.

Pending ultimate full integration the co-operation of all organizations, governmental and non-governmental, should be sought. All divisions of the health and hospital services and general medical practitioners should play their part in case-finding and especially in providing adequate treatment facilities for leprosy patients."


"4.4 Integration of leprosy campaigns into the general health services. Possibility of integrating case-finding and treatment of detected cases. Different methods.

The integration of the treatment of leprosy cases within the general health services is recommended. Those services should develop parallel with the extension of the
leprosy campaign. Such integration cannot start without an adequate rural health unit coverage.

Case-finding will still be carried out for a long time by mobile survey teams."

"4.5 Association of the leprosy campaign with other campaigns against the major endemic diseases, particularly with the yaws campaign.

Advantage must be taken of all gatherings of the population, (e.g., during mass campaigns against yaws, which have popular approval, or against trypanosomiasis surveys in connexion with tuberculosis, filariasis, nutritional diseases, etc.) to ensure that the teams also carry out leprosy case-finding.

Treatment on the other hand would be carried out exclusively by special staff in the mobile circuits.

Certain participants, in view of the importance of skin diseases in their countries, suggested that the leprosy campaign should not be dissociated from the activities of dermatology dispensaries."


"The Service should be staffed by competent personnel who will be engaged principally in case-finding and surveys but be responsible also for the training of medical, paramedical and auxiliary staff so that all the elements and units of the health service, at all levels, may participate in the antileprosy activities. (p. 7)

In all countries the necessary arrangements should be made so that the antileprosy campaign may become an integral part of the general health services. This integration will be effected at different levels according to the country. In some cases, the chief or director of the control campaign will also be responsible for the campaign for the control of venereal diseases, mycoses, occupational dermatoses, etc." (p. 8)

UNICEF/WHO Joint Committee, 1958 (JC11/UNICEF-WHO/3 Rev.1)

"(6) Personnel of other health services who should collaborate in leprosy control campaigns

In many countries it is necessary, after having diagnosed the disease and prescribed the type of treatment
to transfer the patient to a rural health unit which takes over his further treatment. It is very important to employ general (polyvalent) health personnel in leprosy control campaigns as is done in the former French territories in Africa.

In certain countries, the health personnel responsible for yaws control has also been given the task of detecting sufferers from leprosy, with very encouraging results. Such health personnel should follow a short training course with the mobile teams or in the treatment centres. Theoretical instruction can be given by distributing short, clear and precise written directions.

In all countries where leprosy is a major public health problem, some instruction in leprology should be given to the personnel of the rural health units and maternal and child health services, which can actively collaborate in the detection and treatment of sufferers." (p. 20)

Pan American Seminar on Leprosy Control, Belo Horizonte, 1958
(Seminario Sobre el Control de la Lepra - Publicaciones Científicas No. 41, OSP/PAHO)

"The Seminar considers that the integration of the leprosy control services into the public health services makes it more dynamic, far-reaching and penetrating, decreases its costs and facilitates co-ordination with the other health services.

The progressive and complete integration of the activities of the leprosy campaign into the health services is therefore recommended when the latter are capable of undertaking it. Within this plan it is advisable that the directing staff should have, besides training in leprology, the necessary knowledge of public health and health administration." (Translation)