## COMMITTE 7: LEPROSY CONTROL

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Despite substantial and sometimes even striking gains in many fields of leprology, progress in leprosy control has not kept pace-mainly because of the present unavailability of an ideal drug or specific vaccine. Control continues to focus on the patient or those more prone to develop leprosy. The population at higher risk is known, but the means to protect it are not yet available or still under study, and active drugs are badly needed to make a greater impact on the load of infectiousness. Hopefully, the preparation of a specific vaccine and/or the obtaining of favorable results in chemoprophylaxis can make primary prevention possible. The prevalence and duration of leprosy, plus its unique characteristics and socio-economic implications, call for special priority in public health programs and in research.

Because there have been no major breakthroughs necessitating special changes in the guidelines and methodology of leprosy control, the relevant reports prepared by the Committee of Leprosy Control (Rio, 1963) and by the WHO Expert Committee on Leprosy (1966 and 1970) are generally valid today. Therefore our attention will be focused only on certain aspects of control which need more emphasis or represent an addition to the previous guidelines.

There are definite indications that where

an effective case-detection and case-holding program has been developed the total number of patients and the annual detection of new cases has been reduced. It also appears that with such programs larger proportions of early, nondeformed patients are detected who can be easily treated, helping ultimately in reducing the quantum of infection in the community. There is however, a considerable number of new cases in spite of efficient work. This requires epidemiological investigation and also the need to find ways and means to improve present methodology.

#### MEDICAL MEASURES

Case-finding. To control leprosy it is essential to diagnose the early cases prone to develop lepromatous leprosy and the early lepromatous cases; this requires good training and experience of the relevant staff. For such diagnosis bacteriological examination should be done on all patients. In the surveillance of contacts, the criteria recommended by WHO Expert Committee (1966) should be adopted. School surveys are useful in highly endemic areas. Mass survey is an important method for case detection. In nonhyperendemic areas it has limited value. In such areas the most effective and practical case-finding method is contact tracing, not only limited to household contacts.

The above methods of case detection should be supported by health education and where possible, by multiple purpose surveys. Where mass surveys are undertaken, they should be multipurpose, as performed in several countries, and advantage should also be taken for health education in leprosy and other diseases. In this way, such surveys would be relatively less expensive and yield better results and public acceptance.

Outpatient care. Irregularity of treatment continues to be one of the most important drawbacks in control, in spite of the efforts to prevent it. The causes of absenteeism should be investigated by social and behavioral scientists.

Efforts should be made to take the treatment to the patients, near their homes, even if this must be done once a month. Advantage should be taken during the visit for health education and contact examination and other activities including prevention of disabilities and comprehensive medical care.

Inpatient care. Facilities for temporary hospitalization for acute illness must be provided. However, institutional isolation of infectious cases, even temporary, is no longer recommended.

Medical rehabilitation. Prevention and treatment of disabilities by simple physiotherapeutic methods merits greater attention and should be part of the out- and inpatient care. Reconstructive surgery should be undertaken in general rehabilitation centers, surgical and orthopedic services, including university hospitals.

Release from control. This should be a continuing activity to avoid inflation of the prevalence and of keeping patients under control for a longer time than needed, thus increasing the work load and expenses.

Protection of the healthy population with special reference to contacts and children. The committee noted with great interest the findings so far reported by the groups investigating the preventive effect of BCG in Uganda, Karimui and Burma. Similar interest was shown in the chemoprophylaxis trials.

In view of the findings so far available from these trials, the committee considers it premature at this stage to recommend BCG vaccination or chemoprophylaxis as a regular part of the leprosy control measures. Further research is still needed in these important subjects.

# HEALTH EDUCATION

Although it is most important to remove fear and irrational behavior regarding leprosy, it still seems that health education is too often a neglected subject in most countries. The attitude of the medical and health workers is often the first stumbling block. Health education is a most important aspect of leprosy control and should be given high priority. With regard to terminology and approach, all aspects of culture and language call for attention. To be effective and create a positive feeling for action, health education must be in a language people understand. The cause of prejudice should be investigated to develop a better methodology for overcoming it.

## TRAINING

In spite of all the emphasis given to this crucial measure, in a number of countries leprosy training for medical officers is neglected. Initial training and refresher courses and in-training should be conducted regularly for the various types of workers. Refresher courses should be repeated at regular intervals. Seminars and symposia should be frequently organized for all levels of workers.

Training in leprosy for undergraduate and postgraduate students is not receiving adequate attention, as a result of which the leprosy campaign suffers. The efficiency of the teaching and learning processes should be evaluated.

### ADMINISTRATIVE MEASURES

Planning. Many projects have not yet established quantitatively-defined objectives for the different activities. Each project should have realistic objectives, be feasible with respect to available resources, and defined in terms of quantity, areas and time. When defining objectives in quantitative terms, special attention should be given to the following priorities: treatment and follow-up of infectious and indeterminate patients and surveillance of contacts of the infectious patients.

Control measures, specialized or integrated, should aim at reaching a countrywide coverage within the shortest possible time.

Quantization of the problem. Data collection. The data available on prevalence in many countries do not represent the real situation, because case-finding has not reached the desired level and sometimes because the number of patients released from control is small, thus inflating the rates. More realistic figures and baseline information are required for planning and evaluating programs.

A uniform definition of terms is a basic requisite in a system of leprosy statistics. The information collected should allow comparisons between the various areas of the country and also between different countries and continents.

**Integration.** The principle of integration of leprosy control activities into the general health services is widely accepted, as are

the difficulties recognized in achieving it. One of the questions is how to prepare the polyvalent personnel both at medical and paramedical level.

Complete integration may not be feasible at the present time in many countries, however desirable it might be. If integration is attempted too soon, the leprosy work will be the first to suffer most. "Full integration will be attained only as a result of a longdrawn-out process and for this reason countries should be encouraged to take the first step as early as practicable . . . ' (WHO Expert Committee on Leprosy, 1970), after appropriate training and motivation of all the staff concerned. It should be begun and studied in a pilot or test area. Where feasible, leprosy control programs should be combined with other control programs.

**Evaluation.** Constant evaluation should be carried out in all projects, especially where control work has been undertaken for ten years or more, or in areas that appear to have achieved a reduction in incidence and prevalence.

Detection of a large number of early cases indicates the success of the program, but does not necessarily mean that leprosy is increasing. Detection of such benign cases and subsequent early release from control reduces the prevalence rate, apparently indicating that leprosy is being controlled. However, this does not mean that the source of infection has been removed from the community and further control measures must be continued.

Supervision. In most countries, adequate supervision by medical officers and senior auxillary staff is lacking or is unsatisfactory. It is essential that such supervision be provided and exercised for all activities connected with leprosy control.

# OPERATIONAL RESEARCH

The committee notes with interest the efforts to develop technics which can be useful in the detection of the high risk groups. Subjects relevant to immediate and/or long-term public health action should preferably be chosen and should include test runs of optimum solution given by the epidemiometric model. Efforts should continue to develop an epidemiological model to provide forecasts of the impact of the

programs on the natural course of leprosy and its control.

Studies should also be undertaken regarding the methodology to be applied in urban leprosy control.

Studies on reactivation and relapses are needed to determine the criteria and length of treatment required for releasing patients from control.

## RESULTS THAT MIGHT BE EXPECTED FROM THE PRESENT CONTROL METHODS

Where the methodology is correctly and

persistently applied and where there is cooperation of all concerned and where there has been motivation of the populace, it can be expected that there will be an increase of early benign cases, a decrease in the number of disabilities, a slow and progressive decrease of infectious cases and finally a gradual fall in the detection rate. The whole thing is such a long process that it requires a long time to achieve the end result. This prospect can only be improved by intensifying research.