Leprosy

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A broader scope for leprosy control

After examining the drawbacks of vertical programmes for the control of leprosy and the obstacles in the way of integration into primary health care systems, the authors outline experiences gained in the struggle against the disease in Ethiopia and Indonesia. They argue that, in the long run, leprosy control programmes can be implemented efficiently and effectively as integral parts of general health services based on the primary health care approach.

Vertical control programmes

In almost all countries where leprosy is endemic, activities aimed at controlling the disease began as vertical programmes. The current unsatisfactory achievement in leprosy control is, however, partly attributable to the limitations inherent in such programmes. The main problems associated with a vertical approach have been reported to be as follows *(1)*.

- A lack of comprehensive care within the vertical programme means that leprosy patients with general complaints have to use additional health services.
- There is a lack of continuous health care: staff in vertical programmes often have only occasional contacts with the community, as clinics are conducted periodically. This reduces the accessibility of leprosy services for patients who:
  - have leprosy reactions or other complications of the disease;
  - do not attend clinics on the appointed days and so fail to obtain antileprosy drugs;
  - wish to consult because of signs suggestive of leprosy.
- Vertical programmes provide insufficient coverage of populations.
- Resources are used inefficiently: duplication may occur and, after the introduction of multiple drug therapy, the number of patients under treatment will quickly decrease.

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- Too much attention is given to clinical and rehabilitative questions as compared with the control of the disease.
- The isolation of leprosy services may encourage sufferers from the disease to be shunned. People may find it difficult to understand why leprosy patients need special health services while it is advocated that the victims should be socially integrated.
- Vertical programmes are often more dependent on donor agencies than are integrated programmes. Consequently, integration reduces the danger of a collapse of care when donors withdraw their assistance.
- Job satisfaction and career opportunities are lacking for specialized leprosy field workers.

Most of these limitations are interrelated. Several of them hinder an optimal relationship between the leprosy services and the community. This may result in delayed self-reporting and reduced compliance with chemotherapy. Not all of the limitations occur in every vertical leprosy control programme. Nevertheless, in many situations they do point to the need for merging leprosy control into the primary health care system, including its first-level referral facilities such as district hospitals.

Integration means that leprosy control activities become the responsibility of decentralized, multipurpose, permanent health services.

Factors hindering integration

Although the need for integration is widely recognized and moves towards integration began a decade ago, actual progress has been slow in many countries. Where integration has been implemented, numerous vertical characteristics often remain. Existing programmes span the entire spectrum from fully vertical to fully integrated. Some of the most prominent factors accounting for the slowness of integration are indicated below *(1)*.

- Political commitment to primary health care is often lacking. This results in weak administrative support, low morale among staff, and organizational weakness in the primary health care system. Politicians and administrative authorities may be influenced by specialists in vertical programmes who do not accept that multipurpose health workers can deal with leprosy.
- Because of the low prevalence of leprosy, the disease often does not have a high priority in general health services, even when compared with other communicable diseases. After integration, financial resources for leprosy control may be decreased; this leads to a shortage of drugs, transport, laboratory equipment, and training opportunities, and to a worsening of operational performance.
- The infrastructure and/or managerial capacity of the primary health care system may be less adequate than that of the vertical programme. Thus the quality of laboratory services and referral facilities may be poor and intermediate general health managers may be overburdened with administrative or clinical tasks.
- Some donor agencies prefer to support vertical programmes with autonomous infrastructures.

- The stigma attached to leprosy reinforces the common belief among health workers, patients, politicians, administrators and the community that the disease should be tackled by a special service. In some situations, for the same reason, leprosy patients will not accept care from health workers who are members of their own communities.
- General health workers may not have adequate knowledge, skills and motivation. This arises mainly because of poor training of multipurpose health staff and community health workers, and because universities do not make a proper contribution to the training of doctors in leprosy control, programme management, and health systems research. Furthermore, integration may lead to a decline in the quality of leprosy control because multipurpose health workers see relatively few leprosy patients and so tend to become rusty in this field.
- General medical staff may be reluctant to do additional work without extra remuneration, such as may be available under vertical programmes.
- A conflict may arise between the interests of specialists in a wide range of data for monitoring and evaluation and those of administrators who wish to rationalize information systems. It frequently happens that the recording and reporting of integrated services does not permit satisfactory monitoring and evaluation of the performance of leprosy control programmes.

Two countries' experiences

The means of communication in Ethiopia are very poor and about half the population can be reached only by mule transport. The situation is particularly difficult during the rainy season. Nevertheless, the accessibility of the health services has been greatly improved. In 1984, 46.2% of the population was within 10 kilometres of a peripheral health unit. The concept of primary health care has been adopted and the Ministry of Health has formulated guiding principles on the prevention of diseases, the promotion of health, self-reliance, and community participation. There is a commitment to provide full coverage with essential health services, and measures of reorganization have been taken.

Unsatisfactory achievement in leprosy control is partly attributable to limitations inherent in vertical programmes.

In 1978 the Ministry of Health decided that leprosy control activities should be gradually integrated into the general health services. At present, most work is done by the National Leprosy Control Programme within a framework of partial or full integration with the general health services. Voluntary organizations also play a part, and their endeavour is structured vertically.

In the fully vertical service of Shoa Province, the All-Africa Leprosy and Rehabilitation Training Centre conducts a control programme using specialized workers and clinics.

The partially integrated service, provided in areas with a prevalence rate of 1 to 4 per 1000 population, is still mainly organized vertically but clinics are conducted in general health centres and health stations. Formerly, these clinics were conducted by

some 150 special leprosy field workers, who have recently been trained as multipurpose health workers in health posts and health centres. They provide comprehensive care but are still mainly concerned with leprosy control and continue to be supervised by regional leprosy officers and regional leprosy supervisors.

In the fully integrated leprosy service, available where the prevalence rate is less than 1 per 1000, all activities are carried out by the general health services under the responsibility of regional medical officers. Technical guidance and coordination are provided by the National Leprosy Control Programme. At the community level, community health workers are supervised by retrained leprosy health assistants, who may delegate this task to multipurpose health assistants attached to health stations.

The leprosy field workers who join the integrated programme have been trained for multipurpose activities but many have a special responsibility for leprosy control at the health station and health centre levels. The district leprosy supervisors, the regional leprosy medical officers, and the regional leprosy supervisors are still full-time leprosy workers in the integrated programme but they now have only technical supervisory responsibilities. Centrally, the specialist staff of the National Leprosy Control Programme are responsible for policy formulation, planning, the technical guidance of the integrated programme, the organization of all types of training in the leprosy field, the processing and analysis of data, and evaluation.

The existence of vertical leprosy control programmes reinforces the stigma attached to the disease.

At present the following health services facilities are available for leprosy control activities.

- *In 9 regions of high endemicity*

Vertical clinics	266
Partially integrated clinics	430
Fully integrated clinics	42

- *In 12 regions of low and moderate prevalence*

Vertical clinics	4
Partially integrated clinics	19
Fully integrated clinics	50

Data for 1985 indicated that the performance of vertical and partially integrated programmes still needed improvement: just under 22% of the 53 000 registered patients were on multidrug therapy (of whom 85% received it regularly), and of the remaining 40 000 or so who were on dapsone monotherapy only 64% were receiving it regularly. However, the performance of the integrated programmes was even worse: none of the patients covered by the fully integrated health services was receiving multidrug therapy, and the proportion of patients on monotherapy who were receiving regular treatment was estimated to be far below 60%. Apparently the recent integration of leprosy control into the primary health care system had not yet resulted in an improved performance.

The constraints mentioned above were evidently responsible for this unsatisfactory state of affairs. Particularly significant was the shortage of funds in the national programme. Another factor was that more attention was given to high-prevalence areas, where the vertical and partially integrated programmes were operating, than

to low-prevalence areas covered by fully integrated programmes.

It would be wrong at the present stage to conclude that integration leads to reduced performance. Experience gained in Indonesia, as outlined below, shows that excellent results can be obtained in integrated programmes.

Administratively, Indonesia has a fully integrated leprosy control programme. However, the technical supervisory system still has many vertical characteristics. At the national, provincial and district levels, specialized supervisory staff are available to give technical guidance and supervision. At the subdistrict level in areas of high endemicity, a field worker attached to each health centre deals solely with leprosy control activities while working in a multipurpose team. The policy now is to replace retiring single-purpose field workers with multipurpose staff.

In Indonesia's North Sulawesi Province, where multidrug therapy has been introduced gradually since 1984, 33% of the 3051 registered leprosy patients are now on this regimen and more than 95% of them take their treatment regularly, compared with 66% among those receiving dapsone monotherapy. It is expected that from 1988 onwards all new patients will receive multidrug therapy.

Leprosy control in primary health care

It is possible to prevent disabilities as a complication of leprosy. The most important tools at present available for disability prevention are early diagnosis, adequate chemotherapy, and adequate care for patients with impairment of peripheral nervous system function. Yet leprosy control programmes have not been very successful in this respect, because most health services have proved incapable of adequately delivering and applying these tools.

Will the integration of leprosy control programmes into primary care systems be the solution to this problem? Is it not too optimistic or even unrealistic to expect that this will be so, while in many countries there is still a diversity of experimental approaches to primary health care?

Integration does not imply that specialized elements should disappear from the health services.

The issue of integration of leprosy control into general health services has undergone a revival associated with the international acceptance of the primary health care approach based on equitable use of health resources, universal coverage, and community participation. The main relevance of this approach to leprosy control is that it encourages decision-makers to acknowledge that leprosy control should be the integral responsibility of community-based general health services and should, in keeping with the principle of equity, provide all leprosy patients with adequate chemotherapy and care so as to prevent the development of deformities and disabilities.

Although it is widely accepted that integration is desirable, we should not expect that it will put right all the failings of vertical programmes. Indeed, some people are afraid that integration will make things worse, especially since the operation of leprosy control programmes has become more complex through the introduction of multidrug therapy. Pragmatists may argue

that integration will possibly not bring much improvement in performance but that neither will it decrease quality. In reality, it has been shown in Indonesia and elsewhere that leprosy control programmes can be effectively implemented by general health services.

Given the limitations of vertical programmes and the fact that a clear epidemiological impact cannot be demonstrated for most of them, the pragmatic choice for many countries should be to adopt a more efficient solution that will probably maintain or even improve the quality of services.

At a meeting of the World Health Organization in November 1986 it was agreed that all leprosy patients should receive multidrug therapy as soon as possible. In most countries where the disease is endemic, this objective cannot be achieved by means of vertical programmes. Full utilization will have to be made of existing general health care systems, preferably based on the primary health care approach.

The following considerations are vital when integration is being contemplated.

- A prerequisite for integration is the existence of an adequately functioning general health services infrastructure. However, a vertical leprosy control programme with an adequate infrastructure can be used to strengthen a weak general health services infrastructure existing alongside it.
- The integration of leprosy control with the primary health care system does not imply that specialized elements should disappear from health services. Rather does it mean that leprosy control activities become the responsibility of decentralized, multipurpose, permanent health services providing the entire community with integrated, comprehensive and continuous care. Leprosy control may be fully implemented either by multipurpose workers in the primary care system or by special leprosy field workers who are members of multipurpose health teams. A specialized component should provide training, technical supervision and advice.

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Integration into primary health care systems is not a panacea for all the shortcomings of vertical leprosy control programmes. One should not expect too much from it in the short run. In the longer term, however, especially when the number of patients has declined following the introduction of multidrug therapy, it should be possible to implement leprosy control programmes efficiently and effectively as an integral part of general health services based on the primary care approach. □

Reference

1. *Report on the consultation on implementation of leprosy control through primary health care.* Geneva, World Health Organization, 1986 (unpublished document WHO/CDS/LEP/86.3).