

## FOCUS

## Eliminating Leprosy as a Public Health Problem: Progress and Challenges

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**There is a strong need to de-mystify leprosy. Leprosy referral services should be provided at all dermatological facilities and in a very limited number of specialized leprosy centres. Most supervisory and monitoring functions for leprosy can be incorporated within the overall surveillance of communicable diseases**

**I**t is well known that for centuries leprosy had remained a disease of endless misery and the leprosy patient the ultimate pariah in practically every society. Leprosy was considered a disease apart and not easily accepted within the mainstream of medicine and public health. However, this situation has greatly changed in recent years, thanks to the dramatic improvements in the treatment of the disease through multidrug therapy (MDT) and its widespread application as a public health strategy. This strategy not only aims at drastically reducing the disease burden but also the potential for transmission of the disease.

The success of MDT, introduced in the early 1980s, created so much awareness about the possibility of conquering this disease, at last, that the World Health Assembly, through a resolution in 1991, committed WHO and its member countries to the goal of eliminating leprosy as a public health problem by the year 2000, i.e. reducing the prevalence of the disease to less than one case per 10,000 population. The goal clearly reflects the aspirations of the leprosy-endemic countries and their determination to eliminate the disease at least from the public health point of view. No doubt the related problem of rehabilitation of the already-disabled patients, as well as the occurrence of small numbers of new cases, will continue to be challenges even beyond the year 2000. However, the very prospect of reducing the global disease burden by more than 97% by the year 2000, as compared with the situation only 15 years earlier, augurs well for the prospect of total eradication of the disease sometime during the early part of the next century.

The following tables and illustrations explain the current leprosy situation and the

progress made towards leprosy elimination.

By working towards our common goal of eliminating leprosy, what is it that we are aiming to achieve, and what progress have we made?

The first and foremost aim is to reduce drastically the disease burden in communities to insignificant levels. Over the past 10 to 15 years, we have reduced the disease burden by nearly 85%. In order to achieve our goal of leprosy elimination, this figure should reach 97% or more by the year 2000. This is indeed quite a challenging task as the remaining problem is concentrated in the more difficult-to-access areas and populations, as well as in areas where

trends over the past 10 to 15 years, the available information indicates only limited gains with no rapid reduction at the global level. Explanations for this include the following:

i) Implementation of MDT in many countries and in parts of

detected which have never had treatment before, although they might have had the disease for several years. In such situations increase in case detection simply reflects an extension of leprosy services and not necessarily increase in disease.

v) In some countries, increase in case detection figures has resulted from an unusually high detection of paucibacillary cases with single-skin lesions. This has been shown to be due to an increase in the sensitivity of diagnosis with a concomi-

tant reduction in the specificity of diagnosis. This problem is particularly intense in countries with specialized leprosy programmes where, as a result of reduced workload, the full-time leprosy workers are facing the threat of relocation or even loss of job. In some situations the practice of target-setting for case detection has made the problem of over-diagnosis still worse.

Even if the global case detection figures do not show a rapid decline there are two positive indications which increase our optimism towards leprosy elimination. Firstly there is enough information to indicate a rapid decline in the number and proportion of skin-smear positive cases, i.e. the true multibacillary cases. Secondly, even if the global figures do not show rapid decline in case detection, individual countries with well-operating programmes show a substantial decline in case detection. In countries or areas where effective MDT implementation has been in progress for less than five years. Therefore, the global less-than-satisfactory trend in case detection is largely the result of the time taken in many countries to effectively reach all patients with MDT. Thus the challenge today is to reach every patient in every village — not only to cure the patient by also to stop the spread of the disease.

\* Adequate referral facilities for management of complications are available in 3 GOB and 8 NGO hospitals which together offer 464 beds.

Leprosy is like any other disease and is 100 per cent curable. Bangladesh is fully geared towards achieving the leprosy elimination goal by the year 2000.

The third aim in relation to leprosy elimination is to reduce disability owing to leprosy. The most effective and cost-effective approach to disability prevention in leprosy is early identification of patients and their treatment with MDT. The widespread implementation of

MDT has contributed to early detection of cases and their disability-free cure. It is estimated that MDT, over the past 10 to 15 years, has contributed to the prevention of over 1 million from becoming disabled. In general, MDT services often in-

clude specific disability prevention/management activities such as patient education, provision of footwear, etc, depending upon the resources available.

However, the needs of the physical and social care of the already severely-disabled patients are met only in limited facilities, and even where community-based rehabilitation programmes operate, leprosy patients do not get sufficient attention. This is an area where the NGOs have a competitive advantage. With their humanitarian approach and resource availability, they are in a very good position to fill this important need. However, it is important to reach every patient in need of such services rather than to set up model or pilot projects, to demonstrate what is possible under ideal settings.

The fourth aim in relation to leprosy elimination is to see that the needs of the leprosy patients continue to be attended to and the leprosy situation continues to be monitored, even after the prevalence level of less than 1 in 10,000 is attained. This is best achieved by integrating leprosy services totally within general health services. This calls for including leprosy in the training programmes of all peripheral health workers and their supervisors. In the past, leprosy existed as a specialized activity in many countries mainly for the following reasons:

i) Leprosy was not accepted

as part of general medical care

and the general health services

did not want to deal with it.

ii) Leprosy work was consid-

ered a vocation apparently re-

quiring extraordinary sacrifice

and the facilities of special in-

stitutions.

iii) Leprosy workers did not

accept that general health

workers could handle leprosy

largely owing to the perception

of leprosy being their exclusive

may be difficult to reach by the target date of the year 2000.

Having reviewed the aims and challenges of the leprosy elimination goal, what is it that we need to do more to reach the goal?

Firstly, there is a clear need to further intensify our common commitment and recognize the urgency of reaching the goal and raising the resources needed. The political commitment in the past has been extremely good and we need to strengthen it further.

Secondly, we need to develop strategies and activities to reach every patient in every village and implement them vigorously. The WHO initiatives of Special Action Projects for the Elimination of Leprosy (SAPEL) and Leprosy Elimination Campaigns (LEC) aim to address the problems of difficult-to-access areas on the one hand and the problem of hidden cases on the other.

Thirdly, we need to monitor the progress closely and find solutions to specific problems.

Again, WHO has a special initiative on this through a Leprosy Elimination Monitoring (LEM) scheme.

Lastly, there is an urgent need for all of us — national governments, national and international NGOs, and bilateral and international organizations — to recognize the unique opportunity we have to identify our competitive advantages, to coordinate our resources, and to work to reach our common goal of eliminating leprosy by the year 2000.

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## Global Burden of Leprosy 1996

- Estimated number of cases 1.3 million (10-12 million in 1985)
- Number of registered cases 0.94 million (5.4 million in 1985)
- Number of new cases detected in 1995 560 000
- Estimated number of disabled individuals due to leprosy 1 to 2 million

the disease has entrenched itself in strong pockets of endemicity.

The second, albeit indirect, aim is to reduce the potential for transmission of the infection by treating and curing existing cases, and consequently reducing the occurrence of new cases. Changes in transmission of infection, however, is difficult to measure as we have no tool to directly measure infection. Even the indirect measurement of incidence or occurrence of true new cases is not easy. The only measure we have, therefore, is the number of cases detected under programme conditions with its limitations.

With regard to case detection

## What needs to be done?

- Recognize the opportunity to conquer leprosy
- Intensify commitment - political, professional and financial through:
  - Leprosy Elimination Campaigns (LEC)
  - Special Action Projects (SAPEL)
- Closely monitor progress towards leprosy elimination at community level

iii) In general, case detection does not always correlate with the occurrence of new cases and a high proportion of detections in many countries simply relate to identification of old "backlog" cases. This is largely the result of applying ineffective strategies for case detection.

iv) Even if leprosy cases are detected early, i.e. as soon as the disease manifests itself, it does not necessarily indicate recently-acquired infection, since leprosy has a long incubation period or latency of several years. Many of the cases detected in recent years could have been infected even before MDT was introduced in their communities.

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## Leprosy Status in Bangladesh

Project is 47 crore for a 5-year period.

Ten countries — India, Brazil, Indonesia, Myanmar, Bangladesh, Nepal, Nigeria, Philippines, Mozambique and Ethiopia — contribute 90 per cent of the global leprosy prevalence by the year 2000.

GOB has followed up this resolution by making substantial allocations to the National Leprosy Control Programme. The total allocation for Leprosy in the World Bank funded Fourth Population and Health

Survey is 47 crore for a 5-year period.

With an estimated 80,000 cases, Bangladesh is one among the six most endemic countries for leprosy and has the third highest number of estimated cases.

Bangladesh has one of the

highest deformity rates among newly detected cases — 21.4 per cent in 1993, 14 per cent in 1994 and 13 per cent in 1995. This indicates that greater efforts have to be directed at early case detection and prompt treatment with the very effective Multi-Drug Therapy (MDT).

## Achievements of the Bangladesh National Leprosy Programme

\* Total of 600 leprosy treatment centres are established in the country. This includes all

the thana health complexes, district headquarters, urban areas and metropolitan cities.

Thus leprosy control activities are integrated into the general health services. All treatment centres have been provided with adequate stock of drugs and the treatment is given free.

\* Over 26,000 general health staff have been given training or orientation in leprosy.

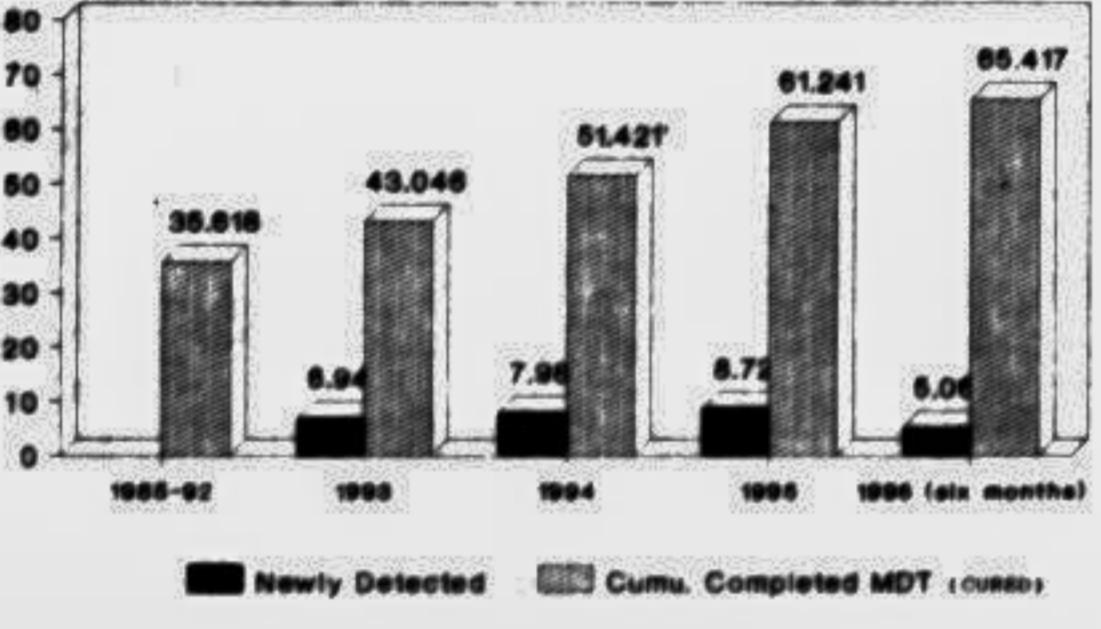
\* Country-wide a total of 44,164 leprosy cases have been registered for treatment in the last three years of which 29,999 have been declared cured. From 1985 to date, over 65,000 patients have been cured through MDT in Bangladesh.

\* The implementation is being done in close collaboration with 10 NGOs, who are working in 23 districts comprising 195 thanas.

\* Adequate referral facilities for management of complications are available in 3 GOB and 8 NGO hospitals which together offer 464 beds.

Leprosy is like any other disease and is 100 per cent curable. Bangladesh is fully geared towards achieving the leprosy elimination goal by the year 2000.

## Result of Leprosy Elimination in Bangladesh



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## Leprosy Detection in Bangladesh

THOUSANDS

YEAR

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