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Editorial

REMAINING CHALLENGES TOWARDS ELIMINATION OF LEPROSY

Introduction

Among all communicable diseases, leprosy remains one of the leading causes of permanent physical disabilities worldwide. The disease and its visible deformities result in intense social stigma and in the discrimination of patients and their families. It commonly affects individuals in the most productive stage of their life and thus imposes a significant burden on the community. An intensified strategy focusing on the local level has recently been defined by WHO to make a fresh attempt at overcoming the remaining hurdles in the fight against leprosy. The key elements of WHO's intensified strategy to eliminate leprosy are early case-detection and treatment using multidrug therapy (MDT) – and the greatest challenge is to ensure its vigorous implementation. If elimination is to be achieved, it is imperative that MDT services become accessible to every community in all endemic countries.

The elimination strategy

The elimination of leprosy as a public health problem aims at reducing the prevalence, at national level, to less than one case per 10,000 population. The strategy initiated by WHO to achieve this aim, based on early case-detection and cure with MDT, assumes that:

- treatment with MDT, together with early case-detection, is highly effective;
- the reduction of prevalence to very low levels will lead, in time, to interruption of transmission of infection and reduce disease incidence to insignificant levels;
- having an insidious onset, a chronic course and a very strong self-healing character, it is not possible to measure the incidence of leprosy from routine surveillance systems;
- until a steady epidemiological state is reached, with no more 'hidden' cases and with MDT universally available, new cases will only reflect surveillance programme performance and not incidence;
- because of the lack of appropriate tools, elimination rather than eradication remains the objective.

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248 M. P. Neira and D. Daumerie

Main achievements over the last 15 years

- By the end of 1999, more than 10 million cases had been treated and cured.¹
- All registered cases are today receiving MDT.²
- Less than one in 1000 patients (0.1%) suffer relapses.³
- No resistance to MDT has been reported.⁴
- The number of countries showing prevalence rates above one in 10 000 population has been reduced from 122, in 1985, to 24 at the end of 1999.¹

Main limitations of the current strategy

Whilst, on the eve of the original elimination target date, which was set for the end of the year 2000, the global prevalence rate of registered cases stands at about 1.4 per 10,000, in the 12 most endemic countries the average prevalence rate remains 4.5 per 10,000. This demonstrates the limitations of the current strategy and indicates that additional efforts and new approaches are required if elimination is to be achieved. Some countries will need to pursue further and intensify their activities beyond the year 2000 in order to eliminate leprosy. The reasons why elimination will not be achieved in these countries by the end of the year 2000 are varied and include: high prevalence rates (Brazil, India and Nepal), intensity of disease transmission (Guinea, some states in India, and Madagascar), limited geographical coverage with MDT services and, in some countries, civil strife and poor health infrastructures (Angola, Democratic Republic of Congo, and Mozambique).

Basis of the intensified strategy for 2000-2005

Although most of the expectations of the global elimination programme were met during the period 1991–1997, there have been some setbacks since then. This is due, in part, to intensified activities in some parts of the world successfully revealing many epidemiological and operational situations that had not previously been well perceived and which needed to be analysed further. Whilst the 1991 World Health Assembly resolution on the elimination of leprosy clearly defined targets and achievements, it proved difficult to reach a consensus on the target as being one case per 10,000 population. The scientific community, governments and donor agencies all argued that elimination should relate to incidence reduction, claiming that a global target was meaningless, and pointing out that the strategy paid insufficient attention to people disabled by leprosy. The major concern today is the stability of the number of newly detected cases stagnating at some 500,000 cases per year. Obviously, leprosy has not yet been eliminated.

Experience shows that the number of health facilities able to provide MDT services is limited and that, even when available, MDT is only provided for a limited time during each month. Considered as a special disease, the diagnosis and treatment of leprosy are often considered beyond the capacity and responsibility of general health services and therefore the disease remains isolated.

In this context, WHO and its advisory bodies have developed technical and operational mechanisms to overcome these obstacles. Endemic countries are being provided with simplified guidelines for case management, training to strengthen local management capacity, shortened treatment schedules, free supply of MDT drugs in blister calendar packs, and direct support, both financial and technical, in the form of leprosy elimination campaigns (LEC) and special action projects for the elimination of leprosy (SAPEL). All this is very useful but the impact on leprosy at local level remains questionable.

Elements of the intensified strategy

The delivery of MDT services within general health services is the single most critical element in the intensified elimination strategy. Without it, case-finding, diagnosis, classification and drug supply efforts are meaningless. Thus the revised strategy focuses on the coherence of these activities at district level.

IDENTIFICATION OF ENDEMIC DISTRICTS

Endemic countries exhibit regional differences in terms of disease burden, health service coverage and programme efficiency. In order to appropriately assess the epidemiological situation, and surveillance and control needs, countries in which leprosy remains endemic must implement a micro-information system providing data from as far down as the village level.

MDT SERVICES INTEGRATED INTO GENERAL HEALTH FACILITIES

MDT services must become available and accessible at all health centres so that patients can get treatment easily from their nearest centre. The integration of MDT services into general health services is currently regarded as the key to elimination. General health services are usually spread over a large area and often have close and frequent contact with the local community. Their participation would thus enhance case-finding and case-holding activities whilst improving the cost-effectiveness of programmes.

Successful integration can be achieved only if it is simple, practical, and if tasks assigned to health workers are clear and in line with their daily routine activities – including maintaining information systems. At the local level, integration will help in sustaining MDT services, especially in areas where prevalence is declining. Some national programmes already have integrated leprosy services, mainly because of the urgent need to expand MDT coverage; national co-ordination will, however, generally remain a central activity, providing technical guidance, monitoring activities and evaluating progress towards elimination. Training for surveillance, control and research will also remain the responsibility of a centralized service. National referral centres will be maintained or established to provide support to the general health services in diagnosing difficult cases and in the management of leprosy-related complications.

MONITORING ELIMINATION AT THE DISTRICT LEVEL

Most endemic countries are now using well-standardized information systems. The essential indicators have been identified as prevalence, case-detection, MDT coverage, cure rates, relapses and the number of newly detected cases with grade 2 disabilities and impairments. In the context of the improved strategy, however, these indicators are stored in an integrated district-level database and analysed at district level. Such monitoring approaches will allow

250 M. P. Neira and D. Daumerie

more pertinent assessment of performance of MDT services, particularly drug availability, cure rates and quality of patient care.

PROMOTING COMMUNITY ACTION

Increased participation of the community in elimination activities will reduce the fear of leprosy and the stigma attached to the disease. The main difficulty encountered currently is ignorance, and public awareness of the signs, symptoms and treatment of the disease needs to be improved. Elimination cannot depend upon health services alone; it is crucial that obstacles to community participation be identified in order to ensure enhanced contributions.

HISTORICAL HANGOVERS

Leprosy generates intense emotions probably owing to the historical stigma attached to it. The fight against leprosy has traditionally been undertaken by a relatively small group of people, highly dedicated with a strong humanitarian commitment. This phenomenon relates not only to programme managers, but also to groups of experts and charitable organizations. To some extent, this explains why achievements in leprosy control during the last half of the 20th century remained poorly recognized. Today, leprosy can be cured – but making the idea attractive to the public, the scientific community, decision-makers and politicians seems to be a difficult task. Awareness of the current reality that leprosy can be eliminated needs to be created through intensified information, education and communication efforts.

RE-MOTIVATING THE RESEARCH COMMUNITY

Estimating the exact enormity of the task ahead to achieve elimination, particularly in areas where high levels of new case-detection rates exist, is extremely difficult, owing mainly to the weakness of the tools currently available. New, more reliable and effective diagnostic, preventive and therapeutic tools are needed, and for this, research must be strongly promoted. Alternative drugs that are more effective and less toxic must be found for the management of adverse reactions; new methods for the early detection and treatment of lepra reactions and neuritis need to be developed and novel approaches to their prevention need to be explored; a common regimen for both multibacillary (MB) and paucibacillary (PB) leprosy would be a great advantage. Epidemiological and operational research is also required and should be encouraged and strengthened wherever possible. The research community needs to be motivated to find solutions.

PREVENTION OF DISABILITIES AND REHABILITATION

Simple disability prevention and management components need to be incorporated into leprosy elimination programmes. The most cost-effective approach to this would be to strengthen collaboration with other relevant services and non-governmental organizations.

The strategic plan and the role of WHO

WHO's role is to assist countries in developing more effective health systems. It remains the repository of knowledge on health issues, it sets global standards and pleads causes —

including that of eliminating leprosy. During the period 2000–2005, WHO and its partners will focus on eliminating leprosy in the countries where the disease remains a public health problem and on sustaining elimination in those countries which have recently achieved it. WHO hopes that new partnerships will develop more enthusiasm for leprosy elimination at all levels, both nationally and internationally. The implementation of an intensified strategy is expected to bring about the political commitment required to achieve elimination. There will undoubtedly be opportunities for creating a new image for leprosy through global and local advocacy, resulting in stronger partnerships and additional resources.

Focus at the country level

COUNTRIES THAT HAVE NOT YET REACHED ELIMINATION AT NATIONAL LEVEL

Several countries/areas have already been identified as having a greater leprosy problem than was previously believed. In some places, several years of intensified activities may be required to evaluate the real magnitude of the leprosy problem. In the new strategy, in-depth analysis of the leprosy situation in individual countries, in collaboration with WHO and other agencies, is foreseen in order to estimate the additional time likely to be required to achieve elimination at national and district levels, to decide on additional interventions to be introduced, to intensify ongoing ones or, when needed, to repeat them, and to estimate the cost of those interventions.

COUNTRIES THAT HAVE ALREADY REACHED THE ELIMINATION TARGET AT NATIONAL LEVEL

These countries must ensure that elimination is sustained at national level and must identify districts where the elimination target has not yet been reached. Intensive, time-limited activities should then be carried out as required. Certification or validation of elimination would be of little value and would not be cost-effective in the absence of reliable tools to ascertain absence of transmission.

Future challenges

Although significant progress has been made towards eliminating leprosy as a public health problem worldwide, it is clear that some countries will not reach the elimination target at national level by the end of the year 2000. In those countries where the target has been reached, there is still a need to achieve elimination at subnational levels and sustain elimination activities for several more years.

It is evident that owing to improved disease control activities, the detection rate of new cases has increased over the last few years. This does not mean that transmission is on the increase or that it has not been interrupted. This status simply reflects the inadequacy and inefficiency of some programmes in the past.

Leprosy is feared because of the disabilities it causes. Little has yet been done in this area and the issue would perhaps be better addressed through integrated services for all disabled people in the community, which until now has not been the case. Until then, early detection and treatment with MDT will remain the best strategy for the prevention of occurrence of

252 M. P. Neira and D. Daumerie

disabilities. The image of leprosy has remained unchanged for many thousands of years because of poor awareness of the impact of the disease. One of the big challenges now will be to accept that leprosy workers can hand over the job of promoting the necessary change we are so passionately trying to bring about to our colleagues in the primary health care services. In this long battle against leprosy, many excellent institutions have also contributed enormously towards the improvement of care through research and training. They will now be needed for activities such as simplifying case management, improving surveillance, strengthening socioeconomic rehabilitation services and remaining alert to counter any unforeseen challenges.

In the coming century, priorities and commitments are likely to change. Other diseases such as malaria, tuberculosis and AIDS, which are on the increase, will gradually absorb most of the resources available for health. Although this can easily be justified, it is the responsibility of each one of us to maintain leprosy high on the health agenda, not to lose momentum and, most importantly, not to lose this opportunity for its elimination.

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⁴ WHO Expert Committee on Leprosy, Seventh Report, 1998.

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