

ELIMINATION OF LEPROSY

Questions

and

Answers

Leprosy Control Programme
World Health Organization





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FOREWORD

Following the adoption of resolution WHA 44.9 on the elimination of leprosy as a public health problem by the year 2000 in the World Health Assembly in May 1991, the increased political and professional commitment in several countries to attain that goal has been phenomenal. Since the adoption of the resolution, the progress made in controlling leprosy has more than justified the initial optimism. However, the elimination goal cannot be reached without a substantial increase in control efforts by all concerned.

During the past two years several doubts and questions have been raised on the exact meaning of eliminating leprosy as a public health problem by the year 2000, and on the various issues connected with it. Some of these doubts are a result of misunderstanding of the resolution and its implications. It has therefore become necessary to clarify the situation, particularly for leprosy workers in the field.

This document, prepared by the Leprosy Unit of WHO, presents - in question-and-answer form - the main issues that require explanation in the context of eliminating leprosy. It is hoped that this document will clarify the situation and allay any doubts on the part of the leprosy workers, so that they can forge ahead with determination towards the goal set by the World Health Assembly.

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**QUESTIONS AND ANSWERS ON
ELIMINATION OF LEPROSY
AS A PUBLIC HEALTH PROBLEM**

Q.1

What is the essential message conveyed by WHO in establishing the goal of elimination of leprosy as a public health problem by the year 2000?

A: WHO wants to show that leprosy is not an endless problem and that, within a foreseeable period and through effective disease control operations - it is possible to eliminate the disease in public health terms.

Q.2

What exactly is the basis for setting this goal?

A: Today we can feel confident that a drastic reduction in the prevalence of this disease can be brought about by treating patients with multidrug therapy (MDT).

Q.3

What is meant by eliminating leprosy as a public health problem?

A: This means reducing the proportion of leprosy patients in the community to very low levels, specifically below one case per 10 000 population.

Q.4

Because case-finding on a global scale presents major difficulties, are we talking about estimated prevalence or registered prevalence?

A: The elimination goal refers to estimated prevalence. But before very long and with improved case detection it is expected that the gap between estimated and registered prevalence will be closed.

Q.5

Why has a prevalence of below one case per 10 000 population been chosen as the level of elimination?

A: There are some indications that around the prevalence level of one in 10 000 there is a tendency for the disease to die out, and any resurgence of the disease is highly improbable.

Q.6

What is the definition of a case of leprosy? Does it include cured patients who still have residual disabilities?

A: The report of the 6th Expert Committee on Leprosy identifies a case as a person in need of or under chemotherapy for leprosy. It does not include cured patients with residual disabilities.

Q.7

At what level of population cluster is elimination expected to be achieved?

A: Ideally elimination should be attained at all levels - regionally, nationally and locally. However, in view of the uneven distribution of the disease, it is not always possible to envisage attaining the targeted prevalence level of one in 10 000 population for every local population cluster. At the minimum, we hope to attain elimination levels at the national level, and for larger countries at the first sub-national level (province or state).

Q.8

What is the basis for setting the target year as 2000 A.D.?

A: This is simply a convenient date, because it coincides with other public health targets for that year. Consequently the turn of the century offers an opportunity to step up leprosy control activities sufficiently to meet the goal.

Q.9

Why has a reduction of prevalence been selected as the yardstick for elimination?

A: The main thrust of the strategy to eliminate leprosy as a public health problem is to reduce the prevalence of the disease, through MDT, to very low levels. In the course of time, this is expected to lead to a reduction in incidence, since the transmission of infection with M. leprae will have been interrupted. Leprosy is unique among communicable diseases in that a high proportion of the prevalence pool is contributed by the back-log cases, that is, cases that have occurred over a period of time and have remained active in the absence of effective treatment. Reducing the prevalence is therefore an appropriate way of measuring progress towards the goal of elimination.

Q.10

Will new cases of leprosy continue to occur beyond the year 2000? If so, how can they be explained?

A: *New cases will continue to occur in small numbers beyond the year 2000 as a result of the disease making an appearance in individuals who acquired their infection several years earlier, before the introduction of MDT. However, through the continued application of MDT, and possibly through other interventions that might become available later on, the number of new cases is expected to diminish steadily over a period of years. We can expect the total eradication of leprosy some time in the early part of the next century.*

Q.11

If we can interrupt the transmission of infection with leprosy organisms in the community, will that be enough to eliminate the disease as public health problem?

A: With very high MDT coverage, it is expected that the pool of infectious sources will be wiped out in the course of time, and transmission of infection with M. leprae will cease. However, at any time new cases are likely to occur that are not brought about by continued transmission of infection but are simply the result of infections acquired several years earlier.

Q.12

How does the concept of leprosy elimination differ from that of leprosy control?

A: Leprosy control was a more limited concept, based on strenuous - but not always successful - efforts to find leprosy cases and treat them with one or more drugs. By contrast, the concept of leprosy elimination takes advantage of the availability of the effective technology of MDT, and its capacity to reduce disease prevalence drastically, to work towards a defined goal within a specified timeframe.

Q.13

What epidemiological advantages over other diseases does leprosy have that make elimination possible?

A: The special features of leprosy are that: (i) the infected human being is the only reservoir and source of infection; (ii) under natural conditions, incident cases make up only a small fraction of the prevalence pool; (iii) below a certain level of prevalence, any resurgence of the disease is very unlikely; and (iv) unlike tuberculosis, where HIV-positive individuals have lower resistance to the disease, the leprosy situation does not appear to be adversely affected by HIV infection.

Q.14

What possible problems could arise in the future through the continued application of multidrug therapy that might prevent the goal of elimination being attained ?

- A:** *We all need to be on our guard against such problems as: (i) treatment failures due to drug resistance arising from injudicious use of drugs; (ii) a loss of momentum in countries which start with relatively high incidence levels when they are faced with the difficulties of eliminating the disease; (iii) initial success breeding complacency so that health services allow MDT coverage to fall off; and (iv) total breakdown of health services due to civil disturbances or other factors.*

Q.15

What are the major elements of the global strategy to achieve the goal of leprosy elimination?

A: Firstly, the global strategy will build on geographic stratification of the problem on the basis of epidemiological and operational factors. Next, the high priority countries or areas will be identified and targeted. Thirdly, intensive and flexible deployment of MDT will be accompanied by intensive case detection. And finally, there will be close monitoring of targets as we progress along the road to complete elimination.

Q.16

What are the essential requirements for attaining the elimination goal?

- A:** *The ingredients for success are: (i) sustained high levels of MDT coverage - in the region of 95%; (ii) high levels of compliance and treatment completion rates; (iii) a narrowing of the gap between estimated and registered cases through effective case detection, to the point where it is no more than 10% of the estimated cases; (iv) updating of the national plans of action and constant monitoring of the progress made; and (v) continued political commitment and mobilization of resources.*

Q.17

What impact is the elimination strategy expected to have on the disability situation?

- A:** *Early detection of cases and early cure through MDT will initially have only an indirect impact on the numbers of people disabled by leprosy. In the longer term, the strategy will prevent hundreds of thousands of disabilities which would otherwise occur.*

Q.18

Are disability prevention and management given priority within the elimination strategy? What about similar activities and rehabilitation during the post-elimination phase?

A: Disability prevention and management through cost-effective methods will be a priority concern, next only to MDT and case detection. As the prevalence of leprosy declines, the diminished workload should make it possible to give higher priority to these aspects, and this will be even more the case in the post-elimination phase.

Q.19

What is the role of WHO in ensuring progress towards elimination?

A:19 The role of WHO in the elimination strategy includes (i) ensuring technical support to countries for leprosy control, including recommendations for treatment, case detection and so forth; (ii) stimulating and sustaining political commitment to the elimination goal; (iii) assisting countries to develop strategies and plans of action for eliminating leprosy; (iv) assisting countries to mobilize resources, particularly for implementing MDT; (v) building national capabilities through training, including technical and managerial training; (vi) monitoring the global progress towards elimination, and assisting countries to monitor and evaluate their programmes; and (vii) health systems research aimed at solving operational problems in leprosy control, particularly at the local level.

Q.20

Is there not a risk that over-optimistic expectations for the elimination of leprosy might dilute the priority at present accorded to leprosy control and leprosy research, and might even undermine the fund-raising potential of various agencies, particularly of the nongovernmental organizations?

A: Setting the goal of elimination by the year 2000 does not mean that the international health community should become complacent, nor should early success of the strategy encourage anyone to lower their guard. On the contrary, efforts should be further intensified to meet the remaining challenge, which is still formidable. Nor should initial success lead to any dilution of the support for leprosy control or research, whether among national governments of endemic countries or among nongovernmental organizations. The messages that go out to the various agencies concerned and to the public should make this clear.

Q.21

Will the attainment of the goal of elimination mean the end of leprosy work? What actions will be needed nearer the time of attaining that goal?

A: Eliminating leprosy as a public health problem will not mark the end of leprosy work. Special strategies will have to be developed in the run-up to elimination and in the post-elimination phase. A considerable amount of work will go on beyond the year 2000, particularly in the field of rehabilitation and in ensuring maintenance of skills for diagnosis and treatment of the small number of new cases that will continue to occur.

Q.22

What is the scale of the disease problem to be tackled between now and the year 2000? What additional resources are needed for this purpose?

A: Between 1993 and the year 2000, it is expected that a total of 6.5 million patients will have to be treated with MDT. The total cost of reaching these patients and curing them is estimated at between US\$ 400 and 600 million, of which about 25% will be required for drugs.

Q.23

Finally, is the goal of elimination reasonable and feasible? What urgent actions must be taken now to ensure the attainment of the goal?

A: The goal of eliminating leprosy is both reasonable and feasible. However, it will not be attained easily, and will call for the concerted and coordinated efforts of all concerned, together with the mobilization of additional resources.

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