

Editorial

LEPROSY BY THE YEAR 2000—WHAT IS BEING ELIMINATED?

Several important statements on the current state of leprosy in the world have recently appeared. The article by Cairns Smith in this issue of *Leprosy Review* accompanies (see p. 195) position papers in WHO's *Weekly Epidemiological Record (WER)*. No fewer than four issues of *WER* were devoted to the subject within two months, timed to coincide with the meeting of WHO's Seventh Expert Committee on Leprosy.

In simplest terms, the world's leprosy situation is as follows: the WHO has declared 'Elimination of leprosy as a public health problem by the year 2000' as one of its goals, defining elimination in terms of a prevalence target. Prevalence has indeed declined rapidly, but this is largely the result of cleaning of registers and shortening the recommended duration of drug therapy. Though this is no doubt an achievement; the emphasis upon prevalence has obfuscated the issue of incidence trends.

The situation is disturbing, on two counts. First, although incidence appears to have declined in some countries, there is no convincing evidence that it has done so on a global scale. Second, the way that the elimination issue is being addressed is inadequate.

The *WER* report on 'Global case detection trend in leprosy' (13 June 1997) is not a simple document. We encourage all with interests in leprosy to study it. It begins by underlining the important question of whether declining prevalence impacts on 'transmission of the disease' (it would be better to speak of transmission of infection and subsequent appearance of disease). It is noted that 'globally, and at national level in many countries, detection has been increasing significantly over the past 10 years'. Indeed, when India is excluded, annual cases have almost doubled. In order to explain this observation, we are given an hypothesis: 'Assuming that introduction of MDT was successful in 'clearing' the accumulated backlog of prevalence, i.e. curing most of the already known cases, a new situation has now arisen. For the first time in the history of leprosy control, detection and prevalence are converging, and it is becoming increasingly obvious that detection to a large extent really reflects a hidden prevalence which was not very well perceived before' (the conclusion may not be obvious to all readers). The report then refers to 'indirect indicators, such as detection of children below 15 years, detection of multibacillary (MB) cases and proportion of disabled patients among newly-detected cases' and finds that 'the situation seems to be even more interesting'—with increases in child detection rates and proportions of multibacillary cases since 1985, and inconsistent trends in proportions of newly-detected cases with disabilities (declines in India, increases elsewhere). The implications of such figures, which are complicated by changing ascertainment criteria, are far from obvious. The report admits that 'At first glance one might think that [the] incidence of leprosy is remaining the same, or is even increasing in some parts of the world...', and follows by reference to 'some

special studies' (which are not identified) that would suggest that the incidence is decreasing by about 10% per year. We then read, 'In one way, increasing detection trends provide reassurance, since they clearly demonstrate the effectiveness of the global elimination strategy in identifying the backlog cases for treatment with MDT'. We find the demonstration far from clear, and almost circular. The report then reviews the several WHO regions of the world, in none of which is there a consistent or convincing decline in leprosy in all member states, but ends on an optimistic note: 'The fact that the trend in the global leprosy detection (*sic*) has not changed over the last 12 years should not be interpreted as a weakness of the global elimination strategy.... While information is lacking on how to estimate the current annual incidence of the disease from case detection figures, it can reasonably be assumed that incidence represents no more than one-third of the annual detection. If this assumption is true, ... then one could expect a rapid and considerable decrease in global detection rates in the next 2–3 years.' Once again an assumption, out of nowhere and unsupported, this time followed by an inference which 'could' be true (readers of the WER report may wish to count the number of times this word is used). This is not the language of rigorous epidemiology.

Beyond the complexities of such logic, there is another disturbing element to leprosy figures today. The diminishing leprosy 'problem' recorded in some countries is likely to be at least partly attributable to amalgamation of leprosy control programmes into general health services. The increase in disability in new cases in endemic countries excluding India, as discussed by Cairns Smith, is to be expected when leprosy diagnoses are left to general health staff who increasingly recognize leprosy only when the patient presents with a classic disability. In such a situation, many early (and self-healing?) cases will be missed. As anyone knows, an efficient way to make a disease disappear is to stop looking for it...

The extent to which the year 2000 represents a watershed for leprosy is not widely appreciated. The considerable funds extended generously to leprosy control by the Sasakawa Foundation (10 million US \$ per year for the last five years of this century) are not likely to be extended. The WHO's leprosy unit will almost certainly be reduced in size, and may cease to exist altogether. No doubt enthusiastic press reports will emanate from Geneva, declaring the elimination of leprosy as a public health problem to have been one of the successes of the twentieth century. These announcements will have an effect on leprosy charities, which will face further difficulties in raising funds, although these will be all the more needed with the discontinuation of alternative support—for no-one believes that leprosy will disappear by the year 2000, let alone its disabilities.

Given the importance and implications of the leprosy elimination target, we require harder logic and clearer vision than is evident today. Though the epidemiology of leprosy poses formidable difficulties, much could still be done to improve the quality of leprosy data, by insisting upon—and funding—external reviews which frankly document ascertainment methods and diagnostic criteria. And these data must be subject to critical and transparent analyses if they are to be convincing. Unsupported assumptions, and predictions of what 'could' happen are not enough. What if it only appears to be: or if it doesn't?

*Department of Epidemiology
London School of Hygiene & Tropical Medicine
Keppel Street, London WC1E 7HT*

P. E. M. FINE

*Karonga Prevention Trial
PO Box 46
Chilumba, Malawi*

D. K. WARNDORFF