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Success Brings New Challenges

Dr S.K. Noordeen, the architect of WHO's elimination strategy, looks at what has been achieved and the work that remains to be done.

In the history of public health there are not many achievements as gratifying as the elimination of leprosy. But while leprosy is a relatively small problem today in public health terms, it continues to pose important challenges in terms of physical and social rehabilitation.

The idea that leprosy could be addressed from the public health perspective developed in the wake of the introduction of the first effective anti-leprosy drug, Dapsone, back in the 1950s. As leprosy patients were the only source of infection, it was quite conceivable that by treating all patients in the community, leprosy transmission in time could be arrested and thus leprosy controlled. However, the results with Dapsone were generally disappointing due to the slow cure effected by the drug and the development of drug resistance over a period of time.

The 1970s saw renewed interest in leprosy control largely due to the identification of newer drugs such as Rifampicin and Clofazimine as highly effective in the treatment of leprosy. However, the way the drugs were administered to patients by different health workers varied widely. Therefore, it was only natural for WHO to embark on an initiative to develop a consensus on treatment of leprosy for control programs through the establishment of a study group on the subject.

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The WHO Study Group which met in 1981 had a judicious combination of microbiologists, chemotherapy experts, leprologists and leprosy control program managers. The recommendation on multidrug therapy (MDT) made by the group was the result of intense analysis of all available scientific evidence, on-the-ground realities of implementing public health programs and a strong desire to bring about a major impact on the leprosy situation in endemic countries — even if this meant compromising on some less critical scientific requirements.

The report of the WHO Study Group on *Chemotherapy of Leprosy for Control Programs*, which was published in 1982, is considered today as a historic document that enabled patients to receive standard, highly effective and acceptable treatment for their disease through MDT.

The initial reaction of leprosy workers to the WHO-recommended MDT varied widely as it had introduced some revolutionary changes such as treating patients for finite periods of time and simplifying classification of the disease. However, the early results of MDT as observed in the field were so highly encouraging that the initial reservations and criticisms died out over a period time. MDT was accepted in all countries and programs, and leprosy workers everywhere received it with great enthusiasm, leading to renewed motivation to control the disease.

HISTORIC OPPORTUNITY

The phenomenal reduction in the prevalence of leprosy seen even within five years of the introduction of MDT resulted in further intensification of leprosy control activities everywhere. This led WHO to recognize there was a historic opportunity to aim at the elimination of leprosy as a public health problem with a deadline of the year 2000.

WHO defined elimination as reducing prevalence of the disease to less than one case per 10,000 population. This is not to be confused with eradication of the disease — aiming at reaching zero prevalence and zero transmission, which is not possible. The idea was that when leprosy prevalence reached a level below one case per 10,000 population, the disease would die out over a period of time, provided anti-leprosy measures, including MDT, continued to be available.

It may be argued that the definition of leprosy elimination, the target figure of one in 10,000 and the deadline of the year 2000 were arbitrary, and not open to strict scientific "proof." Nonetheless, the goal set by WHO enabled development of strong political commitment everywhere and effective and widespread leprosy control programs in all endemic countries.

With regard to the deadline itself, the year 2000 was essentially an aspirational goal. When progress proved insufficient, the goal was moved to the year 2005. It may be necessary to push the goal back further in a very small number of countries.

The progress so far indicates that leprosy

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