

## Letter to the Editor

### LEPROSY ELIMINATION—HOW FAR?

'Leprosy elimination by the year 2000' was first proposed in 1986 and the 44th World Health Assembly in 1991 modified it by the addendum 'as a public health problem', defined as less than one case per 10,000 population.<sup>1</sup> Leprosy elimination campaigns (LECs) have been of great importance in the direction of achieving the goal of elimination. LECs are a time-bound activity for intensifying anti-leprosy activities, particularly in areas in which the disease burden is high and where the routine programme is relatively weak. This is continuing on a yearly basis with the emphasis changing from door-to-door surveys to promoting information, education and communication (IEC) activities and encouraging self reporting.<sup>2</sup> We report the results of a population survey carried out under the latest such activity, modified LEC (MLEC-IV) at regional level at Chandigarh, India (18–19th December 2002), which underlines the need for more strenuous efforts towards eliminating leprosy as a public health problem.

In October 2002, a population of 45,000 residing in slums surrounding Chandigarh was scanned in 1 day as part of a modified leprosy elimination campaign (MLEC-IV). A continuous IEC campaign was conducted through radio and television, together with distribution of posters, community rallies and wall paintings with involvement of local leaders, administrators and NGOs. Pre-campaign training was given to multi-purpose health workers, anganwadi workers, sarpanches and local school children. Handbills were distributed throughout the targeted area. Twenty-five search teams comprising of trained persons went from house to house identifying any suspected case of leprosy. All suspected cases were brought to the local health centre for confirmation by an expert. In addition, patients self-reporting to the health centre were also examined. In the health centre, the patients were examined in more detail, and slit skin smears were taken of all leprosy cases. Of the 317 suspected and self-referred cases, 11 (seven males, four females) were confirmed to be of leprosy, which had not been treated in the past. Eight of them were multibacillary (MB) and three were paucibacillary (PB) cases. Slit skin smears were positive in four MB cases. Deformities involving hands and feet were present in five cases (grade 2 in 2, grade 1 in 3) including two children. There were three children with leprosy (<14 years); MB in one and PB disease in two cases. Type 1 and 2 reactions were present in two and one patients, respectively. Only one patient was a local resident and the rest were migrants from different endemic states. They were all put on treatment and are regularly being followed up in a leprosy clinic. Apart from these 11 new cases, there were six treated/inactive cases of leprosy. It is possible that we might have missed few cases because of inherent operational problems like non-availability of index case at home, low motivation to subject for examination or inhibition for such body exposure and genuine missing of a patient by the surveyor.

Chandigarh is a Union Territory in Northern India and a low endemic area for leprosy. Prevalence of leprosy amongst the indigenous population in Chandigarh is only 0.05 per 10,000. The largest input to the pool of cases is from migrants from endemic states of India like Bihar, Jharkhand, Chhatisgarh, Uttaranchal, Uttar Pradesh, Madhya Pradesh, Orissa and West Bengal coming to Chandigarh for better prospects of employment. It is clear that the problem of leprosy in Chandigarh is mostly due to a migrant population. In cities like ours, the migrant population mainly maintains a low but significant level of prevalence with continuous transmission, an urban phenomenon that the programme managers have to

face.<sup>3</sup> The risk of transmission amongst the migrants in slums is likely to be the same, as in rural areas in their native places, with the factors of overcrowding, lack of hygiene and malnutrition playing their role. However, the risk of transmission to the local population outside these slums is expected to be low. The prevalence of leprosy in low-endemic cities like Chandigarh will not decline until leprosy is eliminated from the high endemic neighbouring states of the country which act as feeders for the migrants. Moreover, detection of disease in children, especially MB type, indicates continuing transmission in the community. Also, the presence of deformities in nearly half of the newly detected cases highlights the need for availability of adequate expertise and facilities for their management in the post-elimination era.

Though this one-time search helped in bringing out hidden cases, continued surveillance is necessary to detect and treat these cases at the earliest opportunity to prevent the transmission of the disease to others.

In 2001, WHO claimed that leprosy had been eliminated 'at a global level', even though 719,330 new patients were registered in 2000. Children comprise 15% of cases, indicating that active transmission continues.<sup>4</sup> WHO has now rescheduled elimination for 2005. LECs in the endemic countries such as India, Brazil, Myanmar, Madagascar, Nepal and Mozambique have helped to rapidly identify as many backlog cases as possible within a short time and bring them under MDT. Sustained efforts should be made and resources made available to achieve a 'World Without Leprosy' a concept propagated during the International Leprosy Congress, Beijing, 1998.

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