

## Letter to the Editor

### **‘LEPROSY ELIMINATION’ – NEED FOR SAMPLE SURVEY**

With the announcement of achieving the intermediate ‘target for leprosy elimination’ (defined as a prevalence rate of less than one case per 10,000 population by the end of 2005) by the Government of India (GOI), a new optimism of eradicating leprosy has become a talking-point in various forums. This declaration has also greatly influenced the public perception about the leprosy burden and has adversely affected the ongoing leprosy control efforts in terms of programme priorities, manpower utilization and resources. The National Leprosy Eradication Programme (NLEP) is ‘continuing the efforts to achieve elimination of leprosy through existing MDT services in the remaining districts and blocks as a strategy for the future’.<sup>1</sup> This has guided the programme managers at the state and district level to apply their own ‘criteria for registration of new cases’ in order to sustain or reduce below the target level. Such misinformed policy perceptions and measures can only lead to an upsurge of the problem in future. This has led to serious setbacks in sustaining leprosy control measures and strategies for quality care at the field level.

WHO has rightly maintained that the ‘given consistent procedures for case detection, figures for a period of several years will show whether there is an increase or decrease in numbers, which may indicate whether activities aimed at controlling the disease are effective’.<sup>2</sup> A careful observation of the trend (see Fig 1) for the past 6 years shows a sharp decline in the reported point prevalence rate (PR) in India from 24% in 2003 to 63% in December 2005.<sup>1</sup>

A similar trend was also observed in the prevalence rates reported from Maharashtra and Mumbai during the same period.

Is it a decline propelled by the change in policy and operational practices or an epidemiological phenomenon? What additional inputs to the programme have brought in such a decline in the reported prevalence is not known.

The tremendous progress towards leprosy elimination made due to the introduction of MDT is unquestionable. The question is how far the reported figures today reflect the true situation. In 2003, WHO opined that the ‘case detection trends in India are not showing any appreciable decline and there is no clear explanation for the persistence of this situation in spite of the highly specialised and expensive vertical programme in operation for close to 50 years’.<sup>3</sup>

Recently, in 2006, the Technical Advisory Group (TAG), WHO ‘reviewed the figures based on data reported by countries (including India) and identified a number of issues, which need further analysis, particularly disparities between new case detection and registered prevalence’.<sup>4</sup> It is pointed out that ‘the over-emphasis on early diagnosis and the absence of robust criteria and methods for diagnosing early leprosy compounded by ‘target pressures’ have made leprosy statistics on case-detection generally less accurate’. Therefore, ‘it is not easy to directly interpret changes in case-detection as an attribute of changes in transmission of the disease’.<sup>5</sup>

The fact that new cases continue to occur across the region in the country and with a high proportion of MB cases, calls for an in-depth assessment of the situation and an appropriate action plan. We lack knowledge about the specific regions or the population groups where new cases surface. It is extremely difficult to agree with the policy makers that the disease has declined and shown unprecedented and sudden change in epidemiological trend within a prescribed time span set by WHO, and leaves one to wonder the manner in which the disease has behaved.<sup>6</sup>

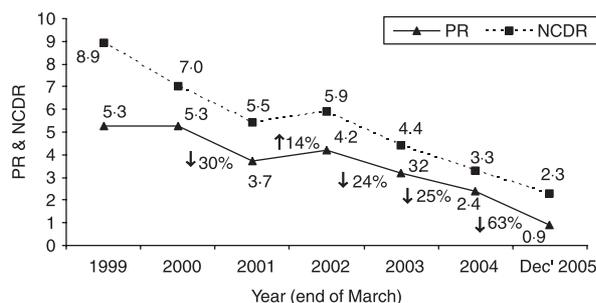


Figure 1. The trend of PR & NCDR in India

Routine surveys to detect new cases were considered time consuming, uneconomical and less productive particularly in the low incidence phase of leprosy. No-one can question the wisdom of this. Unfortunately, this has resulted in 'all or none' policy as regards the efforts to detect new cases at an early stage from the selected areas that are identified as harbouring new cases.

Present policy insistence on the new case detection of leprosy should only be relied on the awareness campaigns aimed to promote self-reporting. WHO has cautioned that 'the awareness about the disease is low, and the negative images traditionally associated with leprosy persist. These factors have prevented patients from coming early for diagnosis and treatment, thus increasing the risk of their becoming disabled and transmitting the disease to others'.<sup>7</sup> Further, WHO has also clarified that 'it seems likely, however, some new cases never come for diagnosis and treatment, so the number of cases detected is lower than the number of incident cases'.<sup>2</sup> All these cautions have gone in the wind with the euphoria of leprosy elimination and the talk of eradication.

### Sample Survey – a strategy for epidemiological surveillance

WHO has strongly advocated that 'special monitoring exercises may be carried out periodically to validate case-detection and quality-of-care indicators, as part of routine supervision or by independent teams on a sampling basis'.<sup>2</sup> 'If the population of the area is known, it is possible to calculate the case detection rate (the number of new cases per 100,000 people) which can be compared with other areas'.<sup>8</sup>

From the human rights point of view, 'for patients, it is important that the diagnosis of leprosy should be made as early as possible so that effective treatment can be started and steps taken to prevent nerve damage'.<sup>9</sup> The reduction in the number of new cases with disabilities and its consequences is directly attributed to the 'early' case detection. WHO emphasised that 'there is an urgent need to identify, through independent (and rapid) assessment, geographic areas where the transmission of leprosy is high'. WHO also admits that 'there are no tools at the moment to carry out such an exercise and existing epidemiological surveillance systems are not yet sufficiently effective'.<sup>10</sup>

In the absence of any rapid diagnostic test available for mass programme, one would really wonder how this can be accomplished by any means other than a sample survey in different geographical areas where new cases continue to occur. Sample survey is an effective tool for disease surveillance and for detecting hidden cases. However, the policy hurdles on the need for sample surveys is yet to be overcome.

## References

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- <sup>10</sup> World Health Organization. *The Final Push towards elimination of leprosy, Strategic Plan 2000 – 2005*, WHO/CDS/CPE/CEE/2000.1.