

## Letters to the Editor

### INTERPRETATION OF DATA ON MONOLESION LEPROSY CASE VS TOTAL NEW CASE DETECTION RATE

Sir,

As a result of satisfactory implementation of multidrug therapy (MDT) in the National Leprosy Eradication Programme (NLEP) in India, the registered prevalence rate has shown an 87% reduction; and the new case detection rate (NCDR) or crude incidence rate has shown a 62% reduction after 11 years.<sup>1</sup> However it is observed that after 8 to 9 years NCDR remains more or less constant.<sup>2</sup> As emphasis has been laid on early case identification with a target set for case detection, more and more early single patch PB leprosy cases are recorded. Sometimes they are detected so early that it becomes difficult to demonstrate the cardinal signs, which may necessitate very careful examination. In a mass programme, over-diagnosis of such early monolesion cases at the peripheral level cannot be ruled out.

Generally it is believed that these monolesion PB leprosy cases have no transmission potential and are not of great significance from a public health point of view. Nearly 60–80% of such cases also show a tendency of self-healing.<sup>3</sup> NCDR is an indicator to assess the transmission of the disease in the community. It is a fact that among all the new cases detected, a large number of monolesion cases representing an exposure of population to a reservoir of infection contribute to the pool of new cases at present.

To look at this issue from a public health angle, we collected statistics on monolesions from seven MDT districts during the evaluation of NLEP–MDT programme assisted by Swedish International Development Authority (SIDA) in India. The analysis revealed the following findings:

1 The staff of these seven districts detected 19,210 new cases in one year—3509 (18%) were MB

**Table 1.**

Sl. No.	District	Population (1991 census)	Total new cases	Monolesion PB cases	Total NCDR/1000	NCDR of monolesion/1000	NCDR other than monolesion/1000
1	Baroda	31,94,692	1325	114	0.41	0.04	0.38
2	Belgaum	35,83,606	1181	467	0.33	0.13	0.20
3	Dharwar	35,03,150	1725	808	0.49	0.23	0.26
4	Amravati	20,08,568	3046	981	1.52	0.49	1.03
5	Ganjam	31,58,764	5518	2717	1.75	0.86	0.89
6	Puri	35,90,026	5146	1779	1.43	0.49	0.94
7	Varanasi	47,98,729	1269	90	0.26	0.02	0.25
		2,38,37,535	19,210	6956	0.81	0.29	0.52

and 15,701 (82%) were PB cases. 6956 (36%) out of the total detection were monolesion PB cases.

- 2 The monolesion PB case detection rate was 0.29/1000. This is 36% of the total case detection rate of 0.81/1000. Detection rate of cases other than monolesion PB cases was 0.52/1000. This reduced the total detection rate by 38%.
- 3 In view of factors like: i, negligible contribution of monolesion PB leprosy cases to the pool of infection; ii, their self-healing nature; and iii, difficulties in accurate diagnosis etc, programme managers may consider this 'monolesion phenomenon' as a 'clinical problem' and not as a 'public health problem' and calculate new case detection rates without including monolesion PB cases. This may reveal a more realistic picture of not only the transmission of leprosy, but also the quantum of the disease likely to pose a problem from the point of view of clinical management, such as reactions.

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## References

- <sup>1</sup> *National Leprosy Eradication Programme Report India*. Prepared by DGHS Leprosy Division 1994.
- <sup>2</sup> *SIDA Evaluation Study of the multidrug therapy programme in India*, April 1994.
- <sup>3</sup> Browne SG. Self healing leprosy—Report on 2749 patients. *Lepr Rev*, 1974; **45**: 104–11.