

Improving case detection is more important than achieving elimination of leprosy in Odisha

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INTRODUCTION

In 1991, the World Health Assembly passed a resolution to eliminate leprosy as a public health problem, defined as reaching a prevalence of <1 leprosy case per 10,000 populations in a defined geographical area. India achieved the goal of elimination of leprosy at the national level in December 2005.^[1] In Odisha, a state in India, the prevalence of leprosy decreased from 123.3/10,000 population in 1983 to 0.65/10,000 population in 2006, thus satisfying the elimination target.^[1] Following the achievement of elimination in 2006-07, the prevalence of leprosy in Odisha has gradually increased to 0.99/10,000 population in 2011-12.^[1] If this increasing trend of prevalence continues, it is expected that the state of Odisha will lose the elimination status soon.

Elimination of leprosy in its real sense means the incidence of leprosy is reduced to zero in a defined geographical area as a result of deliberate efforts.

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Following the achievement of the target of elimination, it is expected that the incidence of leprosy and annual new case detection rate (ANCDR) should come down even after optimal efforts to detect more cases.

In Odisha, however, the number of newly diagnosed leprosy cases has gradually increased from 5088 cases in 2006-07 to 8312 cases in 2011-12.^[1] As a consequence, the trend of ANCDR has also increased from 12.69/100,000 population in 2006-07 to 19.56/100,000 population in 2011-12.^[1] In the present context, whether achievement of current target of elimination of leprosy, i.e., prevalence of <1 leprosy case per 10,000 population is equivalent to attaining the real elimination of leprosy disease or infection is an issue that requires consideration.

AIM

1. To critically review the NLEP strategies that may have influenced prevalence rate of leprosy
2. To reconsider whether it is important to achieve current leprosy elimination target or to pursue case detection and prompt treatment

METHODOLOGY

Various leprosy reports and program strategies under NLEP were critically reviewed. The strategies followed in the program before the achievement of the elimination target was corroborated with the evidence collected from various studies to derive logical assumptions and conclusions.

FINDINGS

The ANCDR from 1991 to 2003 was fairly stable between 10 and 20 per 10,000 population, except in the year 1997-98 when ANCDR had gone up to 20 per

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10,000 population. This increase in ANCDR in 1997-98 was mainly due to the initiation of Modified Leprosy Elimination Campaigns (MLEC) in January 1998, which was a welcome step in program implementation.^[2] A study by Sahu and Sahani showed that, in Odisha, >40% of the total new cases and about 45% of total new child cases were detected during the MLEC.^[2] Four MLECs were conducted in Odisha between January 1998 and March 2003. Following the MLEC years, there was sharp fall in ANCDR to 5.46 per 10,000 population in the year 2003-04 and a further drop to 2.14 per 10,000 population in the year 2005-06. Discontinuation of MLEC may have resulted in less case detection.

The drop in ANCDR in 2005-06 could also be due to “Kathmandu Recommendations,”^[3] where active case detection was discouraged, and registration of leprosy cases was not done until the cases were reconfirmed by the experienced staff. The drop in prevalence of leprosy during 2005-06 may also be due to the policy decision that the patients be declared “Released From Treatment (RFT)” as they received their last pulse of treatment and their names were removed from register subsequently.^[3] Registration of single skin lesions (SSL) too were “discouraged” during this period, resulting in decrease in ANCDR and prevalence of leprosy.^[3]

From the year 2004, the Sustained Action Plan was launched. This was a major strategy of NLEP, and much of the success of the program was attributed to this.^[4] Under this strategy, Block Level Awareness Campaign (BLAC) was conducted selectively in high endemic blocks. Selectively targeting high endemic blocks in BLAC may be logical in the scenario where there were sensitive indicators to monitor quality of leprosy surveillance. But in areas of poor surveillance, this strategy has its own limitation, as BLAC may have focused attention only in the high endemic districts and blocks. It is, therefore, likely that Block Level Awareness Campaigns were carried out only in the blocks where the health care personnel were already active and, hence, were detecting more cases. Awareness campaigns were probably poor in the areas where there were more hidden infection pools. This, in turn could have contributed to less detection of leprosy cases, contributing to the achievement of the elimination target.

It was also decided in 2004, that a defaulter should be removed from the register. This administrative

decision of record cleaning^[5] could have resulted in the decrease in prevalence of leprosy, contributing to the achievement of the elimination target.

The fall in the prevalence of leprosy leading to achievement of the elimination target may be at the cost of missing cases or by implementing certain policy decisions like record cleaning, non-registration of SSL leprosy cases and decreasing the duration of treatment.

CONCLUSION

Critically looking at the data and strategies followed in the program a few years prior to the achievement of elimination, it appears that the program was fast-tracked to achieve the elimination target. The question arises—Is elimination that is achieved in the state of Odisha in 2006 because of not detecting adequate number of cases or has the prevalence of leprosy actually come down? The real answer to this question could be revealed by initiating mass surveys to confirm whether we are missing detection of the cases. This step may be similar to initiating MLEC again and bring out the true picture.

The focus should be more on early detection of leprosy cases and curing them rather than on achieving the present elimination target. Available evidence suggests that early detection of leprosy and curing them is more important than consolidating the present elimination target. Placing sensitive indicators for monitoring the quality of leprosy surveillance as there are for other infectious disease control/eradication programs like polio and malaria would be useful in achieving elimination of leprosy in its real sense. But a sensitive indicator to assess the quality of leprosy surveillance does not exist. Sensitive indicators like the number of newly detected non-leprosy patches or nerve thickenings in a specified population will be meaningful for monitoring the quality of leprosy surveillance in its real sense.

The present article is not to undermine the remarkable efforts already put in by National Leprosy Eradication Program (NLEP) in the past, but to break the complacency, if any, after having achieved the elimination target.

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