Leprosy detection: Involvement of teachers

Sir,

India accounts for the major burden of globally recorded leprosy patients despite claims to having reduced the burden to below the level of public health significance. Interstate variations in the prevalence rates and the percentage of population at risk are quite substantial. The states of U.P, Bihar, Jharkhand, Orissa, West Bengal and Madhya Pradesh contribute to nearly 63% of the country's case load.[1]

One of the goals of the National Health Policy 2002 was to achieve a reduction in leprosy cases to < 1 in 10,000 in the general population by December 2005. Modified leprosy elimination campaigns (MLECs) which had been carried out between 1997-2004, yielded > 1 million new cases that were treated with multidrug therapy (MDT) and cured.[2] However, more needs to be done in states like Chhatisgarh where the disease prevalence is still more than the national average.

To achieve the goal of elimination of leprosy, the strategy being used is the effective interruption of disease transmission by early detection of leprosy cases and their prompt and effective treatment. The MLECs had been conducted with an objective of increasing public awareness about leprosy, building the capacity of general healthcare staff to deliver services and to detect and treat hidden cases by conducting an intensive, time-limited survey among the people to detect hidden leprosy cases.

Elimination of leprosy has been achieved by India at the national level, however, the aim of the healthcare sector is to detect 'hidden' cases of leprosy and start treatment quickly.[2] Much remains to be done in urban areas where the coverage of the governmental primary healthcare structure is minimal. Although not a part of the policy of the Govt. of India, 'school surveys' need to be considered as there is a large population of children who need to be covered especially in urban areas. An earlier study in school children was found to be effective in the detection of leprosy in Tamil Nadu, with a new case detection rate (NCDR) of 6.05/10,000.[3]

This approach may have a component of 'peer embarrassment', wherein a subset of children may be hesitant to come forward and tell their peers about any skin lesions on covered body parts. However, within the overall ambit of the concept of a School Health Program, teachers are usually the first point of contact of school children and as such, are supposed to be keeping a watchful eye on the health of their pupils. Besides, during routine school health examinations, the services of the teachers are co-opted for conducting various screening activities, rendering the teachers attuned to such activities and sensitive to further orientation.

As a 'proof of concept' project, teachers of two government-run schools in Hazaribagh District of Jharkhand, (prevalence of leprosy = 3.21 per 10,000) were trained through the use of visual aids and interactive group discussion, to screen for leprosy among school children. The limitation of this project was that the "trained teachers" would undertake examination of only the exposed areas and rely on inputs from students for any lesions on covered areas. Prior to this, active approval for the project was obtained through the forum of the Parent Teacher Association (PTA).

An introductory talk was given to students during the daily school assembly on the occasion of National Leprosy Day in January, 2003, outlining the importance of leprosy as a problem. The screening of students of all classes was done by the schoolteachers with due attention being paid to gender sensitivity. This was followed by referral for expert evaluation to us, through coordinated visits to the school, to obviate wastage of school hours. All suspect cases were then referred to the hospital-based clinic of the military Dermatologist and were required to be accompanied by the parents. Expert confirmation was done and treatment commenced as per MDT guidelines.

We found four cases of paucibacillary leprosy amongst the 2400 school children screened, which translates to a NCDR of 16.6 per 10,000. It is possible that due to active screening of the pupils by the teachers, the detection rate for this

project would be higher than that in the project conducted by Norman *et al.* involving screening relying on reporting to peers.[3] This serves to illustrate the relevance of such an approach targeting schools especially in urban areas, which could be coordinated through the involvement of nongovernmental organizations (NGO) and PTAs. The large number of cases among children which might go undetected in the course of routine screening initiatives, can be brought 'under the scanner' by taking advantage of the organization of the school system and training motivated teachers to screen, initially verbally, then by local examination as indicated. The advantage of focusing on schools is the potential for health education and dissemination of information on the disease to the family, besides influencing future behavior and attitudes among students.

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