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Letter to the Editor

THE DHARAVI STORY—SAGA OF LECs OVER 2 DECADES

Massively proliferating urban slums have posted tremendous challenges in planning ideal health delivery systems. Leprosy in mega-cities like Bombay is a classical example, the elimination of which calls for special campaigns since conventional mass surveys using trained para medical workers, repeated at intervals, are time consuming and are not cost-effective. Bombay Leprosy Project has since 1979 taken up the onerous responsibility of leprosy control in the heart of the city which has the dubious distinction of housing about 500,000 citizens living in squalor in a single large slum called Dharavi (Figure 1), believed to be the largest in Asia (Map). Considering the magnitude of the population, poor living conditions and the limitations of trained manpower in Bombay Leprosy Project, routine surveys could be planned only occasionally and sporadically in Dharavi slum. This expensive strategy employed at random over the years was responsible for case detection only to a limited extent. In anticipation of an abnormal load of leprosy cases in this slum 2 decades ago, a strategy based on repeated campaigns was thought of long before the strategy of special case detection through LEC (leprosy elimination campaign) was recommended in 1995 by WHO to be adopted in endemic countries.[1] In fact, we coined the term 'LED' (leprosy eradication drive) for such campaigns. In this brief communication, we report the results of several crusades of activity, which are depicted in Figure 2. This figure shows peaks of new cases detected following every such campaign in this unmanageable slum.

We can infer that even in settlements with abnormal population density, through series of campaigns using a variety of rapid and quickly rewarding unconventional techniques, new case detection can be enhanced without resorting to expensive 'house-to-house' surveys employing staff trained at heavy cost. In the slum under investigation, it can be seen that after recurrent bursts of campaign activity over the years, the yield of new cases is gradually declining. The proposed next LEC in October 1999 will indicate whether the downward trend of new case detection rate will be sustained. However, factors such

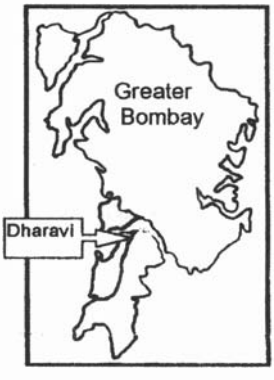

Figure 1. Location of Dharavi slum.

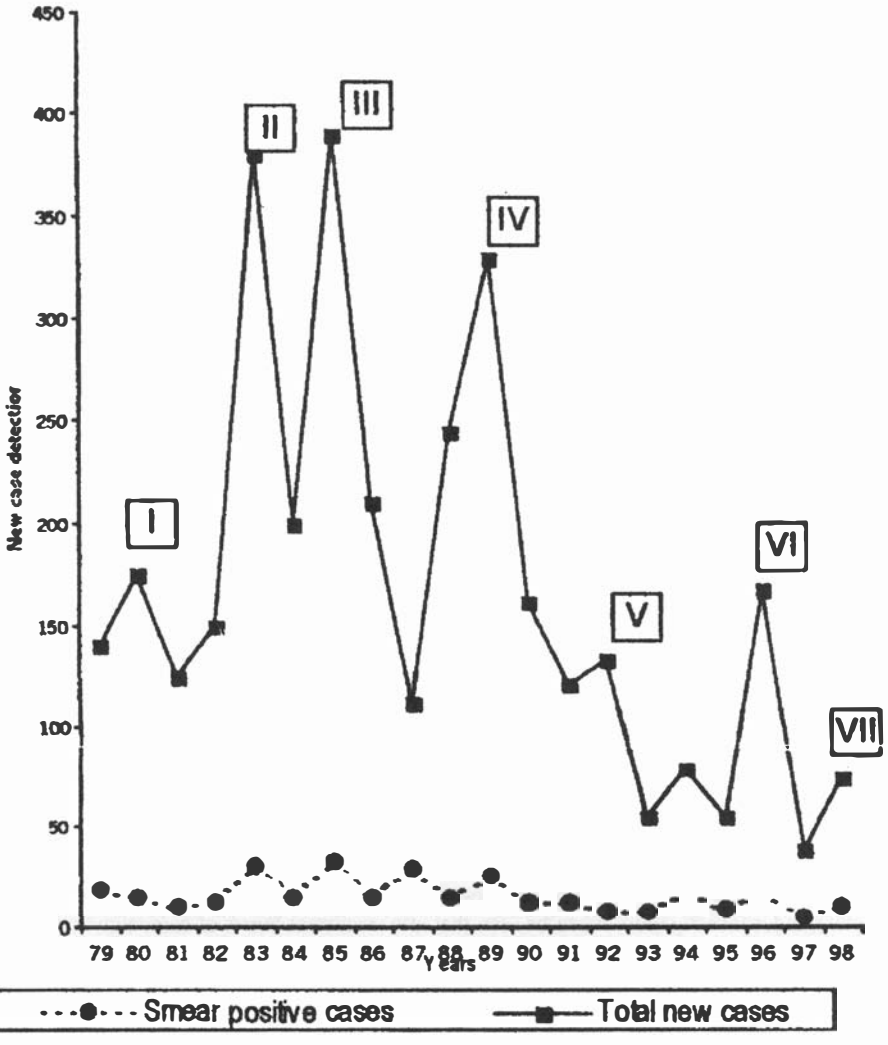

Figure 2.
I) The first 'LED' (leprosy eradication drive), taking advantage of the visit of important city dignitaries to the school in the centre of Dharavi, yielded a moderate number of new cases.
II) For the first time in the city, 2100 medical students, nurses and laboratory technicians after a brief training screened about 225,000 subjects over 6 days. In all, 236 new leprosy cases were confirmed during this LED in 1963 along with voluntarily reported cases soon thereafter, making a total of 370 cases.
III) The leprosy message was innovatively disseminated to the slum dwellers using a highly popular 10-day religious festival celebrated with great enthusiasm. MDT was introduced with a flourish, making deft use of folklore involving God Ganapati and other mythological characters. This unique effort resulted in a spate of nearly 400 self-reported cases.
IV, V & VI) Represent spurts of intensive short-term case finding activities employing multiple teams and volunteers undertaken during 1989, 1992 and 1996. The massive drive, coupled with LEC activities, unearthed several new cases.
VII) During 1998, a massive case detection drive was undertaken in this slum as part of the 'modified leprosy elimination campaign' (MLEC) financially supported by the Government. This campaign yielded 70 new cases, including some who reported voluntarily.

as migration, which is an ongoing phenomenon in a big city like Bombay, and the sporadic occurrence of new skin smear positive cases (see graph) are problems causing deep concern. A permanent strategy in a difficult urban situation defies solution.

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[1] World Health Organisation. *Weekly Epidemiological Record*, 1998; **73**: 177–184.