

Current Leprosy Burden: India Should Lead the Way

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Dear Editor

Hansen's disease is one of the most ancient diseases known to mankind whose description is also given in Vedas. This neglected tropical disease is caused by *Mycobacterium leprae*. It has a long incubation period ranging from two years to twenty years (Narang et al 2022). It is thought to be mainly transmitted through droplets and close contact. The disease primarily affects the skin and peripheral nerves. The long incubation period along with a wide range of clinical signs and symptoms often leads to delayed diagnosis contributing to community transmission. Although leprosy is curable by the administration of multi-drug therapy (MDT), depending on the type of leprosy, it must be taken from six months to a year. If untreated, the disease may progress to cause permanent disabilities in the hands, feet, and eyes. Due to self-healing nature and to avoid overdiagnosis and inflation, case detection efforts got shifted to cases of consequence. Also, natural reservoirs of the disease are possible, and we cannot eradicate it from nature but still we

can efforts to reduce the transmission of disease by early detection and treatment (Gupte 2023).

As per the World Health Organization (WHO), two lakh new cases per year are reported in more than 120 countries across the globe (WHO 2023). Global elimination of leprosy (defined as a prevalence of less than 10 cases per lakh population was achieved in the year 2000. But recent data as of 2019 suggests major countries like India, Indonesia, and Brazil reporting more than 10 000 new cases while 13 other countries (Bangladesh, Philippines, Myanmar, Sri Lanka, Nepal, the Democratic Republic of the Congo, Nigeria, Ethiopia, Mozambique, Madagascar, Somalia, South Sudan and the United Republic of Tanzania) each reported thousands of new cases (Gupte 2023). Many other countries reported fewer than a thousand new cases and 45 reported zero cases. Recently published data showed that India accounts for 52% of new cases reported globally last year (NEXTIAS 2023) and is one of the "global priority countries" that contribute 95% of total cases reported across the world.

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Our country requires a sustained effort to fight community transmission (Rao & Suneetha 2018). India launched the National Leprosy Control Programme (NLCP) in 1955 which was further renamed as National Leprosy Eradication Programme (NLEP) in 1983 (DGHS guidelines). However, the fact remains that we have not been able to achieve what we aimed for in the last six decades. This forces us to introspect about our approach to tackling leprosy. WHO has released the 'towards zero leprosy: strategy 2021–2030' aligned with other neglected tropical diseases road map 2021–2030. This strategy aims for a vision of zero leprosy: zero infection and disease, zero disability, zero stigma and discrimination and the elimination of leprosy (defined as interruption of transmission) as its goal. The COVID-19 pandemic created immense pressure on the health infrastructure shifting our focus to what was needed at that time at the cost of overlooking the neglected diseases. It led to interruptions in MDT, delay in diagnosis of some cases and might have led to disabilities. The projection based on the current trend in the reported cases suggests that we may not be able to achieve the set target by the WHO by 2030 (WHO 2023). However, this should not deter us from making concerted efforts. Achievement of elimination of leprosy as a public health problem (less than 1/10,000) in December 2005 was reduction of 97% from approximate 60 lakhs in 1982 (MDT) to less than 2 lakhs. Rather as a country with the highest disease burden in the world, we should lead with example in finding new strategies to fight leprosy. National Strategy Plan (NSP) and roadmap for leprosy 2023-2027 has described various ways to reach the WHO and NLEP goal. Several hurdles to achieve the goal are highlighted which are focused mainly on the delay detection of disease due to slower progressive nature of the disease as well as

paper-based reporting. India has a robust and time-tested healthcare system that roots from ASHA healthcare workers to apex tertiary care centers dotted across the country. Other than support from ASHA workers, epidemiological investigation of patients and Sparsh Leprosy awareness campaigns are planned in NSP announced by Indian government (NSP 2023-2027). After achieving the goal of elimination at public health level in December 2005, the vertical leprosy programme was integrated into the existing healthcare system. Since the globalization of the Indian economy in 1991, the country has witnessed rapid growth and is the fastest-growing major economy in the world. During the time of need in the COVID-19 pandemic, India as the 'World's pharmacy' stepped up to export drugs as well as vaccines to the countries which required them. With the grass-root level of healthcare, potential human resources, IT expertise, and pharmaceutical infrastructure India can lead the way to fight against leprosy. A public-private partnership model may be explored further to rope in companies to spread awareness through print and mainstream media, research, diagnostics, manufacturing, distribution of drugs, management of disability, and reporting of data. May we suggest refreshing the NLCP under the Ministry of Health and Family Welfare so that a roadmap unique to our country is prepared with constituting bodies and appointments to oversee the implementation of the set goals in a time-bound manner. The revival of the leprosy control programme will also help release funds to provide the necessary impetus.

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