

HEALTH

In NTD fight, the end in sight



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Around the world, nearly 1.6 billion people are affected by a group of diseases so ignored that the term used to refer to them is called neglected tropical diseases (NTDs). These are a cluster of 17 diseases affecting the poorest people living in the least developed pockets of the world.

While some of these diseases may be unfamiliar, leprosy, kala-azar and filariasis are better known in India and being targeted for elimination in the near future. A disease is considered 'eliminated' when the prevalence rate is less than 1 case per 10,000 population size.

The Indian government has set itself the target of eliminating kala-azar and filariasis by 2017, and leprosy by 2018. With such ambitious targets, sustained research must remain an integral component of disease elimination programmes.

Besides basic research — the discovery of new facts about a disease, vaccines and drugs — new strategies are needed to make an impact. In fact, proving the efficacy of new tools and methods is not enough; their effectiveness must be demonstrated in the field. Lastly, continued surveillance and epidemiologic data collection is necessary to ensure that the disease continues to be under control. To eliminate leprosy, India needs to tackle the stigma associated with the disease. It leads to delays in diagnosis and treatment, which in turn result in continued transmission of infection within families and communities. In 2015-16, 118 districts in India were endemic for leprosy with a prevalence rate of more than 1 per 10,000.

Targets set

Over the years, the Indian Council of Medical Research (ICMR) has produced new tools, which include two rapid diagnostic tests and a uniform multidrug regimen for all types of leprosy. This has shortened treatment duration to 6 months and is improving adherence. An indigenous vaccine developed by Dr. G.P. Talwar, founder and director of the National Institute of Immunology, is being launched shortly for use under the leprosy control programme. The vaccine, mycobacterium indicus pranii (MIP), will be administered to people living in close contact with patients. The vaccine offers 60% protection to people living with leprosy patients for up to 4-5 years; the renewed strategy aims for leprosy elimination ahead of the 150th birth anniversary of Mahatma Gandhi, in 2019.

In the case of lymphatic filariasis, better known as elephantiasis, the government is targeting a population of 600 million in 256 endemic districts with mass drug administration (MDA). A community-based pilot in Yadgir district of Karnataka is being done to assess the effectiveness of a three-drug combination (DEC + Albendazole + Ivermectin) *vis-à-vis* the existing two-drug regime (DEC + Albendazole). Mass administration of DEC-fortified salt to accelerate elimination of lymphatic filariasis is being tried in the Andamans. Ensuring that the entire target population accepts MDA continues to be a challenge and needs advocacy and community engagement.

The other key intervention is for visceral leishmaniasis (VL) or kala-azar, which is transmitted through the bite of the female sandfly. In India, a majority of cases are reported in Bihar, Jharkhand, Uttar Pradesh and West Bengal. Rapid diagnostic tests followed by single day treatment now makes rapid cure possible. Sandflies breed on mud walls, so vector control by indoor spraying with insecticides and ultimately with improved housing can result in the control of sandflies.

For these programmes to succeed, it is important to maintain constant vigilance through robust surveillance and reporting mechanisms. Partnerships with diverse stakeholders including the private sector, community-based organisations, and community leaders are specifically useful in creating awareness, improving case detection, treatment completion and, most importantly, managing stigma associated with these diseases. While tackling NTDs, it will be important to remember that along with timely diagnosis and treatment access in unreached areas, focussing on the fundamentals of preventive interventions, nutrition, safe drinking water, sanitation and hygiene are essential in fast-tracking the ultimate goal of elimination.

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