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## INFECTIOUS DISEASES

# Covid-19 sets back progress on neglected diseases in India

Government interventions to treat neglected tropical diseases such as lymphatic filariasis and kala-azar were cut back during 2020 and 2021, reports **Cheena Kapoor**

Cheena Kapoor *freelance journalist*

For 68 year old Shivji Singh, a resident of Govind Chak village in Saran district, Bihar, the past two years have meant severe financial losses and physical degradation. The head of a family of 13, Singh has lymphatic filariasis and has barely been able to work because of pain in his left leg.

Also known as elephantiasis, lymphatic filariasis is caused by parasitic worms spread by mosquitoes, and is one of the leading causes of disability worldwide. Singh has lived with the condition for more than 11 years. He says access to treatment was severely curtailed during the pandemic.

“Every time I visited the medical store in the village, they either never had the medicines I needed or demanded four times their price,” Singh tells *TheBMJ*. If left untreated, lymphatic filariasis can cause disfigurement and the abnormal enlargement of limbs or scrotum. Sections of the Indian population are at high risk, and India accounts for 40% of cases globally.

A few houses down from Singh lives 26 year old Rinku Devi, who has visceral leishmaniasis, also known as kala-azar. Transmitted through the bite of a female sandfly, it is the second deadliest parasitic disease in the world after malaria, affecting internal organs including the spleen and liver, and is fatal in 95% of cases if left untreated. The covid-19 lockdown made it nearly impossible for Devi to get treatment, and she has suffered prolonged fever, anaemia, and weight loss.

Bhupendra Tripathi, India lead for neglected tropical diseases (NTDs) at the Bill and Melinda Gates Foundation, says the treatment of diseases such as lymphatic filariasis and visceral leishmaniasis, including distribution of drugs and surgeries to prevent permanent disability, were pushed back as priority was given to testing for covid-19 and vaccination. “Since hospital staff were busy managing the pandemic, patients could not get treatment,” he says.

### Progress before the pandemic

According to the World Health Organization, by early 2021, 44% of 109 countries had seen disruptions to established interventions to manage NTDs, and 19% reported severe disruption.<sup>1</sup>

In the past decade, 46 countries have eliminated at least one NTD.<sup>2</sup> Of the 20 listed NTDs, lymphatic filariasis, kala-azar, and leprosy are of greatest concern in most tropical countries.

Of the 72 countries in which lymphatic filariasis is endemic, nine from the WHO South East Asia region (Bangladesh, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand, and Timor-Leste) are running national programmes to eliminate infection.<sup>3</sup> Maldives, Sri Lanka, and Thailand have already achieved elimination, and Bangladesh is waiting for official confirmation.

India, which has the largest population in south Asia, has been trying for two decades to eliminate these diseases (defined as reducing the prevalence to one case in 10 000).

Since 2004, the Indian Ministry of Health and Family Welfare has been running the world’s largest mass drug administration programme with two regimens: DA (diethylcarbamazine and albendazole) and IDA (ivermectin and diethylcarbamazine and albendazole). India initially aimed for elimination by 2015, then 2018, then 2020. Post pandemic the loose target is now 2030.

### Stumbling blocks

Despite an increase in funds for programmes to eliminate lymphatic filariasis, “efficient utilisation of funds is a challenge,” noted a May 2021 report from the National Health Mission, a government programme that provides affordable healthcare. In 2019-20, the total national budget for lymphatic filariasis was £12m—triple that of the year before. But the actual amount spent was £5.7m, attributed to poor awareness and take-up by the public, a switch to domestically procured drugs that are substantially cheaper than imports, and infrastructure that was difficult to scale up to spend the increased funding.

India’s National Kala-Azar Elimination Programme, which handed out diagnostic tests and drugs for kala-azar and sprayed villages with insecticides twice a year, had a target of elimination by 2017, which is now 2023. Having achieved elimination in 92% of endemic regions in 2018, federal and state governments supplied £28m to the programme in 2019-20, with Bihar state in east India receiving 85% of funds. The number of cases reported annually dropped from 6249 in 2016 to 2052 in 2020.

“Poor compliance of the community to consume MDA (anti-filarial) drugs remained the cause of not meeting the target of elimination in the past,” says Nupur Roy, head of the Kala-Azar and LF Elimination Programme, which is part of the government of India’s National Vector Borne Disease Control Programme.

Leprosy was declared eradicated in India in 2005, but new cases have started to emerge. Dependent on the stage and severity of the disease, the government had been providing free multidrug therapy to patients, to be taken anywhere between 24 weeks and 24 months from the onset of disease. But that stopped during the pandemic.

“Due to the movement of resources during the pandemic and the shut down of all the detection programmes, many patients could not continue regular treatment,” says Nikita Sarah, programme manager at The Leprosy Mission Trust India. “This led to a decrease in the number of patients detected in the last two years compared with previous years.”

The trust launched three mobile therapy clinics in south India’s Tamil Nadu state at the peak of the pandemic, to try to plug the gap, and with a dedicated team of health workers and therapists reached more than 800 leprosy patients.

### Back on track?

Since late 2021, most of India’s mass drug administration programmes have resumed in some form. According to a 2021 government review, 133 districts in India will run the lymphatic filariasis drug programme in 2022, and a survey to assess disease transmission is planned in 110 districts.

A Ministry of Health source told *The BMJ* that it is difficult to put a figure on total investment in NTDs, since the central government contributes only 60% and the rest is covered by the state administrations, depending on disease prevalence. The source said elimination goals were pushed back because of poor awareness in local populations of the dangers of NTDs and the benefits of treatment.

To resolve these problems, the lymphatic filariasis programme also runs awareness campaigns in endemic districts.

The Ministry of Health source says covid-19 hindered efforts to tackle NTDs for only a few months when the programmes halted. The closure of schools also hampered efforts to reach children.

“But we are back on track now and aligning with WHO roadmap to eliminate some of these NTDs (by 2030),” the source told *The BMJ*, insisting that “investment never stopped, even during covid. And it will continue till these diseases are eliminated.”

Roy is optimistic. “There were hiccups in running programmes during covid-19. But we are now moving towards our target to eliminate kala-azar by December 2023 and LF by 2030.”

Competing interests: I have read and understood the *BMJ* policy on declaration of interests and have no relevant interests to declare.

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- 2 World Health Organization. Commonwealth leaders recommit to ending malaria and neglected tropical diseases. 23 June 2022. <https://www.who.int/news/item/23-06-2022-commonwealth-leaders-recommit-to-ending-malaria-and-neglected-tropical-diseases>
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