

# COVID-19 in India: Potential Health Risk of People Infected With Tuberculosis

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## About the Study

The treatment of patients with the novel Coronavirus Disease (COVID-19) in India is said to have consumed the public healthcare system. Health campaigners claimed that patients suffering from serious illnesses, including Tuberculosis (TB), are currently being denied necessary care. The COVID-19 pandemic seems to have significantly disrupted TB services, despite the government's pledge to eradicate TB by 2025. On March 25, the Central TB Division issued recommendations to the states stating that despite the COVID-19 situation and restrictions put in place, all facilities under the National TB Elimination Programme should continue to be fully operational for the benefit of TB patients and that the states should take the necessary action.

Patients on the ground appeared to have trouble receiving TB services in spite of the guidelines since more and more medical staff was being diverted to COVID-19 situations. According to media reports, private clinics and OPD services were closed, and new TB case detections have all but ceased. The shutdown reportedly caused delays in the delivery of Dug Susceptibility Testing (DST) data, which made things worse for already-treated patients. The total number of instances notified each month significantly decreased during the lockdown, according to data from the Union government's Nikshay portal, which was accessible at the end of June.

For instance, in Uttar Pradesh, 4,5738 cases of TB were reported in February; however, by March and April, those numbers had dropped to 28,898 and 9,827, respectively. Then, in May, there were 14,033 cases. The portal statistics on TB notification also showed that between March and June 2019, 245,523 TB cases were reported by the private sector and 615,264 cases were reported by the public sector. The public sector has reported 350,261 TB cases this year for the same time period, while the private sector has reported 114,790 cases. According to media estimates, the number of TB case registrations in India has decreased by more than 50% since March, with an estimated 3,00,000 case notifications still unreceived through May 30, 2020.

This is concerning since undetected TB can worsen patient outcomes and boost community transmission. Experts cautioned that this sudden decrease in notifications could cause more than just a surge in disease transmission if people skip out on care and spread the illness. As a result, it would also harm long-term outcomes and even hasten dropouts from TB's extensive treatment programme. Additionally, the National Institutes under the Indian Council of Medical Research stopped their state-by-state study of the prevalence of pulmonary tuberculosis that had been proven by microbiology during the first quarter of this year because of the Covid-19 outbreak. Later, other states utilised the project's infrastructure for the ICMR's Siro-survey for Covid-19.

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According to data, over three out of every ten TB patients (27%) worldwide are from India. Even in India, TB causes 7500 illnesses and 1400 deaths every day. A high-risk group for getting Covid-19, states with 39% of recorded tuberculosis patients include Uttar Pradesh, Bihar, Odisha, West Bengal, and Rajasthan. Both TB and COVID-19 damage the lungs and are transferred through respiratory droplets, which is an important similarity. Patients with the two disorders who are critically ill require ventilators. The same symptomatic technology/machines can be used to distinguish the two of them. Despite the little experience with Covid-19 infection in TB patients, it is anticipated that those who are suffering from both TB and Covid-19 may have more terrible

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According to a modelling research that the World Health Organization released on May 12 of this year, a 25% drop in TB detection due to the COVID-19 pandemic in a year and a half might result in a 13% increase in TB fatalities. According to estimates, the COVID-19 pandemic could cause an additional 1.4 million cases of tuberculosis between the years 2020 and 2025. According to a May assessment by the Imperial College COVID-19 response group, disruptions in the delivery of HIV, TB, and malaria treatment services in high-burden, low- and middle-income countries could result in an increase in the number of fatalities. In this way, the delay in finding new cases becomes a risk [2].

The patient would spread the infection throughout this time, especially among family members. Additionally, there would be a chance of complications and death. Whether or if the patient chooses to visit a medical facility, confirming the diagnosis would need a sizable cost because the facilities have been switched over to COVID-19. Many additional equipment have been diverted, and the automated CBNAAT tests that were created for TB diagnosis have been adapted to recognise COVID-19. Once the patient begins the treatment, the restrictions would make it challenging for community workers to check in on him to make sure the treatment is being followed and to assess his progress. Health professionals noted that TB lowers immunity and makes patients more vulnerable to a variety of illnesses.

One such illness that could infect a TB patient and worsen the course of treatment is COVID-19, it is suspected. Therefore, the best course of action at this time is to implement all steps planned to assure continuity of services for those who require tuberculosis prevention and treatment. In order to reduce the risks of exposure to the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) during clinic attendance, health experts believe that both patients and the healthcare system should discuss and investigate ways to prioritise the provision of uninterrupted TB treatment while focusing on primary care [3].

A sufficient intense phase of TB treatment should be administered to drug-sensitive or DS-TB patients who are starting treatment and are generally doing well so that patients just need to return to the medical facility for a clinical assessment and to transition to the continuation phase. Where clinically indicated, the full four months of TB treatment should be administered. Patients with MDR-TB (multidrug-resistant tuberculosis) should report for refills in order to coincide with the facility's regular clinical visits (Weeks 2, 4 and 8, and 2-month to month from that point). Personnel from the health centre should call any patients who have clinically severe myelosuppression and alter their therapy or monitor them at least once a month while using linezolid [4].

Regardless of the MDR-TB regimen, patients should get 2-monthly treatment refills as well as clinical consultations and monitoring after the first two months. It is crucial to schedule clinical consultations at Week 8, Month 4, and Month 6 in order to monitor patients who are using QT-prolonging medications, assess therapy success, and follow up on sputum culture results. All ill individuals, including those with TB, should be advised to call the medical facility first, according to health experts. When necessary, they can go to the health facility to get advice on COVID-19 screening methods and infection control measures [5]. Besides these, decentralising medicine delivery (with the exception of multi-drug resistant tuberculosis treatment procedures, which are administered intravenously twice daily by community nurses making proper personal protection equipment

Activities for patient support, health promotion, teleconsultation, and staff management must be undertaken seriously. Positive features should be acknowledged and incorporated in the advocacy agenda for overall development of TB services, even though these changes are adaptations to a bad situation. The fact that these two pandemics are interacting productively is that communities, public health experts, and policy makers can share knowledge and recognise the connection between infectious disease and poverty, leading to increased investment in their control and societal structural changes that benefit everyone.

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