

CORRESPONDENCE

Impact of COVID-19 on TB detection in the private sector in Nepal

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Running head: Impact of COVID-19 on TB detection

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Dear Editor,

Findings from a recent Stop TB Partnership report on the impact of the COVID-19 pandemic indicate an average decline of 23% in TB case finding and treatment enrolment in high TB burden countries.¹ A rapid assessment of the impact of COVID-19 on Nepal's TB programme, conducted between May and June 2020, indicated a 67.3% decline in sputum collection for TB diagnosis and a 45.5% decline in TB case enrolment.² Throughout the pandemic, access and utilisation of TB services worldwide has seen a downward trend.³ Furthermore, community-level implementation of TB interventions by grassroots organisations such as Sahayog Samittee Nepal (SS Nepal) have been heavily impacted by COVID-19. SS Nepal operates an active case-finding intervention, with

TB screening services at private health care provider (PHCP) facilities including TB testing through on-the-spot sputum collection and transport. The intervention was initially implemented in Parsa and Dhanusha Districts from November 2018 to December 2019 and was then scaled-up to Makawanpur, Rautahat and Sarlahi from December 2019 to March 2021. Between March–June 2020, there was a strict lockdown in Nepal, which resulted in the temporary shutdown of the PHCP facilities. To assess the impact of COVID-19 on TB case detection, we compared project findings in Parsa and Dhanusha from March–December 2019 with March–December 2020.

The stark difference in data collected for TB screening, testing and diagnosis before and after the onset of the COVID-19 pandemic is illustrated in the Table. These data reflect a 16.9% decrease in screening between March–December 2020 compared with March–December 2019, and there was a 77.9% decrease in identification of TB symptoms over the same period. Further, there was a 67.4% decrease in testing, a 66.9% decrease in bacteriologically confirmed (bac+) diagnosis and a 58.9% decrease in diagnosis of all forms TB. This is despite similar positivity rates for bac+ TB across both periods (4.7%). It was also found that as of June 2020, when lockdown restrictions eased, there was a 93.3% increase in screening activities (with only 513 individuals screened in May compared to 7,711 in June) and a 88.9% increase in case-finding (only 1 case was detected in May compared to 9 in June).

We initially faced many challenges adapting to the restrictions and lockdown measures, including delays in TB testing due to repurposing of laboratory staff for COVID-19, fear of infection by project staff, difficulties accessing personal protective equipment (PPE) and delays in GeneXpert (Cepheid, Sunnyvale, CA, USA) cartridge procurements. These issues were addressed through persistent efforts to procure and distribute PPE and sanitizers, as well as coordination with the provincial government to address testing delays. Furthermore, SS Nepal established Xpert networks outside of the implementation area to compensate for delays in the intervention district laboratories to ensure timely delivery of results and treatment initiation to community members with TB.

Community-level interventions (such as by SS Nepal) have seen significant decreases in TB screening and diagnostic activities since the beginning of the pandemic, but our analysis has shown that it is possible to continue to provide TB services. TB did not cease to affect high-burden communities with the onset of COVID-19. In fact, as reported,¹ people with TB are at three times higher risk of mortality from COVID-19 infections, and previous evidence also indicates a 1.4

times higher risk of TB death in COVID-19 patients.⁴ With the second wave of COVID-19 having devastating effects across South Asia, efforts should be made by governments and community organisations to continue to facilitate access to TB services, and to integrate TB and COVID-19 screening to fight both diseases simultaneously.

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Table SS Nepal programmatic data from Parsa and Dhanusha, Nepal, before and after onset of the COVID-19 pandemic

	Pre-COVID-19: March– December 2019 <i>n</i> (%)	After onset of COVID-19: March–December 2020 <i>n</i> (%)	Decrease after onset of COVID-19 %
Individuals screened, <i>n</i>	175,402	145,735	16.9
Individuals identified with TB symptoms	9,454 (5.4)	2,094 (1.4)	77.9
Individuals who received a sputum test	6,276 (66.4)	2,045 (97.7)	67.4
Individuals who had bac+ TB	293 (4.7)	97 (4.7)	66.9
Individuals with all forms of TB*	550 (5.8)	226 (10.8)	58.9

*Sum of bac+, extrapulmonary TB and clinically confirmed TB cases detected.

SS Nepal = Sahayog Samittee Nepal; bac+ TB = bacteriologically confirmed TB.