

Resource reprioritisation amid competing health risks for TB and COVID-19

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Dear Editor

As the world races to understand COVID-19 and contain its spread, South Africa faces unprecedented challenges. While preliminary research identifies current and previous TB (as well as HIV/AIDS) as risk factors for COVID-19 associated mortality, COVID-19 has had an inadvertent effect on TB care in South Africa.¹ After the first COVID-19 case was confirmed on 5 March 2020, South Africa entered a “state of disaster” consisting of varying degrees of lockdown and COVID-19-related restrictions. By 10 August 2020, South Africa has had 563,598 confirmed cases and 10,621 deaths as a result of COVID-19.²

Most healthcare facilities in South Africa (and globally) have become frontlines for COVID-19, with resources reallocated to COVID-19. Some of these COVID-19-related adjustments may have negative impacts on TB services and TB patients. In order to decrease the likelihood of nosocomial COVID-19 transmission, most hospitals have reduced daily outpatients. In some countries, TB hospitals have been converted into COVID-19 centres as they are better equipped to deal with communicable diseases. These shifts have resulted in an inadvertent deprioritisation of TB, which may delay diagnosis and treatment—a serious risk

for TB-symptomatic patients in need of urgent care.³ In 2018, South Africa had 301,000 new TB cases, with an estimated 63,000 deaths.⁴ Models suggest that COVID-19 has led to a 25% reduction in TB detection worldwide, with a potential 13% increase in TB mortality.³

National data for South Africa indicate that lockdown resulted in a halving of the number of TB tests.² People could not visit clinics, or did not want to for fear they might become infected.⁵ Initial reports highlight a near 50% reduction in the collection of HIV and TB medication in several provinces, likely due to the COVID-19-related reduction in hospital visits.³ Moreover, public health measures, such as restricting movement and encouraging people to stay home for extended periods, could increase the transmission of TB between an infected individual and their household contacts.

The case definition of COVID-19 has evolved and broadened since the onset of the pandemic.⁶ The virus is transmitted through respiratory droplets and aerosols and causes a severe acute respiratory syndrome that commonly presents with symptoms including a dry cough, fever, headaches and shortness of breath.⁶ These overlap considerably with pulmonary TB symptoms.⁷ This makes it challenging for healthcare workers to distinguish between the two diseases in high-burden and resource-constrained settings. The distinction between TB and COVID-19 is made even more challenging as South Africa has over 7.7 million people living with HIV and the highest rate of TB per capita in the world.⁸ Therefore, there is a need for a combined strategy to manage both COVID-19 and TB. This would be an effective use of resources with both short-term and long-term benefits.⁷

Research in public health settings in South Africa found that only 29% to 50% of TB patients discharged from acute hospitals attended public health facilities following their hospital discharge.⁹ Non-acute and isolation facilities for TB patients, such as those created for COVID-19 patients, could be a critical missing piece in the South African TB continuum of care. In addition, the National Health Laboratory Service (NHLS) in South Africa has implemented mobile sampling and testing units with the same function as laboratories. These units use polymerase chain reaction (PCR) testing, the method also used in Xpert testing (Cepheid, Sunnyvale, CA, USA), which is the standard first-line test for TB.¹⁰ These units can be repurposed and used in resource-constrained settings to improve diagnostic delays and ensure continuity of care for TB, while testing for COVID-19.¹¹ Many of the structures, services and facilities put in place during the COVID-19 pandemic can be repurposed and re-utilised to strengthen our response to the TB epidemic. For example, the use of the geographical informational systems (GIS) mapping system to identify and isolate cases to prevent onward COVID-19 transmission can be used as a cheap and effective method to locate sites of TB

transmission and hotspots in high-burden communities for targeted testing and contact tracing.¹²

The rapid spread of the COVID-19 pandemic has triggered social stigma and discrimination towards individuals believed to have been in contact with the virus. As COVID-19 and TB symptoms are similar, this stigma may extend to TB patients.¹³ Stigma and discrimination disrupts social unity and causes isolation. People hide their illness, which prevents them from seeking timely medical help, and discourages their acceptance of the social behaviours required to prevent the spread of TB and COVID-19.¹⁴ This hinders effective public health interventions; it is therefore important to establish reliable health services and strategies that prioritise care for both TB and COVID-19 patients. This approach will assist in building trust in the health system and allow people to take meaningful measures to keep themselves and their families safe. Social media and other forms of communication need to disseminate thoughtful messaging to show support and prioritisation around COVID-19 and TB.¹⁴

Furthermore, the use of respiratory hygiene equipment, including the wearing of surgical or cloth masks by people with TB is particularly important in situations that can lead to TB exposure. The use of face masks for the prevention of TB transmission may perpetuate TB-related stigmatisation and mark people with TB as being sick.¹⁵ COVID-19 has seen the majority of the world adopt mask wearing, and the role of masks in preventing the transmission of respiratory disease is generally accepted. As recommended by the WHO, the use of a mask has been deemed mandatory by the South African government in any public space.¹¹ The move towards universal and cultural acceptance of mask wearing may bring a normalising effect on the stigma associated with mask use, and reduce stigma experienced by TB patients and their families, therefore encouraging greater use of preventive equipment for TB, as well as COVID-19.

In conclusion, interruptions in the delivery of TB services may result in additional loss of life, especially in high-burden settings.³ However, South Africa has the opportunity to use the COVID-19 response to transform its TB response.⁵ It is crucial to establish and maintain prevention measures, as well as healthcare services for TB, as this could substantially minimise the impact of the COVID-19 pandemic³ and vice-versa.

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