THE PROBLEM OF TUBERCULOSIS DURING THE COVID-19 PANDEMIC

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Respiratory tract infections (RTIs) remain the top cause of morbidity and mortality from infectious diseases worldwide. Until the end of December 2019, just three pathogens featured on the WHO Blueprint priority list for research and development: severe acute respiratory syndrome (SARS) coronavirus (SARS-CoV), Middle East respiratory syndrome (MERS) coronavirus (MERS-CoV) and Mycobacterium tuberculosis. In January 2020, SARS-CoV-2, the cause of COVID-19, was added to the priority list. Since then, SARS-CoV-2 has spread outside China to all continents causing death and economic disruption, and considerable concern among national, regional, and international communities. The social and psychological impact of the epidemic has been compounded by the need for strict social distancing, and the rapid spread of information and misinformation via both mainstream media and social media. Even more alarming is the disruption caused to global health services.

TB control programmes will be strained due to diversion of resources, and an inevitable loss of health system focus, such that some activities cannot or will not be prioritised. This is likely to lead to a reduction in quality of TB care and worse outcomes. Further, TB patients often have underlying co-morbidities and lung damage that may make them prone to more severe COVID-19. The symptoms of TB and COVID-19 can be similar, with for example cough and fever. Not only can this create diagnostic confusion, but it could worsen the stigmatization of TB patients especially in Low and middle income countries, given the fear of COVID-19.

While stringent COVID-19 responses may only last months, they would have a lasting impact on TB in high-burden settings, through their effect mainly on TB diagnosis and treatment.

Globally, a 3-month lockdown and a protracted 10-month restoration could lead to an additional 6.3 million cases of TB between 2020 and 2025, and an additional 1.4 million TB deaths during this time.

As such, global TB incidence and deaths in 2021 would increase to levels last seen in between 2013 and 2016 respectively – implying a setback of at least 5 to 8 years in the fight against TB, due to the COVID-19 pandemic. Long-term outcomes can be strongly influenced by the pace of short-term recovery.

Each month taken to return to normal TB services would incur, in India, an additional 40,685 deaths between 2020 and 2025; in Kenya, an additional 1,157 deaths; and in Ukraine, an additional 137 deaths over this period.

To recover the gains made over last years through increased efforts and investments in TB, it is important to have supplementary measures and resources to reduce the accumulated pool of undetected people with TB. Such measures may include ramped-up active case-finding, alongside intensive community engagement and contact tracing to maintain awareness of the importance of recognizing and responding to symptoms suggestive of TB, using digital technology and other tools. Securing access to an uninterrupted supply of quality assured treatment and care for every single person with TB will be essential. Notifications will provide a helpful approach for monitoring the progress of such supplementary efforts.

In a context of widespread restriction of movement of the population in response to the pandemic and isolation of COVID-19 patients, communication with the healthcare services should be maintained so that people with tuberculosis, especially those most vulnerable, get essential services. This includes management of adverse drug reactions and co-morbidities, nutritional and mental health support, and restocking of the supplies of medicines.

Enough TB medicines will need to be dispensed to the patient or caregiver to last until the next visit. This will limit interruption or unnecessary visits to the clinic. Mechanisms to deliver medicines at home and even to collect specimens for follow-up testing may become expedient. Home-based TB treatment is bound to become more

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common. Alternative arrangements to reduce clinic visits may involve limiting appointments to specific times to avoid exposure to other clinic attendees; using digital technologies to maintain treatment support [21]. Community health workers become more critical as treatment is more decentralized.

More TB patients will probably start their treatment at home and therefore limiting the risk of household transmission of TB during the first few weeks is important. Vulnerable populations who have poor access to healthcare should not get further marginalized during the pandemic.

Conclusions. A priority for all governments during this difficult time should be to ensure continuity of essential health services, including national programmes to end TB. During the 2014–2015 Ebola outbreak in West Africa, additional deaths from TB (as an indirect consequence of the outbreak) exceeded deaths directly caused by Ebola.

Access to treatment for people with TB was interrupted because community health workers, doctors and laboratories devoted their energies and resources to the Ebola outbreak. The same is now likely to happen with the COVID-19 pandemic, but on a global scale.

As the relatively weak health systems in high-burden settings struggle to respond to COVID-19, there is a significant risk that prevention and treatment programmes for the existing conditions will be disrupted.

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