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## TB and HIV surveillance amid COVID-19 pandemic

Sir,

Coronavirus disease 2019 (COVID-19) has caused an unprecedented disruption of healthcare systems in many countries. This might affect other public health programs that address critical infectious diseases such as human immunodeficiency virus (HIV)/AIDS and tuberculosis (TB). Currently, COVID-19 testing could overshadow global HIV and TB testing targets.<sup>[1]</sup>

Infection with SARS-CoV-2 can impose a major health burden in patients who are already living with comorbidities of HIV.<sup>[2]</sup> To reduce the burden of COVID-19 infection in HIV patients, the surveillance for HIV should be increased, leading to identification of more patients with less severe comorbidities.

Latency in HIV testing could result in patients being diagnosed with higher viral loads and lower CD4 counts.<sup>[2]</sup> This immunocompromised state increases the morbidity and mortality risk of these individuals in the presence of COVID-19 co-infection.<sup>[3]</sup>

Previous pandemics of viral infections such as Ebola and influenza caused major disruptions in prevention and diagnosis of endemic diseases such as TB.<sup>[4]</sup> An international multicenter cohort study showed that COVID-19 often results in a higher rate of hospital admission and death among patients with active and latent TB.<sup>[5]</sup>

Immunocompromised patients living with HIV often have a greater risk of co-infection with TB. Developing countries were already struggling to fund HIV and TB surveillance programs to identify and treat patients with HIV and TB at an earlier stage.<sup>[6]</sup> It is anticipated that majority of low-income countries will face greater economic challenges in the era of COVID-19, due to negative economic impacts of nationwide lockdown restrictions.

One of the strategies to prepare the public and the healthcare system to face the COVID-19 pandemic is to improve the surveillance of HIV and TB. Increased surveillance of HIV and TB in the current situation would not only benefit the society as a result of reduced burden of these endemic infectious diseases but also would certainly alleviate the pressure on already overwhelmed healthcare systems in developing countries.

Public healthcare systems and governments in developing countries may benefit from implementing cost-effective targeted population approaches to identify high-risk groups, screen, and diagnose patients at an early stage. Particularly, it is important to screen individuals from high-risk groups such as men who have sex with men, sex workers, intravenous drug user, and immigrants from areas with a high prevalence of TB. In addition,

public health campaigns may be used to educate the general public, and continued professional development programs would help in raising awareness among the healthcare workers. COVID-19 is recognized as a multisystemic infection.<sup>[7]</sup> Immunocompromised patients with comorbidities often have a greater risk of developing COVID-19 complications and admission to intensive care unit.<sup>[8]</sup>

In conclusion, the implementation of public health strategies to reduce the burden of complications of COVID-19 in patients with HIV and TB would be essential in the current pandemic. Furthermore, the costs of treating patients with these complications would be reduced for already stretched healthcare systems.

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### Conflicts of interest

There are no conflicts of interest.

Alireza Sherafat, Mohammad Ali Ashraf<sup>1</sup>,  
Kianoush Vosough<sup>2</sup>, Tess Cruickshank<sup>2</sup>,  
Kiana Shirani<sup>3</sup>

Undergraduate Department, School of Medicine, University of Central Lancashire, Preston, United Kingdom, <sup>1</sup>Student Research Committee, Shiraz University of Medical Sciences, Shiraz, Iran, <sup>2</sup>Undergraduate Department, School of Medicine, University of Buckingham, Buckingham, United Kingdom, <sup>3</sup>Infectious Diseases and Tropical Medicine Research Center, Isfahan University of Medical Sciences, Isfahan, Iran

### Address for correspondence:

Dr. Kiana Shirani,  
Infectious Diseases and Tropical Medicine Research Center, Isfahan University of Medical Sciences, Isfahan, Iran.  
E-mail: kianashirani@med.mui.ac.ir

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