CORRESPONDENCE

Sustaining essential healthcare in Africa during the COVID-19 pandemic


Departments of Family Medicine, Immunology, Medical Microbiology, and Division of Infectious Diseases, Department of Internal Medicine, University of Pretoria, Pretoria, South Africa.

Correspondence to: Tessa S Marcus, Faculty of Health Sciences, University of Pretoria, Room 7-10, Level 7, HW Snyman North Building, Private Bag X20, Hatfield 0028, South Africa. e-mail: tessa.marcus@up.ac.za

Dear Editor,

The South African Government’s nationwide lockdown has prompted public and private healthcare systems to prepare for increased acute and intensive care admissions. In developing a response to the threat of SARS-CoV-2 infection, which is stretching hospital services worldwide to their limits, it is easy to lose sight of the importance of essential primary healthcare.

Evidence from China\(^1\) indicates that the shift in focus to COVID-19 leads to resource diversion away from tuberculosis (TB) and drug-resistant TB (DR-TB) management; this is already manifest in South Africa. In at least one province, COVID-19 planning takes no account of the country's multidrug-resistant TB (MDR-TB) ambulatory programme. Aside from being designated a COVID-19 isolation area (to keep people under observation), a team that provides holistic patient and family MDR-TB and HIV ambulatory care in a rural district (Figure) has been left out of district and facility plans.\(^2\) In keeping with expectations that TB patients are particularly vulnerable during the COVID-19 pandemic,\(^3\) staff and patients fear increased mortality, especially where there is HIV or diabetes mellitus comorbidity. Staff are also frightened of the risk to themselves and their families of providing care without essential adequate personal protective equipment (PPE), which is in short supply.\(^4\) There is concern that the withdrawal of a best practice model of community-based ambulatory MDR-TB care will be to the detriment of patients, their families and the health care system. This is compounded by the limitations of the present TB hospitals, which are not structured to isolate patients with MDR-TB and COVID-19.

Beyond these issues, there is a risk that existing healthcare vigilance will not be maintained for diseases presenting with a cough or fever. Given the known influence of clinical activity and health seeking behaviour on TB and HIV detection,\(^5,6\) primary healthcare staff need to be alert for these conditions during the COVID-19 emergency. Equally, primary care case follow-up needs to intensify rather than decline, both to support COVID-19 detection\(^7\) and to ensure that the restrictions on movement do not negatively impact on treatment adherence. Services need to reduce the number of routine visits where patients are controlled and reorganised to ensure patient safety through effective triaging and infection control measures.\(^8\)

There are many unknowns. Without additional laboratory tests it is difficult to differentiate TB, seasonal influenza and SARS-CoV-2 infection in patients with cough and fever. It is also unclear what the course of SARS-CoV-2 infection will look like in undiagnosed TB and HIV, and newly initiated, or poorly adherent patients undergoing treatment.
Nevertheless, there are also opportunities to better manage the epidemic through primary healthcare. All available evidence suggests that the majority of people who become infected and moderately ill recover without the need to be hospitalised. However, in South Africa this is only likely be the case if primary healthcare providers proactively raise awareness and understanding of COVID-19, as has been done with HIV/AIDS, and simultaneously, continue to provide essential services to the millions of people on treatment.

The call to focus and engage the community should be taken up everywhere as both a public and a primary healthcare service issue, not only to prevent and contain infection, but also to support therapy and post-infection recovery. If we do not orientate services to provide extended primary care, it will be difficult to respond to the windows of opportunity that arise to prevent infection, delay disease progression and reduce the need for hospitalisation and specialist care.

At the time of writing, the impact of COVID-19 on people with HIV and TB is uncertain. However, we anticipate that SARS-CoV-2 will have deleterious effects on people with these kinds of respiratory and immunocompromised conditions. As countries prioritise COVID-19, it is imperative that South Africa focuses on essential primary healthcare. We urgently recommend:

1. Best practice training for COVID-19 identification and management for all primary healthcare providers;
2. COVID-19 screening, testing and adherence support of all HIV, TB, MDR-TB and other patients with chronic disease;
3. Development of essential primary care guidelines and training for all primary care personnel;
4. Sustained and adequately staffed essential primary care services;
5. Uninterrupted extended provision of medication for chronic conditions to reduce frequency of non-essential service contact;
6. Provision of PPE for all front-line COVID-19, TB, and MDRTB primary care workers;
7. Intensified infection control during the collection, processing and transportation of all respiratory specimens;
8. Provision of effective electronic and communication technology to support staff, patients and the public.
References
Figure COVID-19 risks to a rural South African ambulatory MDR-TB primary care service

Current patient cohort: \( n = 64 \)
Treatment phase: 4–6 month intensive 70%; continuation 30%
Care: ambulatory 95.3%; admitted 4.7%

Team concerns
Effective ambulatory service not in COVID-19 provincial and hospital emergency response plans.
PPE shortages and reprioritisation away from MDR-TB, resulting in delayed diagnosis and treatment default.
Difficulty differentiating COVID-19 and TB symptoms.
Inadequate in-facility isolation for TB-COVID-19 infected patients.
High vulnerability to SARS-CoV-2 infection

Patient concerns
I am feeling well and have no medical complaint today. Can I self-quarantine or isolate at home rather than being admitted? Can you visit me at home to check on how I am doing if infected? I am asking for your assurance. I know I can infect my family, but we can take precaution if guided properly. (Patient L, 54, female, rifampicin-resistant DR-TB, continuation phase)

I am a diabetic patient on drug-resistant TB treatment with damaged lungs. I feel well, my blood sugar is controlled. I hear COVID-19 is bad for my case. I am asking what are my chances of survival if I get COVID-19 infection? Can I prepare my mind to die? (Patient N, 36, male, MDR-TB, post-treatment discharge phase)