Desperate times call for desperate measures: Adapting antiretroviral service delivery in the context of the COVID-19 pandemic

To the Editor: On 23 March 2020, President Cyril Ramaphosa announced a nation-wide lockdown to help curb the spread of the COVID-19 epidemic in South Africa (SA). While these containment measures are considered to have limited the spread of COVID-19 in SA, the economic and social consequences, including the impact on healthcare service delivery, are prominent.

Regarding healthcare service delivery, there are concerns about people who could be at risk of experiencing severe COVID-19 infection, and about meeting the needs of people with chronic diseases such as people living with HIV (PLHIV). In the context of the COVID-19 pandemic, PLHIV with an unsuppressed viral load may be at increased risk of developing severe COVID-19-related conditions and potentially dying, especially those who are co-infected with tuberculosis (TB). It is therefore important for PLHIV to avoid contact with individuals infected with COVID-19, while having access to antiretroviral therapy (ART). Although differentiated service delivery (DSD) models centred around clients' needs and expectations and relieving unnecessary burdens on the health system, such as adherence clubs and quick pharmacy pick-up models, are now commonplace,[1] the COVID-19 containment measures have dramatically undermined the functioning of these services.

To minimise the impact of the well-intended COVID-19 containment measures on the HIV treatment outcomes of PLHIV, there is a critical need to adopt innovative approaches to sustain access to ART. The authors are involved in designing, implementing and monitoring differentiated approaches to maintaining decentralised access to ART for PLHIV in Western Cape Province. Herein, we describe the various DSD models currently adopted to overcome the challenges faced by PLHIV in accessing ART in the context of the COVID-19 containment measures.

When prepacked medications from the Central Dispensing Unit are received at the primary healthcare facility, the manifestos that come along with the prepacked medications are used to find the patients' phone numbers and addresses in the electronic registry systems or patient folder. The patient is then contacted telephonically to verify their home address and where they would like their medication parcels to be delivered. Parcels for home delivery are then placed into boxes and delivered to the not-for-profit organisation (NPO) responsible for providing the community health services in the designated area for delivery.

Home delivery is the preferred delivery method and is offered to all PLHIV on ART, irrespective of how far from their treating facilities they live. Home deliveries aim to limit the need to attend a health facility for all patients. The call placed to patients is also a form of obtaining verbal consent. Verbal consent is required because not all PLHIV have disclosed their HIV status to their families owing to the potential of being stigmatised by family members and/or neighbours.[2] If follow-up bloodwork is required, phlebotomy services are also deployed through the Uber model. The success of the home delivery approach of medication is dependent on verifying the patients' addresses telephonically so that the community health workers (CHWs) do not waste efforts delivering to a patient who gave the wrong address or who is not in favour of home delivery.

When the phone call to assess the possibility of home delivery is made, some patients who have not disclosed their status to their family members opt to use their standard DSD model. Although DSD models such as adherence clubs, in which patients met as a group, are still operating, these models are now operated as *de facto* medication pick-up mechanisms, as club members are no longer required to sit as a group for facilitated discussions. While picking up medication, patients are required to always wear masks (cloth or surgical), as maintaining the recommended 2 m distance from each other may be challenging because facilities do not have very wide halls.[3] Hand sanitisers are also provided at the entrance to the healthcare facilities.

For PLHIV who do not want their medications to be delivered at home or to go to the clinic for collection, arrangements are made for their medication to be delivered at a community-based designated location, usually church premises, town/community halls or NPO offices. Community-based venues are also used when an area is deemed too dangerous for CHWs to do door-to-door home deliveries. While picking up their medications, patients are also expected to maintain social distancing measures.[4]

Home delivery is also done for PLHIV who are quarantined at home. For PLHIV who are in isolation centres and forgot to collect their medication refill before isolation, arrangements are made for their medication to be dropped by the nurse manning the isolation centre. Deliveries at isolation centres are co-ordinated at a higher administrative level rather than at the facility level. Usually, the patient reaches out to healthcare workers at their usual treatment facilities, who then communicate with the substructure to co-ordinate the efforts to provide ART for patients in isolation.

For PLHIV who are also on TB treatment, rather than have a healthcare professional conduct directly observed therapy (DOT), the patients are assessed in terms of whether a family member is available to support DOT or are referred to NPOs for community-based support if available. The clinicians then provide 2 weeks' supply of medication (supplying a pillbox if available) and schedule a follow-up appointment, as opposed to 1 week's medication. The patient's and family member's contact details are recorded and supplied to the facility for confirmation.

For patients who previously received their medication packages at a facility close to their workplaces, having their medication delivered to their homes is a challenge as they may live out of the designated jurisdiction of the CHWs/NPO, or even in another substructure. An area for improvement is a collaboration between various NPOs and/or substructures to assist with these patients also having their medications delivered to their homes if they give permission.

For PLHIV who the facility fails to contact, their medications are kept at the facility for collection.

In conclusion, we encourage other health systems to consider adopting such patient-centred and context-relevant approaches while upholding the COVID-19 containment measures.

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