

Commentary



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 Patrick Mbulaje,  Symon Fidelis Nayupe,  Steven Munharo, Chikondi Nkwanju,  Confidence Banda, Don Eliseo Lucero-Prisno III

Corresponding author: Patrick Mbulaje, Health Department, Centre for the Development of People, Lilongwe, Malawi. patrickmbulaje@gmail.com

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Effects of COVID-19 on HIV services: the case of Malawi

Patrick Mbulaje^{1,&}, Symon Fidelis Nayupe², Steven Munharo³, Chikondi Nkwanju⁴, Confidence Banda⁵, Don Eliseo Lucero-Prisno III⁶

¹Health Department, Centre for the Development of People, Lilongwe, Malawi, ²College of Medicine Private Clinic, University of Malawi, Blantyre, Malawi, ³Training and Research Unit of Excellence, College of Medicine, University of Malawi, Blantyre, Malawi, ⁴Biomedical Department, Malawi College of Health Sciences, Lilongwe, Malawi, ⁵Laboratory Department, University of North Carolina Project, Malawi-Tidziwe Research Centre, Lilongwe,

Malawi, ⁶Department of Global Health and Development, London School of Hygiene and Tropical Medicine, London, United Kingdom

&Corresponding author

Patrick Mbulaje, Health Department, Centre for the Development of People, Lilongwe, Malawi

Abstract

The coronavirus (COVID-19) pandemic is a global health emergency. It presents a significant threat for people living with HIV and AIDS and for the global response to HIV. Changes that countries have set in motion within the health systems and economies to adapt to the COVID-19 pandemic threaten to deprioritize the urgent, ongoing needs of people living with HIV and derail decades of hard-won progress in the response to HIV, TB and other diseases. Disruptions to supply chain systems for key HIV commodities, logistics and reporting systems have limited the ability for countries like Malawi to maintain or extend HIV-related services, as well as to set up adequate COVID-19 control measures. In such countries where there is high burden of HIV, it is a priority to ensure continuity of ART during the pandemic. HIV related deaths could increase substantially during the COVID-19 pandemic under reasonable worst-case assumptions about interruptions to HIV services. It is highly recommended for the COVID-19 response to be informed and grounded in rights-based and community-centred approaches. True progress will require addressing deep-seated structural inequalities to protect the most marginalized. There is a need to actively involve People Living with HIV (PLHIV) when making crucial decisions about their health during pandemics and that HIV-related policies need not be overlooked during the pandemic if the successes of the decades-long fight against HIV/AIDS have to be maintained.

Commentary

In recent years, substantial progress has been made in reducing the burden of HIV. Ambitious targets have been set for reaching very low levels of burden by 2030, as part of the sustainable development goals. However, many low-income and middle-income countries like Malawi are still experiencing high burden of HIV and millions of people depend on large-scale programs to control and treat the pandemic. Interruptions to control programs might have resulted in major setbacks,

compounding the direct impact of COVID-19 [1]. Disruption to delivery of HIV services in Malawi and sub-Saharan Africa as a whole caused by COVID-19 led to adverse consequences for the health of people beyond those from COVID-19 itself. The disruption has contributed to COVID-19-related morbidity and mortality, clinic closures or reduced service availability [2]. This commentary aims at conceptualizing the potential impact of COVID-19 on HIV services as arising predominantly from disruptions to the usual activities and services due to COVID-19. These disruptions include mitigation strategies being undertaken in response to the COVID-19 pandemic leading to the scaling back of certain activities and care-seeking; reduced capabilities of the health system due to overwhelmingly high demand for the care of patients with COVID-19; and interruptions to the supply of commodities as a result of effects on both domestic and international supply chains.

Scaling down of HIV services: HIV and related comorbidities are still a significant burden to Malawi. As per 2018 UNAIDS data, about 9.2% of adults aged between 15-49 live with HIV [3]. However, intensive interventional efforts by the Malawi government and its partners in addressing the HIV burden have significantly reduced occurrence of HIV-related deaths and illnesses. The incorporation of HIV services into Malawi's essential health package (EHP) and the rolling out of HIV-specific programs had taken the fight against HIV on the right track. Health officials fear COVID-19 pandemic has the potential to turn the tables for Malawi's fight against HIV particularly since response measures to COVID-19 seemed to have directly affected the delivery of various HIV services which often require direct client contact through community outreaches and in-person clinic visits. According to reports by UNAIDS country director, there was a 35% reduction in the number of HIV tests conducted during the lockdown period in Malawi [4] Malawi, as a country was geared towards addressing COVID-19 from the time the first local cases were recorded. Due to this, most of the healthcare workforce was drawn towards

fighting COVID-19, which directly affected the number of healthcare workers on the HIV fight front. This created a gap that eventually led to scaling down of HIV services in hospital systems. As COVID-19 preventive measures got more stringent, restriction on (public) gatherings meant that community volunteers involved in HIV programs would no longer offer community HIV services in fear of spreading the COVID-19 virus. Hospital visits were themselves discouraged, encouraging people to stay home as a measure of minimizing people contact. This meant that routine clinic visits for HIV services were technically reduced as clinics closed scheduled clinic days until the COVID-19 situations improved. In another aspect, HIV projects that were under direct funding from government partner organizations and institutions suffered cuts in funding as countries pulled back to concentrate on their COVID-19 burden. This has directly affected the scale to which HIV programs are running which has significantly impacted on service delivery.

Interruptions to supply of HIV commodities: the COVID-19 pandemic has led to the redesigning of HIV clinical models; HIV patients were restricted from attending clinical services as a measure to prevent SARS-CoV-2 transmission. Clinics adapted remote interactions which further limit access of ART services to HIV patients in low-income countries [5]. Globally, COVID-19 induced supply chain issues in part with the closure of country borders and restrictions in in-country movements. Such movement restrictions meant increased time to move raw materials necessary for manufacturing drugs. Implementation of lockdowns led to disruption of both licit and illicit supply chains of HIV commodities to low-income and middle-income countries from donor funding regions. Countries were more focused on combating COVID-19 hence slowing down the supply of HIV medications such as anti-retroviral treatment (ART) and pre-exposure prophylaxis (PrEP) [6]. The COVID-19 preventive measures affected the international shipping of consumables which led to delays of supplies, increased lead time and arising costs [7]. A country's supply of ART can be

disrupted due to delayed dispatches or delayed transportation. For instance, deliveries of antiretrovirals were delayed in some countries because most manufacturers are based in India which was under lockdown. Manufacturing plants were running at half capacity, further delaying production and consuming storage space. Logistics of raw materials from China to India faced challenges as well. In 2019, 8.3 million people were benefiting from ARVs in 24 countries that have now been experiencing drug shortages [8]. Due to the impact of COVID-19 pandemic, on 6th July 2020, the WHO reported that 73 countries had warned about the likelihood for potential stockouts. A modelling group convened by WHO and UNAIDS reported that a disruption of six months could lead to 500,000 HIV/AIDS related deaths. There were fears that disruption of logistics may lead to 10-20% increase in costs of the final export costs of antiretrovirals from US\$850-900 million to US\$ 100-250 million. This increment of costs may prove difficult for low and middle-income countries such as Malawi. One of the areas that may have contributed to increase in logistical charges is the increase in the prices of air freight due to reduced numbers of carriers operating in the region. Moreover, there were economic constraints of volatile currencies in LMICs which led to the increase of costs. Establishment of lengthy bureaucratic processes such as custom certification and cancellation of passenger freights further worsened the situation.

Impact of physical distancing on HIV services: interruptions to control programs might have resulted in major setbacks, compounding the direct impact of COVID-19 [1]. Due to the COVID-19 pandemic, countries including Malawi imposed physical distancing as one way of preventing transmissions. This meant that even health services were supposed to be scaled down so that health workers do not get in contact with clients routinely. Interactions with health providers, access to medications, and adherence are undermined by physical distancing requirement that was imposed. It is believed that in times of crisis, adherence to ART may be severely compromised for PLHIV,

creating an additional level of concern. In the Wuhan region of China, reports indicate PLHIV struggled to access ART during the COVID-19 outbreak due to the stigma and discrimination surrounding the HIV/AIDS epidemic in the country [9]. As such, it is imperative that PLHIV remains engaged with their primary and HIV healthcare providers amidst the COVID-19 pandemic to ensure consistent access to HIV-related care and treatment. Anecdotal evidence from Malawi showed relaxation of eligibility criteria for dispensing of ART drugs. About 30-40% of people who are on ART were given 6 months refill compared to 10% during the pre-COVID-19 days. However, there is no data on the impact of COVID-19 on critical groups such as men who sleep with men (MSM), female sex workers and other LGBTI+people. However, it is likely that these group may have suffered disruption due to already existing challenges they face such as stigma and discrimination as well as unfriendly services. Data from Melbourne, Australia indicated a 66% reduction of access to post-exposure prophylaxis PEP after the lockdown (March 23rd-29th) and returned around April 20th. For example, among 4 sex workers who would access PEP 4 weeks before lockdown, none accessed PEP after lockdown [10].

Recommendations

Support the establishment of online programming or telemedicine projects: even though social distancing measures are necessary to reduce the number of COVID-19 cases, the long-term impacts of this and related measures must also be considered in terms of their effects on the health of People Living with HIV (PLHIV). While many organisations transitioned to functioning online, community-based organizations and hospitals lacked the capacity to do so during the COVID-19 pandemic. Given that these organizations help support socializing needs of PLHIV, it would be beneficial to provide increased funding at this time to support the establishment of online programming or telemedicine projects. Institutions should also adapt usage of simple phone

technologies that people are using such as WhatsApp communication applications, and Short Message Service (SMS) and Unstructured Supplementary Service Data (USSD) for communication in resource limited settings in Malawi where mobile broadband is not available. Two-way communication via SMS or WhatsApp in between clinic visits may help health officers collect essential data and improve adherence. It would be important if mobile service providers subsidized one way or two-way SMS use between health officers and PLHIV to improve communication particularly at a time when free movement is restricted in some areas [10].

Involve PLHIV in decision making during pandemics: it is imperative that PLHIV are included when discussing needed programming. During COVID-19 pandemic era, a lot of decisions were made without involving the actual clients which adversely affected accessing the services as they were not aware of the set alternatives to access certain services. Drug dispensers must continue utilizing and engaging with the community to find better means of delivering HIV medicines.

Set in place in country distribution systems to prevent stockouts: it is important for dispensaries to continue moving many clients to multi-month drug dispensing as this would minimize congestion in busy facilities also taking into consideration current drug stocks. The hospitals should improve communication with communities and PLHIV to ensure they are monitored even when contact between hospitals and PLHIV is minimal [8]. Distributors should be encouraged to adhere to recommendations by submitting orders in advance and adjust supply plans to longer lead times. Distributing stock rather than holding it and communicating effectively across and along hierarchies of distribution.

Conclusion

As community transmission of COVID-19 continued and the number of country cases were rising, the Malawi fragile health system was strained. Utilizing the adaptive, data-driven programme approaches in facilities and communities established and supported by various partners provided the opportunity to strengthen the COVID-19 response while protecting the immense gains spanning HIV prevention, testing and treatment reached thus far. The indirect impact of the pandemic might be largely avoided through maintenance of core programme elements and recovery campaigns. For HIV, individuals receiving ART should continue to access treatment even in periods of highest health system demand (e.g. via multimonth prescriptions or dispensing away from health facilities).

Competing interests

The authors declare no competing interests.

Authors' contributions

All authors have contributed equally. All authors have read and approved the final manuscript.

References

1. Jewell BL, Mudimu E, Stover J, Ten Brink D, Phillips AN, Smith JA *et al.* Potential effects of disruption to HIV programmes in sub-Saharan Africa caused by COVID-19: results from multiple mathematical models. *The Lancet HIV*. 2020; 7(9): 629-40. **PubMed** | **Google Scholar**
2. Hogan AB, Jewell BL, Sherrard-Smith E, Vesga JF, Watson OJ, Whittaker C *et al.* Potential impact of the COVID-19 pandemic on HIV, tuberculosis, and malaria in low-income and middle-income countries: a modelling study. *The Lancet Global Health*. 2020;8(9): 1132-41. **PubMed** | **Google Scholar**
3. UNAIDS. Malawi report 2019. Accessed 10 November 2020.
4. All Africa. "Corona carriers" - stigma halts medication and meet-ups for HIV+Malawians. Accessed 28th December 2020.
5. Rebeiro PF, Duda SN, Wools-Kaloustian KK, Nash D, Althoff KN. Implications of COVID-19 for HIV research: data sources, indicators and longitudinal analyses. *Journal of the International AIDS Society*. 2020;23(10): 25627. **PubMed** | **Google Scholar**
6. Iversen J, Sabin K, Chang J, Thomas RM, Prestage G, Strathdee SA *et al.* COVID-19, HIV and key populations: cross-cutting issues and the need for population-specific responses. *Journal of the International AIDS Society*. 2020;23(10): 25632. **PubMed** | **Google Scholar**
7. Bharat Bhushan Rewari, Nabeel Mangadan-Konath, Sharma M. Impact of COVID-19 on the global supply chain of antiretroviral drugs: a rapid survey of Indian manufacturers. *WHO South-East Asia Journal of Public Health*. 2020;9(2): 126-33. **PubMed** | **Google Scholar**
8. WHO. Access to HIV medicines severely impacted by COVID-19 as AIDS response stalls. Accessed 28th December 2020.
9. Shiao S, Krause KD, Valera P, Swaminathan S, Halkitis PN. The burden of COVID-19 in people living with HIV: a syndemic perspective. *AIDS Behav*. 2020;24(8): 2244-9. **PubMed** | **Google Scholar**
10. Chow EPF, Hocking JS, Ong JJ, Phillips TR, Fairley CK. Postexposure prophylaxis during COVID-19 lockdown in Melbourne, Australia. *The Lancet HIV*. 2020;7(8): 528-9. **PubMed** | **Google Scholar**