COVID-19: Learning from the HIV/AIDS pandemic response in Africa

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Abstract
About 74.9 million persons were infected during the human immunodeficiency virus/acquired immunodeficiency syndrome HIV/AIDS global pandemic with nearly half of them succumbing to the disease. In 2018 alone, Africa recorded over 400,000 AIDS-related deaths which is more than half of the global total. This reflects years of inequality in the global pandemic response. Also, the international response to AIDS in the early years was very slow, with a global programme only developed 6 years into the pandemic. Many African countries still lack pandemic preparedness plans to handle a global pandemic. Thus, this paper highlights the important lessons that can be learnt from the response to the AIDS pandemic and recommends how they can be applied during the coronavirus disease 2019 (COVID-19) pandemic. Some of the important lessons include: HIV reversed the previous success recorded in health systems of developing countries; the antiretroviral drug development process was prolonged and required long term commitment; and primary healthcare was crucial in preventing and controlling the disease. These lessons can be utilised in the fight against COVID-19 pandemic. It is recommended that: there should be solidarity among the nations of the world to fight COVID-19; health authorities should be proactive in curbing misinformation; and interventions should prioritise human rights and focus on vulnerable communities. HIV treatment services should not
be discontinued as it is still an ongoing pandemic. A balance needs to be achieved in combating both pandemics as discontinuation of HIV treatment during the coronavirus pandemic could result in more than 500,000 deaths.

KEYWORDS
Africa, COVID-19, HIV/AIDS, pandemic

1 | BACKGROUND

The human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) pandemic is one of the most devastating disease outbreaks in history, with 74.9 million persons infected and nearly half of them succumbing to the disease. In 2018 alone, Africa recorded over 400,000 AIDS-related deaths (more than half of the global total)—a reflection of years of inequality in the global pandemic response. The international response to AIDS in the early years was very slow, with a global programme only developed 6 years into the pandemic.

Although, a few African countries have developed their disease response capacities over the years due to recurring disease outbreaks, most of them have obsolete pandemic preparedness plans that are inadequate to handle a global pandemic. Furthermore, the lack of adequate social and economic support structures in most African countries make blanket restrictions insensitive and unrealistic. While there are several lessons that can be learnt from the global AIDS response, the most fundamental of them is the need to anticipate and address inequalities not only between Africa and the rest of the world but also within Africa itself.

A number of developed countries have committed to ensuring that coronavirus disease 2019 (COVID-19) vaccines and drugs are accessible around the world, but the question is how soon will supplies get to Africa? As was said for AIDS, it is clear that due to the increasing interconnectedness of our world: the COVID-19 pandemic cannot be stopped in any one country except it is stopped in all countries. The pandemic calls for solidarity among the nations of the world against this common enemy. We examine some of the lessons that can be learnt from the global AIDS response, particularly in Africa, and suggest how they can be applied in the context of the COVID-19 pandemic.

2 | SIMILARITIES AND DIFFERENCES BETWEEN HIV AND COVID-19 PANDEMICS

Although they are both zoonotic viral diseases, COVID-19 is caused by a coronavirus while AIDS is caused by a retrovirus. There are no approved vaccines or drugs for either of them, and they can both be transmitted by asymptomatic persons. Therefore, behavioural responses have been adopted to curb the spread of both diseases. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is transmitted mainly via droplets when infected persons cough or sneeze while HIV is transmitted via mucosal contact with infected body fluids. COVID-19 is best prevented by physical distancing, regular handwashing with soap and water or cleaning with alcohol-based hand rub, while HIV prevention strategies include abstinence, limiting sexual partners, avoiding needle sharing, and so on. The incubation period for COVID-19 is 2–14 days, and data revealed that severe disease may develop within one week of symptoms with the possibility of death occurring within 2–8 weeks, while AIDS has an incubation period of approximately 10 years in adults.
THE GLOBAL HEALTH RESPONSE TO THE HIV/AIDS PANDEMIC

Although the first cases of unusual pneumonia in homosexual men were reported by the Centers for Disease Control and Prevention in 1981, the global response started 6 years later with the creation of the Special Programme on AIDS by the World Health Organization (WHO).\textsuperscript{3,14} Prior to this, many scientists, governments, and religious organisations favoured the narrative that AIDS was limited to minority groups in wealthy countries. This had the effect of shaping public opinion towards discrimination against these groups and resulted in a muted response from national governments and health institutions (including the WHO), leaving civil society organisations to fill this gap.\textsuperscript{8} As the number of cases and deaths increased around the world, the potential for HIV to infect large demographics of people—including those who initially thought they were not at risk—created the sense of urgency that triggered a concrete global effort, the WHO's Special Programme on AIDS.\textsuperscript{14}

This programme favoured a human-rights approach towards tackling the pandemic, frowning against stigmatisation and criminalisation of HIV-infected persons or key populations and instead called for solidarity and unity of purpose towards ending the pandemic. It was clear from the onset that a global response was not only ethical but also mutually beneficial given the demonstrated speed with which AIDS spread across several countries in the early days of the pandemic. Among other things, there was a crucial understanding of the following: that HIV could reverse the previous success recorded in health systems of developing countries; that the process of vaccine or drug development could be prolonged hence the need for a long term commitment; and the need to leverage primary healthcare in prevention and control of the disease.\textsuperscript{14} These are important lessons for the global COVID-19 effort.

The global programme on AIDS achieved success in: raising public awareness, initiating relevant research, developing policies, providing technical and financial support to national prevention and control programmes (by 1990 most countries in the world had a National AIDS Program), involving nongovernmental organisations, and advocating for the rights of people living with HIV; this success was cut short by internal conflicts among UN organisations, as well as policy disagreements within the leadership of the WHO and the reluctance of wealthier countries to continue the multilateral effort, preferring bilateral agreements instead.\textsuperscript{8,14} Thus, in 1996 it was replaced by the Joint United Nations Programme on HIV/AIDS (UNAIDS). This programme has provided better coordination of the global effort, addressing the particular problem of multiple programmes being set up by different organisations and donors to solve the same problem.\textsuperscript{15}

One could argue that inequalities in the global response were inevitable as many African health systems have been underfinanced for decades leaving the continent at the mercy of external funding sources that have dwindled in recent years.

LESSONS LEARNT FROM HIV/AIDS RESPONSE AND RECOMMENDATIONS

Here are some of the lessons that can be learnt from the global response to HIV/AIDS pandemic to help in combating the novel coronavirus.

4.1 Anticipating inequalities

The AIDS pandemic ruthlessly exposed inequalities in social, economic and political systems globally, but particularly in African countries with already weak health systems that could barely cope with the added burden of the new disease and COVID-19 is also poised to aggravate such inequalities. China controlled transmission in Wuhan by ramping up surveillance, prompt identification and isolation of suspected cases, rapid testing and
diagnosis and aggressive contact tracing. Such measures would require resources and manpower beyond the reach of many African countries, hence there is a need for support from wealthier nations.

Pre-existing gender imbalances will also worsen. Economic and social implications of lockdowns leave women vulnerable to gender-based violence. Traditional gender roles also mean that women are more likely to be in contact with sick persons and hence stand a higher risk of infection than men. Women play a leading role in taking care of their communities, however, it is recommended that women should be represented in the leadership of outbreak preparedness and response programs.

The pandemic has also had severe impacts on education particularly in developing countries where the WHO estimate that up to 86% of children had their primary education halted. While children in richer countries may have the privilege of online learning, many families in lower-income countries either simply cannot afford the data required or lack adequate power supply to allow their children learn consistently. Thus, children are losing school time simply because they come from economically disadvantaged backgrounds. Governments and civil society organisations should focus on providing sanitisers, soap, clean water, as well as personal protective equipment to schools to allow children resume physical classes at minimal risk to their health.

In addition, the COVID-19 pandemic has exacerbated food insecurity particularly in developing nations whose food systems were already being pressured by conflicts, climate change and economic instability. Food prices have gone up significantly, limiting the capacity of poor families to get enough to eat. The International Committee of the Red Cross (ICRC) recently reported that the number of cases of severe malnutrition in Nigeria grew by 10% compared with 2019, largely due to the COVID-19 pandemic. Interestingly, the country’s land borders have been shut since August 2019 in a move that was intended to boost local food production, but has now ended up worsening food insecurity. Governments must prioritise food aid and avoid detrimental policies like border closure that may stress food systems.

Innovation has played a huge role in controlling the HIV/AIDS pandemic in Africa. Examples include the integration of HIV testing with other healthcare services, the building of efficient supply chains for delivering antiretroviral drugs, and the generation of domestic funding to sustain countries’ national response. In Zimbabwe an AIDS income levy was introduced while in Rwanda HIV services were included in their national social insurance scheme. These measures can also be implemented in tackling the COVID-19 pandemic.

4.2 Curbing health misinformation

Misinformation can foster an atmosphere of panic and discrimination. Hence, there is a need to provide clear, up-to-date information to the public and to be transparent in decision-making. Early in the AIDS response, President Reagan missed a vital opportunity to address discrimination against children with AIDS, refusing to state clearly that he would send his child to a school with other children living with AIDS and instead claiming that there was no convincing scientific evidence that it would be safe to do so. Similarly, President Trump regularly referred to SARS-CoV-2 as the ‘Chinese virus’ early in the COVID-19 response, turning attention away from the crucial task of controlling the pandemic and potentially instigating racial tensions. Situations like this must be avoided as they breed distrust between the general public and health authorities while promoting stigma that may prevent affected persons from seeking care, thus perpetuating disease transmission while creating friction in the global response.

There have been rumours that the SARS-CoV-2 was genetically engineered in a Chinese laboratory despite scientific evidence to the contrary. Similar cases of misinformation occurred during the AIDS pandemic, when Soviet authorities launched a disinformation campaign accusing the United States of creating the virus as part of an alleged research into biological weapons. Health authorities must be proactive in dispelling misinformation and partnerships with media outlets may be explored.
4.3 | Prioritising human rights

Studies analysing criminalisation as part of the global AIDS response have revealed that not only was it ineffective at reducing disease transmission, it also nurtured stigmatisation and promoted an atmosphere of fear that prevented at-risk persons from seeking care.24 There is a real risk of human rights being abused with many African governments deploying the military to enforce lockdown restrictions. Two persons have reportedly been charged with attempted murder in South Africa for flouting quarantine regulations, with the country’s Health minister threatening to ‘name’ and ‘shame’ uncooperative persons.25,26 More worrisome, are reports of security officials killing persons while attempting to enforce restrictions in Nigeria and Kenya.27,28

While there is a need for rapid and effective measures to control the transmission of the virus, such measures must be proportionate and considerate of the unique socioeconomic challenges that many citizens of African countries face.29 It is only logical, to expect a government that cannot provide adequate palliative measures to impose restrictions only when absolutely necessary, and not to ignore the pandemic of hunger that has ravaged their citizens for decades. Local peer support groups, religious organisations, and national and international activist organisations must rise up to the occasion, as they have done so far in the global AIDS response,1 to hold political leaders accountable and demand that human rights are respected.

4.4 | The need for targeted interventions

There is a need to focus interventions on persons most at-risk of infection in resource-limited settings in order to increase effectiveness of health spending. While for HIV that meant condom distribution among sex workers, for COVID-19 this would take the form of food and water supplies, free hand sanitisers, soap, clean water as well as prompt testing within the poorest communities. The poorer the people, the less likely they will be to comply with restrictions, because that may mean sacrificing their source of livelihood. Some form of social protection is required; otherwise lockdown measures will prove to be largely ineffective. Also, targeted education of at-risk groups should be utilised as this was very effective during the AIDS pandemic.30,31

4.5 | Focusing on vulnerable communities

The public health response should be grounded in solidarity and a willingness to make sacrifices to ensure that vulnerable groups can easily assess needed care and testing at no cost. Such groups include, the elderly (above 60 years old), individuals in conflict regions, persons of any age with underlying medical conditions and people living with disabilities (because of likely increased difficulty in accessing care).32,33 Engaging communities in the pandemic response is crucial if vulnerable groups will not be ignored. The existing social structures in communities can be leveraged to ensure that people get the resources or care they need while minimising the risk of infection. Additionally, there should be structured mental health support for this population as they at higher risk of mental illness during a pandemic.34 Furthermore, health workers represent a crucial vulnerable demographic due to repeated exposure to sick persons, especially where personal protective equipment supplies are limited. National governments must prioritise their protection and care by investing significant portions of donor funding to not only providing medical supplies, but also supporting their families. However, in prioritising vulnerable groups care must be taken to also strengthen existing national systems, avoiding a common mistake of the global AIDS response.35

Finally, it is important to note that the COVID-19 response should not side-line HIV counselling and treatment services as the HIV pandemic is still ongoing. A balance needs to be achieved as discontinuation of HIV treatment during the coronavirus pandemic could result in more than 500,000 needless deaths as shown in Figure 1.36
FIGURE 1
Potential effects of disruption to HIV programme in sub-Saharan Africa caused by COVID-19. [Colour figure can be viewed at wileyonlinelibrary.com]
CONCLUSION

Africa is in need of dire help to prevent deaths and economic hardship that would be inevitable if COVID-19 is not promptly contained on the continent. There is also a need to ensure human rights are protected. Civil society groups must rise up to report and prevent human rights abuses in African countries during the pandemic response. Restrictions must also be considerate of the unique economic situation of most African citizens.

This pandemic also provides a timely reminder of the need for African governments to invest in social support systems along with research in order to protect the vulnerable especially in unprecedented times such as this. It must be reiterated that supporting the COVID-19 response in Africa is not only the moral obligation of global leaders, it is also beneficial in the long run.

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CONFLICT OF INTEREST

Authors declare no conflict of interest.

ETHICS STATEMENT

Not applicable.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable, no new data was generated.

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