# Economic and Healthcare Responses to the COVID-19 Pandemic in Africa

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# Abstract

The COVID-19 pandemic has left many governments across the world searching for effective responses to the challenges their citizens face. The paper adopted a qualitative research approach, drawing from an extensive review of literature, analysed through thematic analysis, to explore Africa's economic response as well as challenges faced by the African health systems in addressing the COVID-19 pandemic. Drawing from thematic analysis, pervasive poverty, protracted wars, and entrenched underdevelopment are fundamental considerations in Africa that impact intervention measures towards COVID-19. The thematic analysis also found that inadequate human capital, support for healthcare, weak leadership and management, and lack of quality data were detrimental to Africa's healthcare delivery in response to the COVID-19 pandemic. To improve COVID-19 health response in Africa, public health policymakers can consider adopting the World Health Organization (WHO) national guidelines on reporting, data management, and public accountability on state health disbursed resources.

# Introduction

Globally, governments are still grappling with impactful responses to COVID-19. They are also searching for solutions and health models that can effectively curb the spread of COVID-19. For Africa, this is more important as large parts of the continent are rural. Equal access to health services is a critical measure in bridging the gap between urban and rural areas. Unfortunately, it's well known that in Africa, the rich and powerful get to enjoy a good health system, while everyone else should have access to this as a basic human right.

Responses to COVID-19 have reinforced this perception by focusing mainly on urban areas where wealthy people reside. However, the COVID-19 pandemic provided an opportunity to

rectify the existing imbalances between rural and urban areas, particularly as very few countries were willing to admit COVID-19 patients from other countries, especially Africa. This presented an opportunity for the researchers to ponder the urgency of strengthening African health systems. It is ideal for economic rectification and could serve as a means by which COVID-19 rapid response programs can be implemented. For this reason, using the principles of good governance in the healthcare system is worth considering.

Governance is commonly defined as the set of principles by which the authority in a country is exercised. These principles include World Bank classifications and World Governance Indicators (WGIs), namely, corruption prevention, rule of law, regulatory efficiency, government effectiveness, political stability, voice, and oversight. Good governance arises when there is coordination and clarity in upholding these governance principles. Good governance has two elements: i) bureaucratic and (ii) political. The bureaucratic aspect refers to administrative procedures and the integration of systems using organisational techniques. The political aspect focuses on the fostering of social governance through the involvement of non-state actors.<sup>1</sup>

The reality is that the COVID-19 pandemic came at a time when many governments in Africa were grappling with deteriorating and dysfunctional health systems.<sup>2</sup> This was worsened by the fact that some countries were still trapped in political instability and were impacted by the insurgence of Islamic militants. While there is an expressed desire to curb the effects and the spread of COVID-19 in Africa, the continent has limited means due to competing priorities.

Given the above, the article intends to respond to the following research questions:

- What are the economic impacts of COVID-19 on Africa?
- How has Africa responded to the economic impact of COVID-19?
- In what way did the African health system respond to the COVID-19 pandemic?
- How does governance relate to the African health system?
- · How does data quality relate to COVID-19 response in Africa?

The COVID-19 response can be divided into three parts: first, countries that showed a willingness to develop policies and programmes for rapid response to COVID-19 but had been restricted by limited resources (Zimbabwe, Mozambique); second, countries that opted to neglect the existence and effects of COVID-19 (Tanzania); and, third, countries that implemented drastic measures that were limited to urban areas (South Africa). If extrapolated across the entire continent, these indicate that Africa has provided a mixed response to COVID-19.<sup>3</sup>

The paper used qualitative methods with data drawn from existing secondary sources. Assessments were made by drawing from existing literature and reports on African COVID-19 measures to explore the critical challenges in Africa's strategy to address the pandemic. The first section provides the methodology of the study. This is followed by results and findings of key thematic areas on COVID-19 responses in Africa. The study is relevant to bridge the governance gap in Africa because African states have responded differently to the COVID-19 pandemic.

# **Research Methodology**

This paper employs a qualitative case study approach based on a systematic review of documents on COVID-19 economic and health responses in Africa. Document analysis enables researchers to gain an understanding of the aspects of social life and generate possible themes for analysis.<sup>4</sup> The method relies on the objectivism philosophy, which states that social phenomena must exist independently of social actors. It provides answers regarding reality.<sup>5</sup> This paper is therefore drawn from the assumption that unobtrusive research approaches permit researchers to assess the social behaviour of participants while ensuring that study objects are not being manipulated.<sup>6</sup> This article therefore, adopted an unobtrusive technique that depends on secondary data available in the public domain to arrive at a comparative, historical and conceptual analysis.<sup>7</sup> Content and conceptual analyses were employed for analysis as they helped in identifying critical themes that respond to the research problem. Further, they assisted in acquiring relevant data that could not have been obtained using other data collection methods that include surveys as their coverage may be limited.<sup>8</sup> The main documents reviewed were sourced from the WHO,<sup>9</sup> Africa Union,<sup>10</sup> Africa Development Bank (AfDB),<sup>11</sup> Africa Centre for Disease Control (ACDC)<sup>12</sup> and the Africa Centre for Strategic Studies.<sup>13</sup>

# **Results and Analysis**

This section provides a thematic analysis of Africa's economic and health responses to COVID-19. Five themes are discussed to provide a balanced overview of responses on the continent, bearing in mind differences in governance: the economic impact of COVID-19 in Africa; Africa's economic intervention; Africa's health systems and their capability to handle COVID-19; Africa's health system governance; and the availability of quality data to address the COVID-19 pandemic.

#### **Economic impacts of COVID-19 in Africa**

At the beginning of April 2020, practically all countries on the continent instituted some form of lockdown to address the rapid spread of the coronavirus and to 'flatten the curve' that was showing a dangerous exponential growth rate. The conceptual approach of lockdown included a total shutdown of economic activities, including factories, government departments, transportation, bars, hotels, and other leisure activities. Implemented measures include the total shutdown of international borders (except for transport of essential products such as medicines, food, and equipment for agricultural and pharmaceutical companies). The lockdown in most countries entailed the total confinement of people in their homes.

The main challenges governments were grappling with during the lockdown were the loss of jobs and livelihoods. The COVID-19 pandemic also posed a challenge in managing other common diseases on the continent, such as hypertension, diabetes, and the heavy burden of HIV/ AIDS on health-care facilities. Many scholars have argued that resources that were meant to fight other major health challenges on the continent were diverted to respond to the economic

and health impact of COVID-19. Within the economic realm and according to the AU, more than 20 million jobs were at risk on the continent because of the COVID-19 pandemic.<sup>14</sup> These projected job losses would impact negatively on the lives of the people on the continent, as the economies on the continent were already facing serious economic constraints before the outbreak of the pandemic, owing to increased oil and commodity prices, in addition to a collapsing tourism industry. While some researchers predicted that Africa could lose more than half the jobs it had before the pandemic, the fundamental challenge would be how governments on the continent would respond to the economic situation post-pandemic.

Countries would have to go back to the proverbial drawing board to envisage a post-pandemic economic recovery plan that would have to depart from the traditional Keynesian model of job creation. In the same light, the World Bank warned that Africa's economy may contract by 2.1 per cent to as much as 5.1 per cent in 2022, which had been on an upward trajectory after the economic slowdown caused by the decline in the prices of primary produce in 2018 and 2019. To cushion this fundamental economic setback, the IMF and the World Bank advocated a 'debt standstill' where lenders do not demand the repayment of debt for a period of time to ensure that finances are used in sustaining people's livelihoods.<sup>15</sup>

In this regard, the disruptions caused in the economies of African countries because of the pandemic would necessitate a careful strategy and re-alignment of resources to ensure that priorities for achieving the Sustainable Development Goals (SDGs) were maintained with a focus on the role the Fourth Industrial Revolution (4IR) could play in achieving these objectives. Fundamentally, African economies would have to leverage the huge demographic dividends and the trends associated with them for economic transformation. A demographic dividend refers to the growth in an economy due to changes in the age structure of the population. The change in age structure is mostly due to a decline in fertility and mortality rates. The African economies should focus on the role of Africa's competitive economic advantage, namely, the agriculture and mineral sectors, to advance economic growth in the post-pandemic era. The valorisation of the agricultural sector would be essential in harnessing the advantages accruing from downstream and upstream sectors of the agricultural value chain.

Besides the economic disruptions, African countries struggled to manage the pandemic and other critical health challenges which the continent had been faced with for decades. Malaria and malnutrition are still major health challenges on the continent and many health professionals on the continent were afraid that vital health resources would be diverted from these key health challenges to support the continental response to the pandemic. Of critical concern also was the co-morbidity of COVID-19 with other prevalent health challenges on the continent such as hypertension, diabetes and obesity. Studies in the United States indicate that people with hypertension, diabetes and obesity are twice as prone to developing complications from COVID-19 than normal healthy people.<sup>16</sup> In this regard, the fact that a sizable percentage of the population of the African continent suffers from hypertension, diabetes and obesity gave health professionals on the continent cause for concern.

## **Africa's Economic Intervention**

This section discusses the economic interventions of African countries in response to the COVID-19 pandemic.

#### **Economic relief measures**

One of the first strategic approaches the AU adopted to mitigate the economic impact of COVID-19 was to appoint prominent Africans as special envoys to travel the globe to solicit economic support to African economies. Suffice it to note that the economic atmosphere in most African countries before the pandemic was strained, primarily because of the drastic drop in the prices of oil and other natural products on the international market. With the onset of the pandemic, the key challenge was the kind of economic relief measures the AU was to accord its member states. The chairperson of the AU subsequently appointed special envoys to canvass for financial resources to mitigate the economic challenges of the pandemic. Ngozi Okonjo-Iweala of Nigeria, Donald Kaberuka of Rwanda, Benkhalfa Abderrahmane of Algeria, Trevor Manuel of South Africa, Tidjane Thiam of Senegal, Mbaya Kankwenda of Democratic Republic of the Congo and Strive Masiyiwa of Zimbabwe subsequently mobilised more than US\$30 billion to help COVID-19 strained economies on the continent.<sup>17</sup>

While African countries were urged to submit a request for financial aid from the \$3 billion already secured, the African Union chairperson reiterated that the enormous task of the continent's economic envoys relied on adopting a robust and viable post-COVID-19 economy on the continent.<sup>18</sup> A moratorium on Africa's debt with OECD countries for four years could help many countries to resuscitate their economic activities. As a way of reducing the challenges presented by COVID-19 on Sudan and Zimbabwe, the AU reiterated its call for the lifting of sanctions on these countries.

Individual member states of the AU equally adopted major economic relief packages for industries. In South Africa, the government opted to pay the salaries of most Small and Medium Enterprises (SMMEs) for six months through the Unemployment Insurance Fund.<sup>19</sup> Companies with an annual turnover of less that R300 million were offered government-guaranteed loans. The aim was for these companies to meet some of their operational expenses, rents, lease agreements and contracts with suppliers and salaries.<sup>20</sup> Other economic relief measures were tailormade for companies producing essential commodities needed during the pandemic. These include companies that provided hygiene, medical and food products which were essential during the COVID-19 period. This government relief measure provided stock, working capital, bridging finance, equipment and order finance. The government opted to provide funding to such companies depending on how their businesses were financed.<sup>21</sup> Relief measures were also extended to township businesses to strengthen small businesses to promote accessibility to essential goods for citizen consumption, in addition, serving as a market for locally manufactured goods.<sup>22</sup> The 2020 state budget was re-prioritised to help critical sectors of the economy that were at risk. In other African countries, economic relief measures include tax exoneration and, in some cases, companies were bailed out to avoid retrenchments.

## **Financial responses**

The African Development Bank (AfDB), a technical financial instrument of the AU, unveiled a huge financial facility of US\$10 billion to several countries including the private sector to help regional members address COVID-19. Noting the problem confronting Africa with regard to the pandemic, Akinwumi Adesina, President of AfDB, pledged its support to fight the pandemic. Table 2.1 presents an overview of the distribution of the AfDB COVID-19 relief funds to African member states.

Country/region	AfDB's response	
Horn of Africa and Comoros	US\$9.52 million to improve COVID-19 response coordination	
Gabon	Budget help of €100.5 million to alleviate the impact of COVID-19	
Sao Tome & Principe	US\$683000 in grants to support the country's response to the pandemic and its impacts	
Seychelles	US\$10 million loans to support COVID-19 responses	
Ethiopia	US\$165 million grant for COVID-19 emergency response	
Тодо	For the COVID-19 reaction, a US\$3 million loan reallocated to the agriculture sector	
Cameroon	€88 million to finance COVID-19 response	
South Sudan	US\$4 million to bolster COVID-19 response	
Egypt	Budget support loan of €225 million for the power sector to boost economic resilience and sustainability in the face of COVID-19	
G5 Sahel nations	US\$20 million to contain the spread of COVID-19	
Cote d'Ivoire	€ 75 million for COVID-19 response in the country	
Nigeria	US\$288.5 million for Nigeria's COVID-19 response support programme	
CEMAC countries and DRC	US\$13 million to help COVID-19 response in the sub-region and DRC	
Tunisia	€180 million to support COVID-19 response in the country	
Senegal	€88 million in emergency funding for COVID-19 response	
Economic Community of West African States (ECOWAS)	US\$22 million for low-income ECOWAS countries in response efforts against COVID-19	
Cape Verde	€30 million for COVID-19 response	
Morocco	€264 million for COVID-19 response	
Kenya	GBP188 million to boost COVID-19 response	
Mauritius	GBP188 million for COVID-19 response	
Zimbabwe	US\$13.7 million to strengthen the health system in its response to COVID-19 efforts	

 Table 2.1: COVID-19 relief by country/region and targeted response

Source: AfDB, 2020

It should be noted that most of the financial response facilities were intended to help the health sector address the shortfall the sector was experiencing in mitigating the challenges associated with the pandemic. The purchase of Personal Protective Equipment (PPE) took up a large allocation of the financial resources. Besides these massive financial response packages, the AfDB equally allocated US\$10 million to Razorite Healthcare Fund including US\$2 million emergency help to direct WHO-led strategies for fighting COVID-19 in Africa.<sup>23</sup> Further complementing the response packages, the AfDB offered a US\$3 billion COVID-19 social bond that aimed at assisting African countries survive the scourge of the pandemic while sustaining local livelihoods.<sup>24</sup> The bond exceeded its initial U\$3 billion and increased to US \$4.6 billion.<sup>25</sup> The three-year bond had a maturity rate of 0.75 per cent. The primary objective of the 0.75 per cent maturity rate was to reduce the devastating economic and social effects of the virus on regional African governments and the private sector.<sup>26</sup>

The chairperson of the AU Commission, President Ramaphosa, unveiled Johannesburg as the continent's procurement hub for the purchase of all COVID-19 related supplies. Johannesburg and Addis Ababa were equally designated as African transport hubs for the distribution of medical supplies to other African countries.<sup>27</sup> Supported by the AU, the hubs would be equipped with a state-of-the-art transport and duty-free facility to transport much needed medical supplies quickly and efficiently from China and other countries to African countries. South African Airways, Kenyan Airways and Ethiopian Airlines were designated as official AU freight carriers.<sup>28</sup> Of importance to the continent was the fact that China agreed to make available 30 million test kits for the continent, 10 000 ventilators as well as 80 million face masks per month for the continent. In addition, the AU chair further insisted that African companies should be given priority in the sourcing of medical supplies. While finance was a major challenge to many companies in fast-tracking the production of essential health supplies, the chair of the AU noted that a dedicated team of special envoys was appointed to source funding for both AU member states and the private sector in their effort to stock critical medical supplies for the continent.

Academic institutions on the continent equally listened to the call by the AU for the scientific committee to come on board and help the continent mitigate the challenging impact of COVID-19. While pursuing its perennial mandate, the University of Witwatersrand in South Africa, announced on 23 June, 2020, that it had started human clinical trials with a vaccine designed to prevent infection with SARS-CoV-2 viruses.<sup>29</sup> With South Africa accounting for an estimated 23 per cent of COVID-19 deaths in Africa, the trial could not have come at a better time. Though the University of Witwatersrand had forged partnerships with the University of Oxford and Oxford Jenner Institute, there is no gainsaying the fact that the trial was a major boost for the continent's efforts in finding a vaccine for the prevention of the virus.

Concurrently, Madagascar's president Andry Rajoelina announced that Madagascar had developed a curative and preventative capsule, CVO+, to prevent COVID-19.<sup>30</sup> The capsules made from artemisa and distributed by Pharmalagasy were seen by the President as vital to Madagascar's positioning itself on the global pharmaceutical market. Though the announcement was greeted with enthusiasm on the African continent by believers in indigenous African medicines, the CVO+ did not receive any formal approval from the WHO and the ACDC.

However, the manufacture of CVO+ showed that African indigenous knowledge experts were equally concerned with the devastating effect of COVID-19.

#### **Fiscal response packages**

The financial burden that COVID-19 placed on African economies is immense, forcing governments throughout the continent to take exceptional budgetary measures to address the detrimental impact that the virus had on the fiscus. In this regard, with the support of the AU, several countries on the continent applied for the World Bank's emergency funds to fight COVID-19. Soon after the virus was declared a global pandemic, the World Bank reinstated resources in the projects it financed and restructured the projects' parameters including contingent financing tools that were meant to cater for disasters such as pandemics.<sup>31</sup> Table 2.2 provides a breakdown of how African countries have used the World Bank COVID-19 relief fund.

Country	Amount	Purpose
Benin	US\$40 million	Preparedness and response to the pandemic
Burkina Faso	US\$100 million	Preparedness and response and health services reinforcement to the pandemic
Burundi	US\$5 million	Preparedness and response and health services reinforcement to the pandemic
Cape Verde	US\$5 million	Preparedness and response and health services reinforcement to the pandemic
Central Africa Republic	US\$7.5 million	Preparedness and response to the pandemic
Chad	US\$16.9	Strategic preparedness and response to the pandemic
Cote d'Ivoire	US\$75 million	Strategic preparedness and response to the pandemic
DRC	US\$47 million	Strategic preparedness and response to the pandemic
Kingdom of Eswatini	US\$6 million	Strategic preparedness and response to the pandemic
Ethiopia	US\$82.6 million	Mitigate the effects of the pandemic
Ghana	US\$100 million	Strategic preparedness and response to the pandemic
Kenya	US\$50 million	Strategic preparedness and response to the pandemic
Liberia	US\$7.5 million	Response project and health services reinforcement project
Mali	US\$25.8 million	The COVID-19 Emergency Response initiative aimed to increase medical care and encourage an integrated COVID-19 response by increasing patient screening, diagnosis, and treatment, as well as improving labora- tory capacity and monitoring

 Table 2.2: COVID-19 relief by country/region and targeted response

Source: World Bank, 2020

Other African countries who benefited from the facility include: Malawi US\$37 million; Mauritania US\$5.2 million; Niger US\$13.95 million; Republic of Congo US\$11.3 million; Rwanda US\$14.25 million; Sao Tome & Principe US\$2.5 million; Senegal US\$20 million; Sierra Leone US\$7.5 million; Gambia US\$10 million and Togo US\$8.1 million.<sup>32</sup> These emergency fiscal injections into the economies of many African countries helped to maintain the respective governments' fiscal responsibilities towards other sectors of the economy. It also helped to ensure that broader and stronger measures were taken to increase the effectiveness of countries' responses at all stages of the path to recovery. While the AU was not particularly involved in securing funds for its member states, on several occasions, it intimated that any global challenges should be met by global responses. The AU, which is not a funding organisation, supported the World Bank initiatives that are aimed at strengthening the resilience of African economies, especially in their post-COVID-19 recovery efforts.

Fiscal policy adaptation during the COVID-19 pandemic has also seen many countries on the continent realign budgetary allocations to assuage the impact of the pandemic on ordinary citizens. In South Africa, for example, the government introduced a Universal Basic Income Grant to alleviate the negative economic impact of the complete lockdown the country experienced at the beginning of the COVID-19 pandemic. The grant aimed to provide R350 per month for six months for any unemployed person in South Africa who was not benefiting from any form of government funds despite their marital, family or household status.<sup>33</sup>

# Africa's Health Systems and Their Capability to Handle COVID-19

Soon after the COVID-19 was declared a global pandemic, the AU adopted a healthcare plan that sought to mitigate its impact across the continent. The healthcare plan was informed by the AU's Agenda 2063 that calls for a 'safe, healthy, integrated and prosperous Africa'.<sup>34,35</sup>

The healthcare plan aligns with the ACDC's (full) goal of an 'effective public health disaster management' strategy, which aims to:

- 1. Contribute to the development and testing of cross- and multi-sectoral prevention plans for public health emergencies at the national, regional, and continental levels;
- 2. Promote the development of surge capacity at state, regional and continental levels that incorporates the capacities of National Public Health Institutes (NPHIs) and Regional Collaboration Centres (RCCs);
- 3. Assist the development of functioning national Public Health Emergency Operation Centres as part of NPHIs;
- 4. Create and manage national and regional stocks for disaster response; and develop and promote long-term relationships for multi-sectoral consultation and cooperation.

With this public health emergency preparedness and response strategy, the AU, through the ACDC held its first public briefing on the COVID-19 virus on 4 February 2020. At that time, the continent had no recorded cases of COVID 19. During the briefing, the ACDC outlined the AU response strategy as follows:

1. Activation of the Emergency Operations Centre and Incident Management System for the 2019-nCoV outbreak on 27 January 2020.

- 2. Acquisition of test kits for and working with laboratories in member states to test specimens for novel coronavirus infection.
- 3. Training for working in 16 African laboratories that occurred in Senegal from 6–7 February 2020.
- 4. In conjunction with WHO, a specimen referral system was established. More specifically, efforts were to educate and deploy epidemiologists at headquarters and inside RCCs for daily event recording and risk analysis, for reporting to member states.
- 5. A promise to give training and technical assistance to Africa in need and a commitment to produce preventative awareness materials that would be shared with member states.
- 6. A promise to hold weekly updates with NPHIs in member states, as well as the formation of workgroups in the management of high priority infectious regions including a commitment to collaborate with member states to improve infection prevention and control capacity in healthcare facilities, as well as with airlines to assist traveller screening.
- 7. A promise to continue providing accurate information to member states on the progress of the endemic.<sup>36,37</sup>

This prompted a reaction from the continental body, which enabled member states to put in place strategies for preventing the spread of the virus. However, the ACDC cautioned that the surveillance of serious, acute respiratory infections (SARI) and unusual patterns in cases of SARI or pneumonia should be increased by each member state. Travel-related inquiries and coronavirus tests were added to existing influenza surveillance systems. People who met the SARI case definition and had visited Wuhan, China, or other countries with high rates of infection were told by health care providers.

The second caution was that member countries should activate their Emergency Operations Centres and rapid response teams. Incoming passengers were to be screened for severe respiratory disease and a history of recent travel to Wuhan and/or mainland China in member states that received direct or connected flights from China. As the outbreak progressed, member states were expected to be prepared to broaden the scope of enquiries concerning recent travel to include other countries. Member states were advised to alert WHO and ACDC immediately in the event of any suspicion of a confirmed coronavirus case and prepare to collect samples from people suspected of being infected. As a last step, anyone who had a severe respiratory infection and recently travelled to Wuhan or one of the affected areas was supposed to get medical help and report all of their recent trips.

In addition to the essential practical actions, the ACDC advised AU member nations on how to reduce the pandemic's impact. Other scientifically and time-tested techniques were implemented by specific African nations impacted by the epidemic to counter the virus's rapid spread.

It was along these lines that the AfDB stepped up its efforts in mobilising international financial support to African countries by providing US\$3 billion under the banner of the 'Fight COVID-19 social bond' on the international capital market.<sup>38,39</sup> The purpose of the fund was to garner international scientific support for the development of a vaccine for the virus, to galvanise local resources for the fight against the virus and to create an enabling environment for Africans to mitigate the challenges associated with COVID-19. While COVID-19 had devastating impacts in the Far East and Europe, the WHO and many health observers were worried that the effects of COVID-19 in Africa would be catastrophic. The main concern was the precarious state of health facilities and systems in Africa. Apart from South Africa and some Maghreb countries, many predicted that the health systems in most African countries would be overwhelmed by the virus.<sup>40</sup> Soon after the virus was declared a pandemic, the ACDC activated its pandemic response centre to monitor and provide real-time advice, information and guidance on the approaches African countries should adopt to mitigate the spread of the virus. While this helped to sensitise African countries about the risks linked to the virus, it cannot be said with certainty that all African states were able to cope with the pandemic because of their weak health systems.

While the ACDC provided weekly updates on the measures the continent was taking to address the spread of the virus, the chair of the AU Commission, President Ramaphosa of South Africa, convened a virtual meeting to discuss the role of African leadership in developing and accessing a COVID-19 vaccine.<sup>41</sup>

The virtual meeting enabled leaders in Africa, policy makers, media, health professionals and civic society to meet. Also included were pharmaceutical companies, private sector representatives and community leaders to discuss the most acceptable and practical way of producing safe and affordable vaccines in Africa using Africans as the drivers of developing the COVID-19 vaccine.<sup>42</sup> Although the AU chairperson registered his appreciation for initiatives undertaken by African governments to develop and offer access to safe vaccines, he emphasised the need to collaborate with local manufacturing companies, scientists and healthcare practitioners.<sup>43</sup> Figure 2.1 presents a framework on for collaboration in line with the AU chairperson's suggestions.



Figure 2.1: ACDC and sub-regional collaborating centres

#### African Health System Governance

Responses to the COVID-19 as part of the good governance principles in the health sector require quality data. Quality data is important for all strategies and decisions related to combatting COVID-19, such as lockdown enforcement, assessment of the effectiveness of preventative measures, forecasting the spread of the infection, the need for hospitalisation, and the balance between saving lives through COVID-19 lockdown and risking hunger due to a closed economy. Only a few cases were reported in Southern African Development Community (SADC) countries, particularly Zimbabwe, Mozambique and Tanzania and it was anticipated that the history of bad governance in such states would have a catastrophic impact of COVID-19 on the healthcare system.<sup>44</sup>

The rate at which countries track, report and respond to pandemics reflects their wider governance institutional capability.45,46 At the national, regional and continental level, epidemics have challenged the governance structures of leadership. This article posits that strong public health systems and following public health governance processes are important for critical preparedness. During late 2019 and 2020, the spread of COVID-19 accelerated throughout the world, with most African nations reporting cases and the number of deaths rising.<sup>47,48</sup> With the rise in the number of cases, it became obvious that the management and control of COVID-19 were totally dependent on each country's health capacity. If unchecked, the impact on African people would be severe, given the history of Africa's already weakened health systems, as well as the significant incidence of respiratory and infectious illnesses, which were expected to exacerbate the region's vulnerability and the virus's lethality.<sup>49,50</sup> Director of World Health Organisation, Dr Tedros Adhanom Ghebreyesus, confirmed that African governments should 'wake up' to the COVID-19 threat and prepare for a worst-case scenario.<sup>51</sup> This demonstrates that COVID-19 served as a wake-up call to bolster Africa's ailing health systems and institutional capacity. More research efforts should be directed towards promoting health policy recommendations in Africa during epidemics.

In Sub-Saharan Africa (SSA), the prevalence is typically high for infectious and noncommunicable conditions, such as high blood pressure, asthma and tuberculosis.<sup>52</sup> Individuals suffering from these known respiratory diseases are among the most susceptible to coronavirus, for whom the virus is often devastating. Additionally, most African countries were still dealing with tropical diseases such as tuberculosis and malaria, including the rise in quasi-communicable diseases such as diabetes, which made it even more difficult to deal with the COVID-19 pandemic.<sup>53</sup> The SSA was host to 22 of the 25 most vulnerable are regulates and governs the quality of higher education as to infectious diseases, and it was saddening to note that only 10 African countries had free and universal healthcare, so efforts to improve and enhance preparedness need to be made to help save lives. This reflected the unpreparedness of the SSA countries to contain and manage COVID-19.<sup>54,55</sup>

The COVID-19 epidemic wreaked havoc on the already weak public health systems of SSA nations. Widespread poverty, drought, famine, increasing urbanisation, deteriorating economic conditions, and widespread infectious diseases, along with inadequate resources, overwhelmed the governments' ability to respond quickly to curb the spread of the coronavirus.<sup>56</sup> The

functioning and efficacy of a health system are dependent on the broader institutional framework into which it is integrated. Effective planning, management, and policy implementation procedures are critical when it comes to detecting and prioritising health hazards and delivering effective and appropriate responses during pandemics.<sup>57</sup>

## Quality of COVID-19 Data in Africa

Governmental responses to global pandemics are largely determined by the country's level of preparedness. Almost 14 months into the COVID-19 pandemic, with the transitioning of the virus from the first to the fourth wave, the virus affected Africa more slowly than other countries in terms of the COVID-19-related mortality. The world noted with dismay and disbelief the low number of reported cases of COVID-19 in Africa that refuted the assumption that Africa would be the epicentre of the pandemic.<sup>58,59</sup> However, what was more worrying was how the virus would adversely affect the already strained health systems in African countries compared to other world regions. One of the major reasons why some of the other world regions were not necessarily highly impacted by the pandemic was the level of preparedness that they had, which was informed by the quality of data at hand.<sup>60</sup> Based on the validity of quality data for informing policy responses in the midst of the pandemic, countries such as Italy, Canada and the United Kingdom took the opportunity to speedily move towards future investments post-COVID-19.<sup>61</sup>

Thus, this study highlights that it was important for Africa to put forward critical initiatives and questions which would be key in providing solutions regarding the pandemic in the region. Many lives were lost due to COVID-19, in addition more than 40 million Africans where plunged into extreme poverty, with the youth and women in the informal sector being among the most affected by lack of access to social safety nets and income opportunities.<sup>62</sup> It has since been postulated that the African continent's experience with communicable diseases such as Ebola, HIV/AIDS and malaria has been instrumental in shaping Africa's response to COVID-19. It is, therefore, key to bring to light how the assessment of the capability and readiness of public institutions to provide vital services and prevention mechanisms to halt the spread of the virus is dependent on quality data. Hence, there is a need to re-evaluate the quality and availability of data in the face of a pandemic.

According to the African Centre for Diseases Control, the disease burden on the continent, the effect of co-morbidity and the lack of adequate medical facilities could exacerbate the impact of the virus.<sup>63</sup> In the fifth objective of the African Health Strategy 2013–2030, the AU seeks to collaborate with stakeholders to curb diseases and ensure access to adequate healthcare in Africa. Against this background, the paper attempts to construct an analytical framework to evaluate (a) the preparedness of the AU and its member countries to ameliorate socio-economic effects of COVID-19 and (b) the success of overall response of the AU and its member states to reduce the spread of COVID-19 including Africa's contribution to the world in developing measures to treat people infected with COVID-19.

Overall, the article ultimately seeks to assess the overall response of the AU to COVID-19 and to suggest critical perspectives and fundamental policy positions the continental body should adopt to address the impact of COVID-19 on African economies. The article proposes fundamental policy options which member countries can consider to successfully handle future threats during a pandemic. Developed economies showed variable degrees of strength in absorbing the effects of COVID-19, the fragility of societies across the continent in dealing with the long-term effects of COVID-19 requires policy interventions that will safeguard the continent's resilience to ongoing and future pandemics.<sup>64</sup> This is because, of the lack of proper healthcare infrastructure and difficulties in implementing measures to restrict movement has not only impacted the ability of countries to curb the socio-economic effects of COVID-19 but has also disrupted their economic systems and effectively complicated the developmental trajectory of the continent.<sup>65</sup>

Global data, reveals that most countries in Africa constitute two thirds of net importers of basic food due to severe shortages triggered by the effects of COVID-19. This could severely impact the availability of food in Africa because the COVID-19 induced crisis will potentially exacerbate the pre-existing food security pressures.<sup>66,67</sup> For instance, in early 2020, East Africa was affected by locust invasions and COVID-19 lockdown restrictions further disrupted food supplies in Africa. Global data confirmed that 11.4 million people were in dire need of food relief.<sup>68</sup> Thus, considering this background, the absence of quality COVID-19 data will likely worsen the impact of the pandemic for a region that is already in a food security crisis. Data is key in implementing governmental plans when determining matters such as when to lift lockdown stages, how to tackle the pandemic and the kind of policy measures needed during pandemics such as COVID-19.<sup>69,70</sup> Therefore, it is critical to acknowledge how the lack of data during the COVID-19 created deficiencies between policy definition and policy implementation in terms of facing the realities of the pandemic in the African context.

It is critical for African regions to 'strengthen prevention, expand testing, provide medical equipment, expand healthcare facilities, build systems for real-time community-based tracing, and scale-up communications and coordination'.<sup>71</sup> Hence, in moving forward post-COVID-19, African governments will need to access quality data that enables them to build capacity in alerting them to global pandemics and to assist them to provide social protection systems for the poor. For example, the government of Burkina Faso has been expanding the social protection systems to the poor who do not characteristically qualify for cash transfers such as vendors and small-scale farmers in the informal sector who were affected by COVID-19 lockdowns.<sup>72</sup>

In congruence, the Ebola virus in West Africa, 2014 resulted from limited data emanating from the lack of laboratory testing capacities and inadequate surveillance systems which then had ripple effects in terms of isolating patients.<sup>73</sup> In this study, we argue that this should serve as a point of reflection. With COVID-19 spreading at an increasing rate globally and most African countries having confirmed and reported fatalities, its impact has already been extensive. All the more reason for ensuring the availability of quality healthcare data and good governance to ensure good health for citizens of all countries. The Africa Centres for Disease Control and Prevention stated that 43 African countries were prepared for COVID-19; however, the argument was that of the 43 countries, only a few were fully prepared for the effective screening, monitoring and treatment of cases.<sup>74,75</sup> This simply means that most countries are faced with limited data or low-quality data or both. Similarly, effective planning systems, management and

distribution of resources are essential for identifying and prioritising health risks and providing an efficient and sufficient response during pandemics.<sup>76</sup> Recommendations from this study can serve as a guide for policymakers to focus on acquiring accurate life-saving data for reaching the targets of the AU's 2030 Agenda for Sustainable Development. This will help to support a resilient recovery plan which will strengthen both public and private institutions, thereby promoting reforms that will create the conditions for economic recovery in Africa.

# Conclusion

The paper highlighted Africa's economic and health responses to COVID-19, amongst governance and data quality challenges. Five key themes responding to the research questions were discussed. Summing up the discussion, the thematic analysis of themes revealed inadequate human capital and support for healthcare, weak leadership and management, and lack of quality data as detrimental to Africa's healthcare response to the COVID-19 pandemic. To improve the COVID-19 health response in Africa, public health policymakers should consider adopting the WHO national guidelines on reporting, data management, and administration of cases in the fight against COVID-19. However, due to constraints on the fiscus of many countries, resources will probably be inadequate to meet the WHO guidelines. Consequently, the resources available need to be deployed to priority areas in a balanced manner. In the same vein, African governmental health ministries must foster accountability in the procurement of COVID-19 equipment.

To improve access to financial resources, foreign investment through debt standstills can be considered to source capital for the purchase of and development of the COVID-19 vaccine. While the AU has been recognised for its response to the pandemic, a lot more needs to be done to ensure the provision of balanced interventions.

Drawing from the thematic analysis, pervasive poverty, protracted wars, and entrenched underdevelopment were found to be fundamental considerations in Africa that must guide intervention measures in coping with the COVID-19 pandemic.

# Recommendations

While the healthcare systems of the continent are not well equipped for a pandemic like COVID-19, the following policy options are proposed for consideration by governments in Africa.

- The creation within the ACDC and the RCC, of a dedicated pandemic early warning system that will be manned by experienced biochemists and epidemiologists. These experts would be able to warn African countries about potential pandemic outbreaks on the continent.
- The continental body needs to create or facilitate the creation of an African Medical Association with an affiliate in every member country of the Union. The Association should be tasked with research and patenting of medicines on the continent. The Association should

equally act as a collaborating agent for global health organisations operating on the continent and those wanting to carry out research or work on the continent.

- The AU needs to adopt a clear and concise healthcare infrastructure program on the continent. This strategy should involve decent and equipped healthcare infrastructure and employing experienced medical personnel. Often, the lack of proper health infrastructure on the continent has, for example, necessitated many African Heads of State seeking medical attention abroad. The cost of these health trips has been a major drain on the financial resources of many African countries.
- The continental body needs to address the major issue of a critical shortage of healthcare professionals on the continent. Appropriate financial resources need to be pooled to ensure that African healthcare professionals working abroad are lured back to the continent with better working conditions. An effective strategy for brain-gain needs to be adopted to ensure that the healthcare sector on the continent is attractive to Africans in the Diaspora.
- The training and curriculum of healthcare professionals on the continent need to be revised to ensure that key health challenges peculiar to the continent are prioritised in the training manuals.

# **Limitations and Further Research**

The article was limited by its reliance solely on documents that informed the economic and healthcare responses adopted by various African countries in response to the COVID-19 pandemic. The results may therefore be generalised only to countries that adopt similar economic and healthcare responses as discussed in the paper. In the future, mixed methods studies could be conducted to interrogate the social and political responses adopted by various African countries in response to the COVID-19 pandemic.

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# **Co-authors' contributions**

All the authors actively participated in the writing of their allocated sections, gathered the data and do the data analysis.

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