

## COVID-19 in Africa: The cost of perceived low incidence rates

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### Abstract

COVID-19 is a viral disease caused by the novel coronavirus and has hit many countries of the world heavily. The impact of COVID-19 in Africa, is contrary to the experts and professional predictions. Most African have very poor healthcare systems, water supply, sanitary environment and other factors that are requisite to combating the spread of the virus. Reports on COVID-19 incidence from Africa may not be a true reflection of the actual situation. The poor health information management system predominant in most African countries and the inability to carry out effective testing for cases could be responsible for this reported low incidence rates. The implications of perceived low incidence constitute a burden to governments of nations, health care workers, educational and other institutions, communities, women and girls; as well as members of the population. As the virus spreads across Africa, there is a need to improve active case finding and report same to enable effective planning and resource mobilization towards containing the spread of the virus.

**Keywords:** COVID-19; Africa; Government; low incidence

### 1. Introduction

All around the globe, the coronavirus disease (COVID-19) pandemic has by far surpassed all others of its kind without doubts. Never had there been any record in History of such a pandemic with such a high mortality rate in an equal amount of time. The first case reported of this strain of the virus was said to have been identified in Wuhan, China. The World Health Organization declared the Virus a global pandemic by the 11<sup>th</sup> of March 2020 [1]. Ever since, research has identified the spread of this Virus to have cut across and affected over 3.06 million individuals, with a death record of about 210,000 people spread across different regions of the world [2].

Poor health systems, lack of water and sanitation infrastructure, and environmental and socio-economic conditions which have been reported to be the major contributors to high prevalence rate of other infectious diseases, and which equally stands as visible threats, fostering the spread of the COVID-19 Virus have become a vital source of concern for sub-Saharan Africa (SSA) [3, 4, 5]. However, an unexpected contradiction is said to have been observed between the expectations both from epidemiological models and from epidemic patterns in several divisions of the world and the low perceived burden of COVID-19 in SSA [6]. This region, comprising about 11% of the world's population, only accounted for about 3.6% of the total incidence of the COVID-19 virus worldwide within the first 5 months of its outbreak [7].

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## 2. The Problem

To date, the African continent has been named as the last continent to be affected by the Virus and the least in the relative rate of spread [8]. As of 18th April 2020, Africa recorded a figure of about 19,895 confirmed cases from 52 Nations within the continent and a mortality rate of about 5.1% [7]. The onset of this deadly disease was first identified in Egypt on the 14th of February 2020. However, in recent times, the virus has been identified across many countries of Africa [7]. In Chronological order, after the case in Egypt came that of Algeria, which was officially reported on the 25th day in February, then there was the Country, Nigeria, with its first case reported on the 27th of February [2] These were the only three Countries whose first cases were identified in February. Other African countries that followed reported their first cases in March. [7]. In the long run, the most affected African countries include; South Africa, Egypt, Nigeria, Morocco, Algeria, and Cameroon with the number of identified cases rising daily for every other nation [7]. However, there exists a possibility that the true number of cases may not be known due to inadequate testing capacity for the COVID-19. As a result, this fact poses a challenge to accurate detection of the true epidemiology in the region. Without any doubt, varying vital factors, which includes; late arrival of the pandemic, poor diagnostics, as well as ineffective COVID-19 testing, availability of minimal or no essential medical supplies, and a widely susceptible population will predominantly affect and change the epidemiology of COVID-19 in the continent [9].

There is a clear-cut pointer that cases of COVID-19 in the sub-Saharan region are not accurately reported, while several other cases are most likely not reported at all. The basis of this argument on the high probability of unreported cases can be said to have its roots in the ratio of tests carried out. The degree of tests carried out in each population unit is generally low across countries of the region. The ratio was reported to be as low as 194 per 1 million populations in the Republic of Niger, an estimate of 60 per 1 million population in Ethiopia, 35 per 1 million population in Nigeria, 29 per 1 million population in Mozambique, 22 per 1 million population in Malawi, and 7 per 1 million number of persons in Burundi [10].

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## 3. Evidence on low incidence reports

Models and projections had earlier proposed that the continent will be at the most risk of contracting the COVID-19 virus for reasons such as socio-economic conditions, ecology, lack of water supply, inefficient sanitation infrastructure or sanitary measures, and poor health structures; the same factors identified to be responsible for other infectious diseases [8]. However, so far, Africa has reported minimal incidence and mortalities in comparison to the predictions of standard models and the experience of other continents of the world. Research revealed that there are three major explanations, each with varying consequences for the final epidemic burden: (1) low case detection, (2) differences in epidemiology, and (3) policy interventions. One major implication of the low number of cases is that it has led some SSA governments to relax these policy interventions [11].

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## 4. The implications of low perceived incidence rates

### 4.1. Governments

The governing bodies of nations in Africa are expected to take on the task of facilitating partnerships and coalitions geared towards improving COVID-19 testing. An example worthy of note is the PACT (Partnership to Accelerate COVID-19 Testing) PACT came into existence in June, 2020 [7].

The low incidence rate recorded in Africa has also placed a demand on other nations like Nigeria, the most populous nation in Africa, to improve COVID-19 testing through the creation of a greater number of laboratories in all states found within the country. There is also a need to employ more health personnel in the different laboratories and clinics, by the government ensuring that full PPEs are provided for all staff as at when due. Funds should be cut out to see to the training of these health personnel by the government to ensure their safety and effectiveness [2].

The Kenyan government has been proactive, they were observed to have been working closely with the United Nations to curb the spread and transmission of the COVID-19 Virus. The Kenyan government and governments of some other countries have initiated public awareness campaigns to educate the masses on the dire relevance of handwashing, self-isolation, maintenance of social distance, withdrawal from crowded and public places, and seeking medical solutions in situations where symptoms get more chronic [11]. Not also neglecting the relevance of procuring supplies of protective facilities, such as gowns, gloves, and medical-grade face masks to be used by healthcare personnel. This must equally be carried out by the Government as well [3].

In Nigeria alone, the United Nations Children's Fund (UNICEF) has initiated awareness promotions by health instructors in all 376 wards in all the local government areas of Lagos State, and similar programs in other parts of Nigeria [12]. These awareness campaigns are initiated to properly explain what the corona virus is and equally to study and elaborate on its symptoms, mode of transmission, and measures that can be taken to prevent transmission. Demonstrations are equally carried out to teach the proper handwashing mannerisms with soap and running water for at least 20 seconds. There should also be a sensitization on how to engage the right sneezing and coughing etiquettes, especially in public places or amongst people [12].

#### **4.2. Health organization/healthcare workers**

Health workers remain at the forefront of the war against transmission of the Corona virus across the globe. Sadly, healthcare workers had also been the origin and channel of nosocomial and community transmission [13]. The presence of issues such as contamination of the environment, overcrowding, and insufficient supply of individual safety equipment to healthcare workers exposes how an increase in the strength of the Virus has jeopardized management structures across many nations of the world [14]. Thus, it's essential that Health care workers completely adhere to the standard measures employed to check transmission to ensure a reduction in the numerical count of cases. In most cases, these measures are greatly influenced by the knowledge, attitudes, and practices (KAPs) of the workers at the Frontline [15]. The number of diagnosed cases is still comparatively low in sub-Saharan Africa when compared to other parts of the world. This picture might be due to low testing capacity and a lack of an active surveillance system. For the few cases which have been confirmed, necessary measures and structures should be put in place such as; the creation of isolation centers, proper waste management, and decontamination of the environment, counseling sessions mental health and psycho-social support experts, also public health education. Consequently, it is required that public awareness campaigns be initiated to achieve an effective response within the community and hospital settings [15]. This can be done through community engagement routines and risk communication within the target population of the Healthcare staff and host Cities.

Even more, irrespective of the apparently low occurrence of COVID-19 in Africa, the deadly Virus appears to be spreading at a very fast rate across the black continent. And as a result, Health organizations and health care workers have been saddled with the grave burden of combating this deadly disease, come what may. The WHO, as of the fall of June, 2020, released an article that indicated that some countries were getting close to a critical number of infections which was sure to ultimately leave health organizations and health care service providers under a great deal of stress and pressure [16]. The World Health Organization has had to partner with the health organizations and bodies in different African Nations ever since the outbreak of the SARS-COV-2 to ensure they safeguard healthcare workers from getting infected by the Virus. The organization has also put a lot into Capacity development, in that it has trained not less than 50000 health workers across the Nations of the African continent and still has plans in motion to build an even greater workforce of about 200000 or more [16].

#### **4.3. Educational institutions**

The Education sector has suffered the most casualties in the war against the pandemic in Africa. The mass closure of schools; universities, technical and vocational training centers, and other centers of learning across the continent, being ordered at the very inception of the Virus, has cost many their learning rights and guaranteed access to Education [13]. The idea of Distance learning, even though being embraced by many parts of the world leveraging the use of ICT, cannot still be identified as a viable option. Another very eminent challenge arising from the shutdown of schools, educational institutions, and facilities is the social impact it has had on the younger ones who for a long period, did not attend school, especially the girls. They would be more susceptible to harm in their communities, such as rape and teenage pregnancies. The inequalities and disparities in the education sector are most likely to climax resultant of the consequences of immediate and long-term school closures within the time [12].

#### **4.4. Communities**

An article was published in ODI (Overseas Development Institute) in June 2020, this article revealed that the rural parts of Africa will most likely encounter five potential impacts of COVID-19 which may include; a fall in agro-based output heightened tension amongst mothers, and subsequently a high rise in the burden laid upon women to care for the sick, a fall in incomes of individual households in rural settlements, a decrease in the activities of some supply chain businesses, and inflation in food insecurity [17].

The dread for COVID-19 and the worldwide concern over it continues to grow. Some Countries of the world have adopted stringent strategies to combat the spread of the virus. More unbalanced is the fact that the economy of Africa seems greatly affected by the Virus even though they have recorded the least incidence rate so far. Trade has received

the most dangerous hits from the economic impact of COVID-19 in Africa. China is Africa's most prominent trading partner.

It is essential to note that many African countries have had strained relationships with the Chinese Nation, a consequence of the damages the pandemic has wreaked on the coalition between both regions. Consequently, there has been lesser demand for African commodities from the Chinese Nation. Port and border closures and a drastic reduction in consumption rate in China have forced the hand of many importers in China to cancel their orders and shipments. The Bulk of Africa's export to China is mostly natural resources and any obstruction in the flow of demand impacts the markets of most of the Nations in Africa. These exports to most African nations being a major source of foreign exchange, when restricted will put a heavy strain on the currencies of the Nations in question. Some of them include; Nigeria, Ghana, Angola, Zambia, DRC, and Zimbabwe. These Countries are visibly exposed to risk in terms of industrial product exports, such as oil, copper, and iron ore to China [18]

#### **4.5. Women and children**

Women are mostly the ones saddled with the responsibility of caring for the sick even at the household level. In Africa also, a large percentage of health workers are women. Over four months, the World Health Organization provided strategic virtual training to more than 1000 nurses and midwives under the colleges of Nursing in Africa. Through the use of far-reaching virtual mediums, Cascade training was also carried out in West Africa sub-nationally in a bid to yield an expansive coverage as more personnel; nurses and midwives are being trained in the right case management techniques, infection prevention, and control for COVID-19 [16, 19].

It is undeniable that all members of a family unit have been adversely affected by the decrease in domestic incomes and inflation of food prices. However, in the case of children, the shutdown of schools have given them an additional set of social challenges to deal with intensified crime rates, floods, droughts, locust invasions bringing about climate shocks, and many other forms of conflict such as insecurity and instability were in sync with these times too. Even though prevalent before the outbreak of the Virus, a greater count was recorded within the time frame of the pandemic [10].

The effects of the closure of schools could be said to have been felt all over the globe, however, it is certain that the closure indubitably had greater levels of impact on developing countries. High rates of adult illiteracy also meant the chances that many children in Africa would get educational support from their parents as could be seen in other regions were very slim. Most Children were therefore left with no hope of intellectual engagement during this time [10].

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## **5. Conclusion**

In the short term, countries in Africa should endeavor to coordinate their health-specific feedbacks to curb the spread of the virus. Emphasis should be made on the speed of escalation of the viral infections with proper identification of only a few Countries that have what takes to manage and prevent the escalating crisis. Not to forget, health systems in the region are already flooded with other perennial health issues, hence the escalation of COVID-19 cases is likely to put a lot of pressure on public health systems. The lag of the infections would mean that Africa would be handling COVID-19 cases long after all other Nations of the world have battled and suppressed its effects, this would not be healthy for travel and trade within and beyond the continent. The impact of not acting in a coordinated manner to curtail the virus is likely to be higher in terms of costs related to morbidity, lost lives, and the opportunity costs of instigating such lockdowns in the near future. It is therefore important for the countries to immediately increase expenditure on health interventions to ensure that they bring the COVID-19 infection curves down.

Furthermore, African governments should establish policies that will facilitate an effective response to Africa's emerging debt crisis, increased rational and effective health spending, provision of basic infrastructure (safe water, WASH, improved sanitation and hygiene, etc), and driving Africa's economic reform to boost much more rapid and inclusive economic growth.

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## **Compliance with ethical standards**

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*Disclosure of conflict of interest*

The authors declare no conflicts of interests.

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