



# Impact of COVID-19 Measures on Kenya's Health System

*Tabitha Kiriti Ng'ang'a<sup>1</sup>*

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## The context

Health is a very important component of human capital development for any country since healthy workers can be more productive and more efficient and at full potential without frequent absenteeism. The first Kenyan COVID-19 case was reported on 12<sup>th</sup> March 2020. The COVID-19 pandemic touched the core sector of the economy; the health sector. The measures undertaken by the Government to curb the spread of the virus not only impacted the health sector but also people who seek services from the sector, leading to unintended consequences on other

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1 School of Economics, University of Nairobi, P.O. Box 30197-00100, Nairobi; tkiriti@yahoo.co.uk, tkiriti2013@gmail.com, tkiriti@uonbi.ac.ke

aspects of health. This study focuses on the status of the health sector before and during the first 6 months of COVID-19, the level of preparedness of the health sector for the pandemic, and the impact of the measures on selected health indicators.

## The problem

The COVID-19 pandemic was unexpected and Kenya had not had the experience of handling a pandemic of such magnitude. A country's level of preparedness for an epidemic determines how fast the pandemic spreads, how sick the patients will be and the fatality rate. In 2018, Kenya's level of preparedness was 60% compared to that of South Africa whose level was 79%. Therefore, the objective of this study is to analyse the impact of COVID-19 measures on the health sector. Specifically, this study investigates the level of preparedness of Kenya's health system for COVID-19 pandemic using selected indicators of preparedness and analyses the level of selected health indicators before COVID-19 pandemic and the impact of COVID-19 measures on selected health indicators. The study uses secondary data where available complemented by primary data. The results of this paper provide a platform to engage and influence policy makers charged with the response to health to coordinate the required protocols to prevent the spread of the COVID-19 pandemic. The results provide evidence that can be used to minimize the unintended consequences of the measures used to curb COVID-19 in Kenya.

## Research results

To gather information on the impact of COVID-19 on health, the author attended webinars on health to gather data on patients, both male and female, medical practitioners in both public and private health facilities and policy makers. An electronic questionnaire was administered to medical practitioners in both public and private health facilities and policy makers. Primary data were also gathered through Focus Group Discussions (FGDs). Oral testimonies were also recorded from the participants. Information was also gathered from key informants on health systems. A total of 122 electronic questionnaires were sent by email and 61 participants responded, giving a response rate of 50%. The participants for FGDs were drawn from Kawangware, Mathare and Kibra.

- The level of funding of the health sector in Kenya does not meet the recommended 15% of government budget as recommended by the African Union (AU) Heads of States in the Abuja Declaration of 2001.
- The private, Faith-Based Organizations (FBOs) and Non-Governmental Organizations (NGOs) contribute to 53.0% of the number of health facilities in Kenya compared to 46.9% of public health facilities. This implies that the health sector in Kenya is more private than public.

- The health facilities are unevenly distributed, with most counties not having a tertiary level hospital. Nairobi has the highest number of health facilities and the highest number of tertiary level health institutions. This is significant considering that Nairobi had the highest number of COVID-19 cases.
- Kenyan health facilities do not meet the internationally recommended work force per 10,000 population, with a workforce of 15.6 out of a target of 68, implying that the COVID-19 pandemic found Kenya in a state of unpreparedness in terms of workforce (medical doctors, laboratory technologists, and dentists to nurses and midwives) to handle the situation. Most of the most critical workforce is found in Nairobi and other major urban areas.
- Most hospitals did not have special emergency unit with all the facilities to handle emergencies and operating on a 24-hour basis.
- Only 18.4% of hospitals had all the items required in the outpatient consultation rooms for suspected COVID-19 patients.
- Only 3% of all health facilities had all the items required to prevent infection, hence increasing the possibility of infection of frontline workers and patients seeking services from these facilities.
- Kenya had only 26.2% of the required bed capacity for critical care (2,048) and these were sparsely spread out in the counties, with Nairobi accounting for 51% of ICU beds in the country and only 256 ventilators available in Kenyan hospitals as at October 2020, with majority of these (65.2%) in Nairobi.
- The Kenya health system was only at 17.2% in terms of submitting regular information on COVID-19, and most of this information was coming from secondary and tertiary hospitals, public primary hospitals and private/NGO/FBO primary hospital level.
- Kenya's overall readiness index on all indicators of readiness was at 38.4%.
- There was a change in health seeking behaviour, with 39.3% saying that they traveled less, did not seek medical attention, missed their medication due to fear of contracting the virus.
- Nationally, the modern contraceptive prevalence use dropped slightly from 42.7% in 2019 to 42.5% in 2020. The rate of unmet need for contraceptives increased slightly from 18.5% to 18.6%. Primary data showed that 45.9% of the respondents did not have access to contraceptives during the first 6 months of the pandemic.

- There was a notable increase in the number of adolescent/teenage pregnancies during the first 6 months of the COVID-19 pandemic, and an increase in the number of child marriages in the whole country.
- There was a decline of 6.54% in the number of revisits for antenatal care services and a decline of 12.3% in the number of pregnant women completing 4 antenatal clinic visits.
- There were more people who gave birth at home (14.8%) than those who gave birth in a health facility (9.8%).
- There was also an increase of 10.5% in the number of maternal deaths; an increase of 95.7% in the number of adolescent maternal deaths with the maternal mortality ratio increasing from 96.6 to 105.8 per 100,000 live births.
- There was a decline in the number of children vaccinated with diphtheria, pertussis, and tetanus (DPT3) in the months of April and May 2020. Between January and March 2020, the number of children vaccinated with DPT3 was 312515. However, this number fell by 2% to 307140 between April and June 2020. There was an increase in this number in the month of June, which even surpassed by 1.6% the number of children vaccinated during the January to June 2019 of 106,712 due to concerted efforts and sensitization by the Ministry of Health on the benefits of vaccination. However, there were still mothers who feared venturing out to take their children for vaccination due to fear of exposing them to infection based on information from primary data gathered from Focus Group Discussions (FGDs), key informants and from the electronic questionnaire.
- The study found that 45.9% of people living with Non-Communicable Diseases (NCDs) such as hypertension, diabetes, cancer and arthritis missed their medications during the first 6 months of the pandemic. However, a few were able to access their medication since health facilities put in measures to give enough medication to their patients to cover a couple of months to prevent them from frequently visiting the health facilities.
- Health care frontline workers in Kenya were impacted negatively by the pandemic as 2.6% of the COVID-19-infected persons were health workers while 2.3% of health workers' deaths were due to COVID-19 complications.
- Only 18% of respondents had any form of health insurance, leaving 82% not covered at all. Out of those who had insurance, only 27.3% were from rural areas and 72.7% were from urban areas. In terms of gender, 9.1% of those who had insurance were females and 90.9% were male.

## Implications for policy makers

**Health sector funding:** The government needs to increase the level of funding of the health sector to the recommended 15% of government budget according to the Abuja Declaration. The funds should be used to increase the infrastructure needed to handle pandemics such as COVID-19. Such infrastructure include Intensive Care Units and High Dependency Units (ICUs/HDUs), isolation rooms and well-equipped outpatient departments. Funding is also needed for training and employment of health personnel to increase the level of preparedness for any other pandemic in Kenya and to reach the norms recommended by the WHO.

**Health seeking behaviour:** There is need for a major drive now and in the future to improve the health indicators that deteriorated due to the change of health seeking behaviour as a result of the measures taken to curb the pandemic.

**Public health awareness:** There is need to ride on the level of awareness of increased levels of hygiene among Kenyans by making sure that water for drinking and hand washing is available in every household, as this will lead to a reduced burden of disease for households and the health sector. Public health officers should continue with the momentum of educating people at their households and at the community level on cleanliness and hygiene.

**Primary health care facilities:** Home-based care for asymptomatic COVID-19 patients should be accompanied by an ambulance system equipped with oxygen to evacuate patients whose conditions deteriorate while at home. It is also important to increase the number of health facilities at every ward to reduce the pressure on referral hospitals. This would ensure that primary health care is accessed at these health facilities. The facilities should be well-equipped with Intensive Care Unit (ICU) and High Dependency Unit (HDU) facilities complete with oxygen and ventilators. They should also have trained personnel to handle cases before referring them to the national referral hospitals. An example is the Community Midwifery Model (CMM), whereby the lives of women who do not deliver in an institution are not endangered.

**Health insurance:** The government needs to increase funding of the National Health Insurance Fund to not only cover illnesses and complications caused by a pandemic but also increase the number of people who have some form of health insurance, as this will reduce the out-of-pocket expenses incurred mainly by the lower income households, which makes them fall even further into poverty. This entails implementing the Universal Health Coverage and the health facilities treating patients getting refunded by the National Health Insurance Fund.

**Mental health:** There is need to increase the number of psychologists and mental health specialists in Kenya to provide psycho-social support to the increasing number of people who experience mental health issues due to COVID-19. There is also an urgent need to increase the number of mental health institutions in the country and to make mental health affordable.



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