# Healthcare Delivery System, COVID-19 and Health Status of Nigerians

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#### Abstract

he study is exploratory in nature. It examined the role of health care delivery system of Nigeria on the health status of Nigerians in the event of COVID-19 pandemic. The study gathered secondary data which enabled this writer to review the opinion of other scholars in the area of healthcare delivery system and the Nigerian populace especially in this period of COVID -19 pandemic that is ravaging the globe. The Novel Corona Virus is an infectious disease that is affecting all countries of the world at the same time; it is because of its global nature that is why it is referred to as a pandemic. However, this study was limited to Nigeria in particular. Conclusions were drawn after closely having examined the workers of other scholars. It was therefore concluded that the nature of the Nigerian health care delivery system does not have enough contingencies for the management of emergency situations and most especially for complicated disease conditions like COVID-19, Lassa fever, Ebola and the like. Lack of modern equipment and technologies needed to tackle any health challenges when they arise accounts to impede the health status of citizens of Nigeria. It was suggested that health care delivery systems should be equipped by the government at all levels from federal to local, funds must be set aside to handle emergencies when they arise and for the training of health care workers in anticipation for any emergency situations of any magnitude, like COVID-19 and other diseases now and in the future.

**Keywords:** Healthcare delivery system, Novel Corona Virus and Health status

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## Background to the Study

The healthcare system of Nigeria is very comprehensive and diverse in nature, it covers Faith-Based Organization (FBO), Community-Based Organization (CBO), and public, private, and traditional healthcare providers (FMOH, 2009). In terms of population, Nigeria is the highest in Africa and seventh highest in world. Several nations as well as Nigeria are endeavoring to keep stride with high level of healthcare delivery for the reason that the viability and sustainability of quite a lot of nation's social and economic advancement hinges on the healthcare sector; Akinyemi, and Isiugo-Abanihe; (2014). Since a country of sick individuals for certainty will not be able to live up to its elementary daily duties. Certain measures must be put in place and adopted for a successful management of any form of healthcare system, this include; sets of policies and plans which need to be adopted by the private sector, governmental arms of the healthcare and other areas like financing, health human resources, personal healthcare delivery and pharmaceuticals and lastly the public health (Iboi, Ngonghala, and Gumel, 2020). Coronavirus (COVID-19) which first broke out in China, specifically Wuhan province became a pandemic with Nigeria as one of the countries terribly affected by the outbreak, recording its first case in February 27, 2020 and as at now recorded second highest number of cases in Africa.

As of 25 May, 2020, Nigeria reported 7,839 confirmed cases of COVID-19 and 226 linked deaths. Greatest number of cases about 60percent have been registered in Lagos and Kano states, followed by the FCT. Of all the 36 states including the Federal Capital Territory (FCT), 36 states have reported Coronavirus cases. Capacity for testing in Nigeria is said to be on the increase, even though the healthcare sector is adjudged weak and also many areas of the nation is not readily accessible; Eme (2014). Nigeria healthcare system is considered fragile owing to its limited infrastructure and 'below par funding'. Prior to the COVID-19 outbreak, Nigeria spending on the health sector annually was disconcertingly low, somewhat around 27.84 dollars per capital, and far less than other ECOWAS countries like Cote d'Ivoire and Ghana. The impact of low spending on healthcare delivery system is overburden i.e. demands exceeding capacity in the course of public health or any forms of health emergencies. Findings in a study revealed that African nations with Coronavirus cases, Nigeria inclusive, have not so much of one clinic or hospital bed and ventilator per capita One hundred thousand (100,000) persons. Nigeria is believed to have 0.5 clinics bed for One thousand (1000) individuals and this is among the nations with less amount of beds per persons (below 1.7 per capita persons). Intensive care and ventilator as a matter of fact are crucial for Coronavirus patients who are in severe (critical) condition.

Aside from beds, ventilators and financing not in right proportion per capita persons in Nigeria healthcare delivery system, some are also said to be short-staffed, most especially the volatile parts of the country. If care is not taken, the healthcare system stands the danger of being rapidly overawed with the geometrical and unimpeded increase in number of Coronavirus cases in Nigeria Hell ewell, Abbott, Gimma, Bosse, Jarvis, Russell, Munday, Kucharski, Edmunds, and Sun(2020). This in turn may lead to what the countries such as United State, Spain etc. are facing in term of high fatality in record. The Nigerian government in a bid to flatten the curve of the virus made the use of mask compulsory for all Nigerians and

other precautionary measures in the fight against the virus and attaching punishment for defaulters. Based on the background, the study seeks to check the role of health care delivery system of Nigeria on the health status of Nigerians in the event of COVID-19 pandemic.

#### Literature Review

## Conceptualising Healthcare Delivery System

Health has been defined by World Health Organisation (WHO) as "a state of total, physical, mental and social well-being and not only the absence of disease or infirmity." Health may also be defined as "a state whereby one is not perturbed by either physical, or spiritual (mental) illness, or by injury of any kind. Health care is the provision of suitable environment which is aimed at the promotion and development of man's full potentials. It is just "the distinguishing proof of the healthcare needs and issues of the individuals, and advancing them with the imperative clinical consideration."

Health care delivery system are those fundamental facilities, load of medications, immunizations, versatile water, steady supply of electricity (power), clinical record devices, ambulances for movement of patients, accessibility of qualified healthcare officials and clinical staff, and so on, which make it feasible for the improvement of the patients' solid living. Healthcare delivery systems likewise incorporate "emergency clinics, facilities, dental workplaces, out-quiet medical procedure habitats, birthing centers and nursing homes."

The healthcare framework in Nigeria is delicate due to underfunding and restricted foundation. Indeed, even before the pandemic, yearly healthcare spending in Nigeria was low, at just USD 27.84 per capita, far underneath different ECOWAS economies, for example, Ghana or Cote d'Ivoire. Low spending regularly implies that interest for healthcare administrations will surpass limit during a healthcare crisis Adebayo (2014). A Reuter's review found that African nations with COVID-19 cases, including Nigeria, have not up to one emergency clinic bed and one ventilator for each 100,000 individuals. In 2017, Nigeria had just 120 emergency units for the entire nation, practically 0.07 ICU beds for 100,000 individuals, McKinsey (2017). In certain territories of the nation, emergency clinics and healthcare centers are understaffed. In spite of the fact that this isn't the situation over the entire nation, COVID-19 represents a danger to the Nigerian healthcare framework, particularly in conflict influenced territories.

As indicated by the President of Nigeria Medical Association between 2012/2013, Nigeria lost more than \$800 million on medical tourism. It can even be higher at this point. The NMA president told the TELL Magazine that his figures were gotten from extrapolations from figures made accessible to him by unfamiliar international safe havens in Nigeria including that the nation doesn't have official records of the amount it loses to medical tourism; Adebayo (2014).

COVID-19 has placed a strain on healthcare equipment's in states that record high cases, including Lagos, Kano, and Zamfara. The Nigeria Center for Disease Control announced increased burden of isolation center in these states, with insufficient beds for patients; Eikenberry et al. (2020).

As the amount of COVID-19 cases in Nigeria keeps on expanding, the healthcare facilities are faced with the challenge of being immediately overpowered. In a nation routinely influenced by illness flare-ups, it is critical to incorporate COVID-19 healthcare reaction into existing healthcare projects to satisfactorily react to the pandemic while likewise treating patients influenced by different scourges, for example, measles, intestinal sickness, cholera, Lassa fever, and meningitis.

### COVID-19

From the city of Wuhan in China, the novel SARS-CoV-2 popularly known as COVID-19 sprang up (Center for System Science and Engineering, 2020). This global disease has spread like wild fire to over 210 countries, has cost various countries millions of dollars especially Nigeria. About 4.7million cases have been stated to be in existence at May, 2020. 315,000 deaths recorded World Health Organisation (2020). Currently, no vaccine has been approved by the World Health Organisation as the cure for the virus. However, pharmaceutical companies are conducting various research to drugs with the ability to combat the novel virus. Other methods of fighting the spread of the virus has also been introduced like social distancing, use of face mask in densely populated area, hand sanitizers, washing of hands etc; Eikenberry, Mancuso, Iboi, Phan, Kostelich, Kuang, and Gumel (2020). Social distancing entails staying away from other individuals with a distance of 6 meters or 2-meter distance. The country has experienced a lockdown in almost all sectors except for very important areas like agriculture and health. Churches, schools, market and many other centers have experienced closures.

#### COVID-19 in Nigeria

As the most populated country in Africa, Nigeria s populace has been estimated to be about 200 miilion, Akinyemi and Isiugo (2014), due to its density in population it has become one of the epicenter of the COVID-19. The first case was recorded on the 27<sup>th</sup> of February, 2020 when on return from Milan in Italy, an Italian citizen employed in Nigeria was diagnosed with the virus; Iboi, Ngonghala, and Gumel (2020).

Data from the Nigeria Centre for Disease Control (NCDC) revealed that on the 18<sup>th</sup> of May, 2018, the number of cases had risen to 6,175 and number of lives lost was 191(Nigerian Center for Disease Control,2020). Also a sum of 35,345 persons were examined for COVID-19. The most affect areas in Nigeria at the time was instructed to observe a strict lockdown (Lagos, Ogun and Abuja) in a bid to reduce the spread. At the time of the lock down, only basic goods and services was in distribution. As a result of the rise in cases of COVID-19, the lockdown was extended to other states and lockdown period was extended on the 27<sup>th</sup> of April, 2017. The lockdown was eased by 4th May, 2020 and offices, trade center and stores began operations with fewer hours, lesser number of workers and making compulsory the use of face mask(NCDC,2020). Nevertheless, ban on late night movements and marketing and distribution of goods and services that are not essential and ban of interstate travel are still being practiced.

## Health Status of Nigerians

According to Eme (2014), the COVID-19 cases recorded in various states are real and has also contributed to factors leading to early deaths in Nigeria. He stated that mortality rate which results from preventable and other non-preventable diseases and preventable disease is still high in the country like cancer, heart disease, etc.

Maternal and child mortality for example, we are now the ores tint in the entire world. He opined that that the best way to assess the level of healthcare in Nigeria is to go to your towns and villages and look at the surroundings to determine whether healthcare facilities are readily available. Statistics of health indices from international agencies point to the fact that at 50, Nigeria is still far from achieving the minimum required health standard. A recent World Health Organisation, WHO (2009), report shows that one million Nigerian children die at birth out of the nine million infant deaths recorded globally. The most disturbing part of Nigerian health policy is the culture of government sponsoring leaders abroad for medical treatments.

The country fares worse in most of the key health indicators compared to similar sub-Saharan African countries. For example, the under-5years mortality of 138 per 1000 live births is one of the highest globally as compared to 127 per 1000 live births in other sub-Saharan countries and a global average of 60 per 1000 live births National Health and Development Survey (NHDS), (2006). This high rate in Nigeria might be attributed to a low immunization rate of 41% in 1-yearoldscompared to the regional average of 69% (WHO, 2010). Lack of immunization to diseases such as measles and polio is the leading cause of death in Africa. Similarly, the country holds one of the largest maternal mortality ratio of 840 per 100,000 live births as compared to a regional ratio of 620/100,000 live births and a global average of 260/100,000 live births NHDS, (2006). This can be argued to be attributed to the low rate of antenatal care visits of 45% and a proportion of only 39% of births being attended to by skilled health personnel (WHO, 2010).

## **Empirical Review**

Ohiaa, Bakarey and Ahmad (2020), examined COVID-19 and Nigeria; putting the realities in contest. They stated that Nigeria's current national health systems cannot effectively respond to the growing needs of already infected patients requiring admission into intensive care units for acute respiratory diseases and severe acute respiratory syndrome (SARS COV-2) pneumonia. This has grim implications for Nigeria, especially as increased cases loom that may require critical care. Provision of quarantine or isolation facilities and availability of rapid diagnostic kits for fast and reliable testing and diagnosis of the disease can also be a challenge in Africa. They concluded that there is an urgent need to put into perspective these realities peculiar to Africa including Nigeria and explore available collective measures and interventions to address the COVID-19 pandemic

ACAPS (2020), examined the vulnerability to and impact of the COVID-19 pandemic on individuals. They discovered that the testing capacity in Nigeria is increasing but the healthcare delivery system is weak and many areas of the country is not easily accessible; Iboi,

Sharomi, Ngonghala and Gumel, (2020). In their study utilized mathematical model for understanding the transmission dynamics and control of COVID-19 in Nigeria. The model, which was parametrized using COVID-19 data published by Nigeria Centre for Disease Control (NCDC), was used to assess the community-wide impact of various control and mitigation strategies in the entire Nigerian nation, as well as in two states (Kano and Lagos). It was shown that, for the worst-case scenario where social-distancing, lockdown and other community transmission reduction measures are not implemented, Nigeria would have recorded a devastatingly high COVID-19 mortality by April 2021 (in hundreds of thousands). It was, however, shown that COVID-19 can be effectively controlled using social-distancing measures provided its effectiveness level is at least moderate. Although the use of face masks in the public can significantly reduce COVID-19 in Nigeria, its use as a sole intervention strategy may fail to lead to the realistic elimination of the disease (since such elimination requires unrealistic high compliance in face mask usage in the public, in the range of 80% to 95%). COVID-19 elimination is feasible in the entire Nigerian nation, and the States of Kano and Lagos, as well as the FCT, if the public face masks use strategy (using mask with moderate efficacy, and moderate compliance in its usage) is complemented with a social-distancing strategy. The lockdown measures implemented in Nigeria on March 30, 2020 need to be maintained for at least three to four months to lead to the effective containment of COVID-19 outbreaks in the country. Relaxing, or fully lifting, the lockdown measures sooner, in an effort to re-open the economy or the country, may trigger a deadly second wave of the pandemic.

Using a stochastic model, Hellewell et al (2020) showed that (for most instances) the spread of COVID-19 can be effectively contained in 3 months if contact-tracing and isolation are highly effective. Furthermore, using another stochastic model to study the COVID-19 trajectory in the Wuhan city of China from January to February, 2020, Kucharski et al. showed that a reduction in COVID-19 transmission can be achieve when travel restrictions are implemented. Using a model for assessing the effect of mass influenza vaccination on the spread of COVID-19 and other influenza-like pathogens co-circulating during an influenza season. The discovered that the spread of COVID-19 can be minimized but its effects which includes the thriving of other diseases is inevitable.

## Methodology

The study is exploratory in nature. In examining the role of health care delivery system of Nigeria on the health status of Nigerians in the event of COVID-19 pandemic, the study gathered secondary data to review the opinion of other scholars. Although the COVID-19 is pandemic in nature, that is involving various countries worldwide, the study was limited to Nigeria. Conclusions were drawn by closely examining the findings of other scholars.

#### Discussion

Nigerian health sector is currently not at its best state and this is the unalloyed truth, fact, reality, we are faced with as a nation, in addition to the other list of inconveniences. In spite of having some of the very best healthcare professionals in the world, the lack of development of the public healthcare system has wind-swept the little assurance the residents have in the Nigerian healthcare system. Likewise, the lack of medical intelligence annuls any effort to

identify sectors with disease outbreaks in a timely manner, to contain and treat occurrences of transferrable disease epidemics, and reduce there current incidence of such in the nation. The manner of drug supply is also cause for concern. A comprehensive revamping of the healthcare sector is long overdue and will help lessen the anguish of the common people. Nigerians saw the closure of hospitals and health centers during the period of the pandemic as a result of fear of the virus, lockdown in different states especially Lagos, Abuja, Ogun and Kano and instructions for hospitals to reduce the number of day's doctors go to work in a week as several doctors had contacted the virus with some casualties Kucharski (2020). This fear is due to the unavailability of adequate preventive equipment such as ventilators in each hospital/ health care centers, instrument for checking patients' temperature, fear of the ignorance of patients' health status etc. This in turn led to the scarcity of health care workers in hospitals/health care centers as many of them took to their heels to save their lives, number of patient seeking medical attention drastically increased, health status of patients got critical as a result of lack of assessment of health care providers and death of sick people (suffering from other diseases) who lacked adequate care Ngonghala et al. (2019). All this is due to the nature of the Nigerian health care system, which does not have enough contingencies for emergency situations for complicated diseases like COVID-19, Lassa fever, and Ebola etc. which has affected the health status of Nigerians adversely.

In light of the COVID-19 pandemic, several Nigerian citizens have suffered from one illness or the other and even lost their lives as a result of the lock down and inability to access health care. This is a proof that the health status of Nigerians during the COVID-19 period was adversely effected. One Mr Akpan residing in Port-Harcourt lost his mother from heart problem due to their inability to access medical care during the lockdown. Ohiaa, et. al, (2020), discovered that Nigeria's current national health systems cannot effectively respond to the growing needs of already infected patients however, according to Iboi et al. (2020), COVID-19 elimination is feasible in the entire Nigerian nation if the public face masks use strategy is strictly implemented alongside social-distancing strategy. With the dense population of states like Lagos and Kano, it will only take very stringent implementation of the social distancing and face mask law to eradicate the virus and stop its spread.

## Conclusion

The nature of the Nigerian health care system is such that do not have enough contingencies for emergency situations for complicated diseases like COVID-19, Lassa fever, Ebola etc. this has to a large extent affected the health status of Nigerians adversely. Therefore, the role which health care system has played with regards to the health status of Nigerians in the event of COVID-19 pandemic is poor and has led to increase in poor health conditions and even propelled mortality. Only a change in the response to policies can lead to the improvement of the Nigerian health care delivery system and the health status of Nigerians in the face of COVID-19.

## Recommendations

1. Health care delivery systems should be equipped by the government at all levels from federal to local and sufficient health care workers should be trained in preparation of emergency situations like COVID-19 and other diseases.

- 2. The government to have funds reserved for emergency situations so that they will be able to combat any pandemic that arises.
- 3. Health care workers should be passionate about their jobs and make themselves available when they are needed as long as long as protective equipment is made available.
- 4. To reduce the spread of the virus, NCDC and other healthcare facilities should increase the number of test conducted in a day so that major percentage of Nigerians will know their status and work towards preventing the spread of the virus.

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