**Nigeria – Avoiding potential crisis by quick government action and expanding social protection strategies**

*Introduction*

Nigeria, a lower middle-income country located in West Africa region and the most populous nation in Africa, was one of 13 countries identified by the WHO as a high-risk priority zone for proactive surveillance, detection and containment of the spread of COVID so as to not overwhelm the already vulnerable health system12. In December 2020, Nigeria had the second-highest number of confirmed COVID-19 cases in Africa and accounted for 7% of all confirmed cases on the continent2. As of May 24, 2021, Nigeria has reported 166,061 confirmed cases of the novel coronavirus, placing it at the 8th highest number of cases in Africa and making up 3.45% of all confirmed cases on the continent to date3. While the number of cases is undeniably high and is likely an underestimation due to limited testing in some communities, Nigeria faced a potentially devastating COVID-19 outbreak due to several factors, including high population density in urban slums, large numbers of internally displaced people (IDP) due to the presence of Boko Haram, prevalence of other infectious diseases and noncommunicable diseases which puts the population at an increased risk of serious illness as a result of COVID-19 infection and overall weak health infrastructure4. However, Nigeria has managed to mitigate what could have been the catastrophic impact of the pandemic by taking swift and aggressive action and importantly, implementing social protection mechanisms to ease the socioeconomic impact of COVID-19 mitigation efforts.

While progress towards SDG-3 target and UHC has certainly been made in Nigeria, as shown in figure XX, there has not been adequate focus and investment and therefore the health system remains vulnerable and UHC has not been a driving force behind the country’s COVID-19 response. Rather, taking early action, implementing social protection measures, leveraging existing epidemic preparedness and experience and robust support from WHO and other agencies have likely slowed the rate of transmission2.

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Fig.XX Trend of Selected SDG-3 Indicators Before the COVID-19 Pandemic (2009-2019), Nigeria

*Overview of the health system and progress towards UHC*

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Nigeria’s health care system is largely publicly managed, with 66% of the 34,000 health facilities owned by the government, but there is also substantial private sector involvement in the provision of health services5. The structure of the Nigerian health system is a decentralized model that mirrors the three tiers of government with varying responsibilities at the federal, state, and local government area (LGA) levels[ref]. Each state has at least one tertiary health facility owned by the federal government, often located in more populated urban areas, along with secondary facilities owned by individual states. Local governments provide primary healthcare services through clinics, health posts and dispensaries which tend to serve more rural communities5. Since the establishment of the Nigerian Health Insurance Scheme (NHIS) in 2005, still only about 5% of the population have health insurance and 70% of Nigerians must pay out of pocket for health services6, which points to a highly inequitable system considering 40% of the population lives below the $1.90/day poverty line which presents an enormous financial barrier to access7.

There has been very little improvement in the primary health care and the expansion of UHC in Nigeria in the 21st century, which can be attributed to several factors, including the fact that the leadership of the Ministry of Health changes which every change in political leadership wherein the ruling party often appoints ministers based on political favors rather than competency4. This is a major contributing factor to the Nigerian health system being ranked the worst by Transparency International on healthcare system corruption4. Additionally, investment and overall resource allocation is aimed at secondary and tertiary care rather than primary health care which has been a limiting factor in Nigeria’s progress towards UHC5. As of 2019, IHME estimated that Nigeria had achieved 38.3% effective UHC coverage, an increase of 6.7% from 20108.

Nigeria faces three health system-specific challenges that put the country at particular risk and complicated its response to COVID-19. First, Nigeria consistently faces overcrowding in hospitals; according to the World Bank, the latest available number of hospital beds per 10,000 population was from 2004, and was estimated to be only 5 hospital beds per 10,000 population1. Overcrowding was a challenge even before COVID-19, and has only exacerbated by the ongoing pandemic, with health care providers being forced to make difficult decisions as to who to prioritize for care, especially in major cities such as Konos and Lagos which have incurred the highest rates of positive cases9,10. Second, there is significant geographic variability in access to quality health care. Approximately 55% of the population lives in rural areas which have limited access to secondary and tertiary care facilities, which are critical in treating serious cases of the novel coronavirus, increasing the risk of morbidity and mortality for these already vulnerable communities11. Third, there is an overall shortage of healthcare providers; Nigeria reported only 3.8 physicians per 10,000 population and 15 nurses and midwives per 10,00012. These factors, among others, raised concerns of the capacity of the health care system during the COVID-19 and points to why Nigeria focused its efforts on containing the virus as quickly as possible.

*Pandemic Preparedness*

Nigeria is no stranger to infectious disease outbreaks, with over 20 public health emergencies and disease outbreaks reported between 2016 and 2018 alone13. Lassa fever, Monkey Pox, Ebola, Yellow Fever and Poliomyelitis have been found to be the top five emerging and re-emerging infectious disease outbreaks in Nigeria over the last several years13. Nigeria’s successful response to the 2014 Ebola epidemic, which was controlled in record time, highlights that despite the challenges posed by their weak health system infrastructure, effective outbreak response is possible. Nigeria’s well-coordinated response to the Ebola outbreak included key actions including: (1) leveraging existing surveillance and response systems for effective contact tracing; (2) timely identification of suspected cases; (3) scaled up laboratory diagnostic capabilities; (4) measures to safeguard points of entry; (5) management of rumors and misinformation; and (6) community engagement strategies 13. The experience of the 2014 Ebola epidemic alerted the health system, government, and importantly, communities to the potentially devastating impact of highly transmissible diseases such as COVID-19 and the importance of implementing timely, preemptive response measures15. Since then,

The WHO’s 2017 IHR-JEE found that Nigeria had at least a moderate level of capacity in the technical areas of real-time surveillance; workforce development and immunization, which will undoubtedly be critical throughout the COVID-19 vaccine rollout. However, the review found that there was an urgent need to strengthen national legislation, policy, and financing; IHR coordination, communication, and advocacy; laboratory and testing capacity; and points of entry16. The results of the JEE informed the development of Nigeria’s National Action Plan for Health Security (NAPHS) in 2018, which is a five-year multisectoral plan with a one-health approach at its core. The four major initiatives included in the plan are: (1) expanding digital surveillance; (2) establishing a nation-wide laboratory network; (3) building epidemiology workforce capacity; and (4) developing an “all-hazards” preparedness plan17. Unfortunately, these initiatives were not fully funded and in place ahead of the COVID-19 pandemic as they would have been helpful in an effective response.

*Response to COVID-19*

Nigeria’s response to COVID-19 in many aspects resembles their previous experiences in controlling highly fatal infectious disease outbreaks, such as viral hemorrhagic fevers, and can be grouped into two distinct stages: (1) pre-outbreak preparedness and (2) outbreak response measures. The outbreak response measures can be further broken down into three primary areas of focus: containment of initial cases; suppressing clusters of cases; and mitigating community transmission2.

In terms of preparedness measures, by January 26, 2020, about one month prior to the arrival of COVID-19 in Nigeria, the NCDC established a multisectoral National Coronavirus Preparedness Group (NCPG). This group was tasked with monitoring the epi curve, assessing the risk of disease transmission, and initiating measures to strengthen preparedness for early detection and response to the outbreak2. A week later, a Multisectoral Technical Working Group, with representation from across government ministries, was introduced at the Ministry of Health to strengthen preparedness measures, which included training health care workers on infection prevention and control; designating three existing laboratories for COVID-19 testing; establishing COVID-19 treatment centers and initiating Points of Entry (PoE) surveillance at international borders2.

The first COVID-19 case, an Italian citizen who flew from Milan to Lagos, Nigeria was confirmed on February 27, 2020, in Ogun state.[ref] Through immediate contact tracing, 216 individuals were identified for 14-day mandatory quarantine and follow-up. Following the confirmation of this first case, the NCPH transitioned to a national Emergency Operations Center (EOC), activated at the highest level of response to mobilize all available resources and the Presidential Task Force (PTF) was established to provide high-level strategic leadership. State-level EOCs were also launched in Lagos and Ogun to help coordinate the response2. PoE screening was also scaled up in high priority states with international airports, including Lagos. Transparent and timely information sharing was also facilitated from the early on; NCDC has been publishing the weekly COVID-19 situation report since February 29, 2020;[ref] risk communication strategies, including press releases, radio jingles and leveraging social media platforms, were launched to disseminate accurate information about the virus and how to slow the spread of disease.

By March 23, 2020, Nigeria implemented a ban on all international flights and land borders were closed and mandatory institutional quarantine and testing for all international returnees was required to reduce additional cases coming into the country from other high-risk countries2. The president also implemented a strict lockdown strategy in an effort to slow the spread of the virus and to buy time for the health system too increase preparedness measures, including general stay-at-home orders in high-risk areas (Lagos, Ogun, Kano and Federal Capital Territory), school closures, bans on religious and social gatherings, curfews and restrictions on movement2. During this period, treatment centers were expanded from one center in Lagos with just 35 beds to 121 treatment centers nationwide with 6550 beds by May 30, 2020. The number of laboratories equipped for COVID-19 testing increased from 3 to 28, 13,000 health care workers were trained on IPC and PPE was deployed across the country2. The strict lockdowns that were put into place across the country helped buy time to increase the capacity of the existing health system to better manage the outbreak. The fast expansion of control strategies undoubtedly benefited from their existing infrastructure, including the Integrated Disease Surveillance and Response framework (IDSR), molecular diagnostics laboratory networks for specific disease programs, and existing international aids and support.

The early and rapid response by the Nigerian government has undoubtedly been critical in managing the pandemic, however, simultaneous implementation and scale up of social measures also contributed to its success in part. As noted previously, over 40% of the population of Nigeria live in extreme poverty.7 World Bank recently predicted that an additional 5 million people will be forced into poverty either as a direct or indirect result of COVID-19, pointing to the need for urgent social protection strategies7. While this is far from being a reality in Nigeria, the existing systems have been leveraged to provide support to the most vulnerable to economic shocks, including the development of a Rapid Response Register to supplement the existing National Social Register which is limited to rural populations, to build a more comprehensive database of the urban poor7. Additionally, the government launched a food distribution programme in particular states, which included the delivery of rations through the pre-existing school feeding program and suspension of loan obligations for medium, small, and micro-enterprises that were funded by the government7. The overall lack of capacity, flexibility, and inclusivity within the existing social protection systems have restricted Nigeria’s ability to provide adequate support to a wider scope of people. However, throughout the COVID-19 pandemic, renewed attention to the importance of social protection as a cornerstone of a resilient society has been established, which may remain a priority even after the pandemic.

*Conclusion*

Despite being a resource-constrained country with a particularly vulnerable health system,

Nigeria managed to handle the COVID-19 pandemic relatively well. Leveraging their established competencies and infrastructure from previous outbreaks, Nigeria averted a potentially

catastrophic outbreak by taking swift and coordinated action to slow the spread of disease, including restricting travel, rapidly remobilizing the capacity of the existing public health system. Their success demonstrates the importance of prioritization under the resource-constrained settings, which serves as an important example for other countries under similar situation. In addition to these strategies, the government of Nigeria was acutely aware of the economic impact of the pandemic on its already vulnerable population and built upon existing social protection systems to provide direct relief in the form of cash transfers, loan suspension and food provisions. The implementation of these social protection measures may also help with the post-pandemic economic recovery. In the post-pandemic world, Nigeria’s renewed attention to social protection in addition with continued UHC progress will be important as the country recovers from COVID-19 and to ultimately build a more resilient society.

*Takeaways*

* Nigeria, a lower middle-income country located in West Africa, was one of 13 countries identified by the WHO as being high risk for a potentially catastrophic COVID-19 outbreak, given their weak primary care system and existing pockets of humanitarian crises, which in turn caused the severe disparity in access to and quality of care.
* However, Nigeria due to their agile response in the early phase of the outbreak. Nigeria’s success is attributable to the followings:
  + Swift action to protect the already weak health system
  + Prioritization of strategies under the limited resource setting, including the leverage of existing national surveillance network and laboratory capacities established from other disease programs.
  + Prior experience with outbreaks, which enabled the agile and proactive actiosn from the government, such as early establishment of the EOC.
  + Transparent and communication on the COVID-19 situation and active engagement on risk communication.
  + Implementation of social protection strategies.
* While Nigeria’s progress towards UHC may not have played a major role in the country’s successful COVID response, its UHC capacity, alongside continued commitment to social protection, may enable the country’s successful economic and social recovery from COVID-19

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