Prioritization of resource allocation amid the COVID-19 outbreak response in Nigeria

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Abstract
The COVID-19 pandemic has revealed the massive shortcomings of health systems globally, particularly in Nigeria with weak healthcare infrastructure, high population, and chronic high morbidity and mortality from the double burden of infectious and non-infectious causes. Many routine and elective services were suspended or withdrawn, and existing delivery approaches adapted to the evolving COVID-19 pandemic across all the states in Nigeria. Preventive programs such as screening were completely suspended. The vaccination schedules were missed for many children due to the closure of the immunization clinics. Many Nigerian children being liable to infections, alongside a reduction in the possibility of child survival. Funds to manage the COVID-19 pandemic were donated from internal organizations and corporate agencies. However, the modalities involved in the disbursement of these funds were not publicly revealed by the Nigerian government. Therefore, we recommend optimal allocation of inadequate health resources in ways that maximize health care delivery benefits to the greatest number of people, give priority to the worst off, ensure equality and promote continued care provision for non-COVID-19 conditions, including pregnancy and chronic conditions. To ensure the improved trust of Nigerians and donor agencies and organizations, accountability on all funds should be ensured by the Nigerian government. For this cause, such funds should be committed into the hands of trustworthy and expert finance managers and infectious disease experts.

Background
The COVID-19 pandemic has revealed the massive shortcomings of health systems globally, particularly in Africa’s most populated country, Nigeria, where weak healthcare infrastructure and chronic high morbidity and mortality from the double burden of infectious and non-infectious diseases causes have always been existed [1,2]. Due to the novel nature of COVID-19 and its rapid transmission rate, the Nigerian health system has faced huge challenges. These challenges have ranged from inadequate health facilities for managing positive COVID-19 cases, inadequate infection prevention and control (IPC) tools for healthcare workers, insufficient health workers (HWs) to provide COVID-19 focused care, increasing the rate of COVID-19 among HWs. The resource-limited state in which Nigeria exists has significantly contributed to these challenges. The emergence of the second wave of the COVID-19 pandemic in Nigeria since December 2020 creates an urgent need for the prioritization of the limited resources available in Nigeria [3]. This will help to do a needs-based ranking of healthcare challenges to promptly strategize modalities for addressing them within the limited resources available. A task of this nature would be useful to promote multi-sectoral collaboration from corporate agencies and non-governmental organizations to address the gaps in the healthcare interventions [4,5]. Therefore, this study aimed to describe the challenges experienced during the COVID-19 pandemic to chart strategies for prioritizing resource allocation amid the COVID-19 outbreak response in Nigeria.

Challenges experienced during the COVID-19 pandemic
The COVID-19 pandemic has placed great demands on the Nigerian health system, with more than 800 HWs infected with COVID-19 infection as of July 2020 [4,6]. As a result, positive cases of COVID-19 among HWs were either placed on a home facility-based isolation to break the chain of transmission. This led to a reduction in the available health workforce, and suspension or withdrawal of many routine and elective services became pertinent. During this period, telemedicine, an alien approach to the traditional healthcare delivery style, was adapted in many Nigerian health facilities [7]. However, the effectiveness of this approach was limited due to its novelty in the Nigerian health system. The emergency department of few hospitals that were partially opened granted admission to persons with critical illness symptoms. This stringent measure was taken to ensure minimal physical distancing of two meters between patients on admission. However, anecdotal evidence
reported that many deaths were reported among persons that had no symptoms of critical illness at that instant, which could not gain admission into health facilities.

In some instances, the entire hospital premises had to be fumigated because some HWs and patients had tested positive for COVID-19, and all patients on admission had to be discharged and referred to other facilities. However, it was reported that the condition of many patients who needed specialized care deteriorated within the interval of transitioning between two health facilities. Thus, some deaths were recorded in this regard as well. Interrupted preventive programs such as screening were completely suspended, and vaccination schedules were missed for many children due to the immunization clinics' closure. This exposed many Nigerian children to infections, alongside a reduction in the possibility of child survival. This array of evidence reflects that Nigeria has experienced many limitations in ensuring effective management of health services during the COVID-19 outbreak [4,6].

Given Nigeria's pre-existing resource-limited nature, Nigeria has been able to mobilize additional resources for preparedness and response by leveraging their budget laws to effect re-allocations of existing funds. Additional resources have been accrued from development partners who have dedicated funding to COVID-19. For instance, the International Monetary Fund approved a robust package of US$3.4 billion rapid financing instruments to enable the Nigerian government to effectively manage the implications of the COVID-19 situation [8]. Through her Department of State and the Agency for International Development (USAID), the Government of the United States mobilized up to $21.4 million funds for the control of COVID-19 in Nigeria [9].

The Coalition Against COVID-19 (CACOVID), composed of Nigeria's private sectors, received donations up to #27.1billion for the control of COVID-19 by the Nigerian government [10]. These funds have been used to procure the Rapid Transcript-Polymerase Chain Reaction test kits, PPE for all cadre of HWs, and Information, Education, and Communication materials for community sensitization on COVID-19 [10]. Likewise, the Africa Centers for Disease Control have recruited Community Health Workers across Nigeria for massive COVID-19 sensitization in schools, households, and public areas. The Nigerian government participated in distributing palliatives to the poorest households nationwide; however, the statistics used to determine households in this category are unknown [6]. Such gaps in reporting could have led to the exemption of many households who were in dire financial and material needs during this period; thus, reflecting a state of inequality in resource allocation in Nigeria amid the COVID-19 outbreak. Modalities for improving resource allocation and ensuring an equitable distribution of resources in all regards should be strategized.

Strategies for improving resource allocation during the COVID-19 pandemic
Drawing on previous submissions, we recommend optimal allocation of scarce medical resources in ways that maximize health care delivery benefits to the greatest number of people, give priority to the worst off, ensure equality and promote continued care provision for non-COVID-19 conditions including pregnancy and chronic conditions. Funding priority should be given to essential prevention and treatment services for communicable diseases, including immunizations; services related to reproductive health, including during pregnancy and childbirth; core services for vulnerable populations, such as infants and older adults; provision of medicines; management of emergency health conditions and common acute illnesses; and auxiliary services, such as basic diagnostic imaging, laboratory, and blood bank services. Also, Nigerian policymakers should ensure that social protection services are instituted and maintained during all periods. The Nigeria Bureau of Statistics should develop standards for determining the poorest persons, and these should be utilized to ensure fair distribution of financial and material resources. To ensure the improved trust of Nigerians and donor agencies and organizations, accountability on all funds should be ensured by the Nigerian government. For this cause, such funds should be committed into the hands of trustworthy and expert finance managers and infectious disease experts.

Abbreviation

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Data will be available by emailing afoannade@gmail.com

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OSI conceived and supervised the study. AAA wrote the first draft of the manuscript. AA, AAA, and OSI edited the manuscript. OSI and AAA revised the manuscript for critical intellectual content. All authors approved the final version of the manuscript.

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We conducted the research following the Declaration of Helsinki. However, Viewpoint Articles need no ethics committee approval.

Consent for publication
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Competing interest
The author declares that he has no competing interests.

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