



Managing infectious disease outbreaks during an ongoing economic crisis in Nigeria: A call to action

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Dear Editor,

Nigeria, the most populous country in Africa, is facing a dual challenge of health and economy. In recent years, the country has experienced several infectious diseases, such as yellow fever, meningitis, cholera, Lassa fever, and Coronavirus Disease 2019 (COVID-19), putting a strain on its already weak health system [1,2]. Currently, Nigeria is managing multiple epidemics including Anthrax, Diphtheria, and Lassa fever (LF) [3,4]. At the same time, the country has suffered retarded economic growth, driven by low oil prices and the impact of the COVID-19 pandemic [1]. Nigeria has witnessed another economic growth retardation in the first part of 2023, driven by petrol subsidy removal and foreign exchange reforms to stabilise the economy [5]. The Gross Domestic Product fell from 3.3 % in 2022 to 2.4 % in 2023 within the year's first quarter [5]. These challenges have significantly influenced the standard of healthcare in Nigeria, manifested by increased healthcare costs leading to demand-related problems, increased morbidity, reduced quality of healthcare delivery despite the increased cost, understaffing, the inefficiency of healthcare workers, medical brain drain as well as dwindling of research activities [1], which is detrimental to the nation's ability to manage the outbreak of infectious diseases properly. This letter aims to highlight the need for proactive measures and collaboration among various stakeholders to address these interrelated challenges and manage the infectious disease outbreak amidst an ongoing economic crisis in Nigeria.

The relationship between Nigeria's infectious disease outbreaks and economic crises is complex and intertwined. Over the past two decades, several infectious disease outbreaks have occurred, notably the Lassa virus, Ebola virus, and coronavirus outbreaks. The Ebola outbreak that occurred in 2014 - besides posing a significant health hazard - had severe economic repercussions. Resources were redirected towards combating the virus, reducing healthcare quality and accessibility, ultimately negatively affecting public health and economic productivity [1]. In 2020, Nigeria experienced another pandemic, the COVID-19 pandemic, which profoundly impacted health and the economy [1,2]. It was even more critical considering that Nigeria was managing the Lassa fever outbreak, which eventually led to a sharp rise in the epidemiological trend of LF in the country, with 1189 confirmed cases and 244 deaths in 2020 and 833 confirmed cases and 174 deaths in the previous year, 2019

[7]. The 2020 LF epidemiological trend remains the highest so far since 2016, which may also be attributed to the ripple effect of the LF and COVID-19 outbreaks on the health system and economy [8]. Misdiagnosis was also not ruled out during this period due to LF and COVID-19 sharing some clinical features [8]. Therefore, sizeable infectious disease outbreaks can open a country to economic risks [2]; this may become even more serious and severe should an existing economic crisis exist. Conversely, economic crises, including recessions and budget constraints, weakened Nigeria's healthcare infrastructure, exacerbated poverty, and restricted access to essential healthcare services [6].

The ongoing economic crisis in Nigeria has left the country's fragile health system in a more exposed state not because of unqualified practitioners but due to a lack of adequate funding from the government, poor management of little available resources, and increased living standards for Nigerians.

Managing infectious diseases in an economically challenged country requires efforts from various private and public sectors. Various governmental health agencies such as the Nigeria Centre for Disease Control and Prevention (NCDC), non-governmental organizations, and social institutions such as schools and religious centres need to remain intentional in safeguarding the healthcare system in the country. Suitable sustainable policies should be set up to cushion the effect of the current economic situation on the healthcare system and for future outbreaks [9]. These policies should address pandemic preparedness and responses, vaccination coverage, resource allocation, emergency funds, and health insurance. Lack of health insurance can lead to preventable deaths, and this situation worsens as some individuals and populations prone to infectious diseases suffer more [2].

The Basic Health Care Provision Fund (BHCPF) was established in Nigeria by the National Health Act of 2014 to achieve Universal Health Coverage [10]. The NCDC - Nigeria's public health organisation that responds to infectious diseases of public health concern - was removed temporarily from the BHCPF; however, it is now an implementer of this fund [11,12]. This is a good development, considering how the fund could be instrumental in future pandemic preparedness and response if adequately utilized. The BHCPF is expected to deliver health care services to Nigerians and assist people experiencing poverty, especially at the Primary Health Care level [10]. Despite the identified role of BHCPF

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in health financing, a declining and inconsistent supply of this fund has been recorded [11,13]. This calls for consistent funding, proper monitoring, and supervision of the program. There should also be enough funds that can be secured through alternative means for the relevant agencies to address public health emergencies. These funds can be deployed in an infectious disease outbreak or other health emergency. Therefore, the government, policymakers, and healthcare professionals must work together to effectively implement public health emergency responses through a working healthcare system.

Public health and economic stakeholders, including the relevant organisations, should also coordinate and communicate to set up resilient strategies and forge a collaborative alignment in making decisions that concern the growth of the economy and healthcare system. These actions will better prepare the country for outbreaks and even more during economic crises. Nigeria is suffering from an increased cost of living and deterred economic growth due to some reforms to stabilize the country's economy [5]. With solid commitment and intentionality from the government and across all sectors, including the private sector, the healthcare system can be better managed despite the ongoing economic concerns.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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