

**Viewpoint****Open Access****Neglect of common infectious disease outbreaks during the COVID-19 pandemic: an impending crisis in Nigeria?**

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Correspondence to: sogbengasoyemi16@gmail.com; +2348128388296**Abstract:**

Infectious diseases are major challenges of healthcare system in Nigeria. The coronavirus disease-19 (COVID-19) pandemic has disrupted many systems including healthcare at all levels by creating disparities in the treatment, prevention, resource allocation and control of diseases in Nigeria. Premised on the foundation of circulating news and fact-checking platforms, this paper provides empirical evidence on varying perceptions on COVID-19 pandemic and apparent neglect of other infectious diseases while giving a critical analysis and comparison between them.

Keywords: COVID-19; infectious diseases; neglect; Nigeria

Received Nov 10, 2020; Revised Dec 26, 2020; Accepted Dec 27, 2020

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Négliger les flambées de maladies infectieuses courantes pendant la pandémie COVID-19: une crise imminente au Nigeria?

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Les maladies infectieuses sont des défis majeurs du système de santé au Nigeria. La pandémie de coronavirus-19 (COVID-19) a perturbé de nombreux systèmes, y compris les soins de santé à tous les niveaux, en créant des disparités dans le traitement, la prévention, l'allocation des ressources et le contrôle des maladies au Nigéria. Fondé sur la diffusion d'informations et de plates-formes de vérification des faits, cet article fournit des preuves empiriques sur les différentes perceptions de la pandémie de COVID-19 et la négligence apparente d'autres maladies infectieuses tout en fournissant une analyse critique et une comparaison entre elles.

Mots clés: COVID-19; maladies infectieuses; négligence; Nigeria**Introduction:**

Coronavirus disease-19 (COVID-19) caused by severe acute respiratory syndrome-coronavirus-2 (SARS-COV-2) is a pandemic disease burden that has affected millions of people all over the world. In Nigeria, infectious diseases constitute significant disease burden in the country. Prior to the onset of the global pandemic of SARS-COV2 infection, national reports and statistics regarding specific infectious diseases in Nigeria were already alarming, and while plans were being made to mitigate these, the results have been at best moderately effective (1).

Tuberculosis (TB), caused by acid fast

bacillus, *Mycobacterium tuberculosis*, affects more than 63,000 people in Nigeria yearly, coupled with the existing 407,000 people already living with the tuberculous disease (2). Although largely preventable, malaria cases in Nigeria contributes up to 25% of all global malaria deaths (3) while the country has the second largest HIV epidemic in the world, affecting more than 3.2 million people, mostly young people but including women, children, people who inject drugs (PWIDs) and sexual minorities such as men who have sex with men (MSM) (4).

Other common diseases such as meningitis and Lassa fever are already endemic in Nigeria. Interestingly, some of these diseases

are associated with one another, some with direct proportional relationships. For example, malaria increases risk for HIV infection and causes a temporary increase in viral load (5) while there is 30 times increased risk of developing TB in people living with HIV than non-HIV infected persons (6). This is baffling for a developing country like Nigeria that has public health issues occasioned by political instability and social insecurity, inadequate or delayed funding and poor standard of living of residents, which eventually affect campaigns aimed at eliminating these infectious diseases (7).

This viewpoint critically analyses the perspectives of whether an impending crisis is possible using current facts and historical data while seeking to inspire researchers to develop quantitative surveys on the direct correlation of the COVID-19 pandemic and common infectious diseases in Nigeria. To fully understand the probability of an impending crisis in the country, a brief history in time of the most prevalent and current infectious diseases in Nigeria, Lassa Fever and Yellow Fever, was undertaken.

Current infectious diseases with epidemic potentials in Nigeria:

Lassa fever is an acute viral haemorrhagic fever caused by the Lassa virus, a member of the *Arenaviridae* family of viruses. The disease is transmitted through urine and droppings of infected multimammate rats of the *Mastomys* genus and is characterized by fever, bleeding and headaches. Shortly before the report of first case of COVID-19 in Nigeria, Lassa fever had already prompted calls for declaration as a national health emergency. This was because as at February 23, 2020, the disease had spread through 27 States of the country, with 689 confirmed cases and 118 deaths, as against the cumulative 381 confirmed cases and 83 deaths for the same time period of February 2019 (8). This became alarming and the immediate response by the Nigeria Center for Disease Control (NCDC) was to activate the national emergency operation centre (EOC) that would coordinate activities at the State level, activate State public health emergency operation centre, and scale up community engagement and risk communications. For typical infectious diseases such as this, extreme precaution and coordinated responses are necessary to prevent a national epidemic disaster. Public stakeholders have therefore been involved in controlling this potentially dangerous disease by localizing its spread.

After 21 years without occurrence, Yellow fever re-emerged in Ifelodun Local Government Area (LGA) of Kwara State, Nigeria on September 12th 2017 with an index

case, a 7-year-old who presented with fever, jaundice and vomiting of blood, with no record of travel or vaccination (1). By the end of the year, the number of suspected cases had risen to 337 with 13.6% case fatality rate and 23.3% for suspected cases (1). At this time, it was already confirmed in 4 States (Kwara, Kogi, Kano and Zamfara). Strategies were deployed to tackle this outbreak, which included surveillance by active case search and entomological surveys, sample collection for laboratory testing, immunization and vaccination (1). Even with this scheme, there were series of re-emergence between 2018 and 2020.

A deeper comparative analysis of these two common infectious diseases and the COVID-19 in terms of control strategy has shown that the recent pandemic has taken more attention than these other infectious diseases.

Was there increased awareness and alertness of COVID-19?

The index case of COVID-19 in Nigeria was reported on February 28, 2020 (9) and since then, many strategies have been developed to contain the disease. SARS-COV-2 is transmitted through droplet secretions and direct contact but could also be airborne when aerosols are generated. Elderly and immunocompromised people are more prone to the disease. Therefore, containment of the disease solely depends on containing the virus spread as a preventive measure and not just its treatment. There is no general agreement on the direct impact of the pandemic and existing infectious diseases in Nigeria as there are insufficient data regarding clinical and community management of infectious diseases apart from the SARS-COV-2 infection. With varying perceptions of the pandemic, the impacts for now can only be speculative.

COVID-19 affects individuals of any age and while asymptomatic patients have been reported, the most common clinical symptoms are fever, dry cough and upper respiratory tract symptoms such as sore throat, headache and myalgia (10). The differential diagnoses include a wide range of diseases such as any type of respiratory viral infections (influenza, adenovirus, coxsackie), bacteria pneumonia and respiratory infections by atypical organisms. Because SARS-COV-2 infection presents like many other respiratory diseases and cannot be identified by routine laboratory tests, it is almost impossible to distinguish COVID-19 from other respiratory infections without specific molecular tests (10).

Following the index case and rise of the infections rate, healthcare workers in the country became more careful in relating to

patients especially suspected cases of any infection. All suspected infections especially respiratory infections were ultimately treated as high alert. Since infections are on high alert, detection and diagnosis of any suspected infection were fast-tracked and improved in order to eliminate false positives and false negatives. Infections then were promptly treated and managed. If high priority was put on all types of infections in order to diagnose COVID-19, the main question therefore is "are infectious diseases really neglected?". It could be argued that infections are in fact, not neglected. The nexus between common infections and COVID-19 is however inextricable.

A more popular school of thought proposes that the issues regarding healthcare in Nigeria is chronic in nature and as such, more evident during the pandemic, especially that Nigeria is one of the five WHO African Region countries that has five public health events per annum (7). From an historical perspective, the key principles Nigeria has utilized in controlling major outbreaks such as Lassa fever, Yellow fever and Ebola have involved contact tracing, local intervention by community engagement and sensitization, constant monitoring of diseases, resilience and urgency in action (7). These have however shown to be ineffective because of the many limitations hindering the development of these strategies. These limitations include shortages of human personnel, poor healthcare funding, inadequate diagnostic capacity, political instability and technological limitations, which are still much in existence and consequential today (7). Prior to the COVID-19 pandemic, there was already resource scarcity and deficit, and controlling one outbreak seems entirely difficult. The onset of COVID-19 simply created a reallocation of already limited financial and human resources and an eventual neglect in others.

Recent data show that the Ebola outbreak in three West African countries; Guinea, Sierra Leone and Liberia, led to the disruption of healthcare and an eventual 10,900 deaths due to malaria (12). Even the latest prediction of WHO explained how global number of TB deaths could increase by 0.2-0.4 million people in 2020 alone if health services continue to be disrupted, and affects diagnosis and treatment rate by about 50% (6). Two questions are therefore important in perspective; (i) does Nigeria have adequate capacity to mitigate only one health crisis? and (ii) is Nigeria capable of diversifying resources while also tackling a pandemic?

As at May 2020, while the pandemic progressed, there was a growing concern for capacity to handle other diseases as resources necessary for mitigating the crisis became depleted. In the bid to accommodate preemptive resource fallouts as well as limit contacts

as a preventive strategy, clinic consultations and elective procedures were halted and patients with other medical illnesses were discharged from the wards and intensive care units. This subsequently served as barrier for accessing healthcare outside of COVID-19 and as such, a neglect for other diseases.

The framework in preventing a full-blown crisis led to increasing demand of personal protective equipment (PPE) for healthcare workers (HCWs) and the populations, which ultimately led to shortages of these materials. This is also partly because of the dearth in local production of these materials in Nigeria and the hike in price of PPEs fuelled by heightened public anxiety. The resultant effect is the over 1,000 HCWs testing positive for COVID-19 as at June 2020 (13). Many centres were subjected to rationing and sharing PPEs as a method of avoiding infection. Following this again, was a nationwide strike of resident doctors as a protest for the non-payment of the special COVID-19 hazard and inducement allowance of 50% consolidated basic salary, which the Federal Government of Nigeria had promised the frontline HCWs in fighting the pandemic (14).

While it is possible that monitoring of other diseases has been active by the major stakeholders like the Nigeria Centre for Disease Control (NCDC), the resilience, urgency and resource mobilization can be argued to have shifted to the pandemic, creating a doorway for possible re-emergence of other diseases. From an historical view, we can see how a simple re-allocation of resources led to the neglect of another and eventually caused a significant damage in it. It is therefore recommended that while plans are being made to mitigate the impending crisis, resources are also allocated in an effort to buffer the neglect.

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