# **LETTER TO THE EDITOR**

**Open Access** 

# Healthcare facilities recovering from the COVID-19 pandemic now struggling to contain the spread of infectious diseases in Africa

Bashar Haruna Gulumbe<sup>1\*</sup>, Kadai Alhaji Lawan<sup>2</sup> and Musbahu Abdullahi Bagwai<sup>3</sup>

Dear Editor,

The World Health Organization (WHO) recent announcement denotes COVID-19's departure from its Public Health Emergency of International Concern (PHEIC) status (Lenharo 2023), a crucial step, yet not signalling complete eradication. For example, recent data indicates 1080 active cases in Africa (WHO 2023a). This shift enables heightened scrutiny on other prevalent infectious diseases within Africa.

Throughout Africa, there have recently been outbreaks of infectious diseases in addition to the continuing COVID-19 pandemic. For instance, 40 yellow fever deaths were reported in the WHO African region from 1 January 2021 to 7 December 2022 (WHO 2023b). Similar to this, on December 18, 2022, Sudan reported a case of circulating type 2 poliovirus obtained from immunization. There are still cholera outbreaks in the WHO African region, with 13 countries reporting cases (WHO 2023c). While these cholera cases and deaths have decreased over the past 5 weeks, these outbreaks

are still taking place in areas that are experiencing natural disasters, armed conflicts, and resource shortages, with Malawi having the highest number of both reported cases and fatalities (WHO 2023c). More disturbingly, throughout eastern and southern Africa, there have also been outbreaks of vomiting and diarrhoea that have sickened over 60,000 people and claimed 1700 lives, with Malawi and Mozambique suffering the greatest losses (Bawage and Uba 2023). In addition, there have been outbreaks of diphtheria (Agrawal et al. 2023), Lassa fever and meningitis in West Africa, with substantial diphtheria and Lassa fever outbreaks in Nigeria (Gulumbe et al. 2023) and a recent meningitis outbreak in Niger (WHO 2023b). In the light of recent circumstances, UNICEF has voiced poignant concerns regarding the capacity of healthcare facilities to curb the spread of infectious diseases amidst their recovery from the aftershocks of the COVID-19 pandemic (Bawage and Uba 2023).

The causes of these outbreaks are multifactorial, including inadequate water and sanitary facilities, a lack of resources, natural catastrophes, and conflicts (WHO 2023b). Poor hygiene habits and insufficient access to clean drinking water have also been linked to epidemics of vomiting and diarrhoea in eastern and southern Africa (WHO 2023b). In addition, the interplay of factors such as rapid population growth and climate change further complicates the health landscape (Baker et al. 2022). Increased human densities can facilitate the spread of diseases, while shifts in climate patterns can favour the proliferation of disease vectors like mosquitos. Their significant role in the transmission of diseases such as

<sup>&</sup>lt;sup>3</sup> Department of Life Sciences, School of Technology, Kano State Polytechnic, Kano, Kano State, Nigeria



<sup>\*</sup>Correspondence: Bashar Haruna Gulumbe bashar.haruna@fubk.edu.ng

<sup>&</sup>lt;sup>1</sup> Department of Microbiology, Faculty of Science, Federal University Birnin-Kebbi, Birnin Kebbi, Kebbi State, Nigeria

<sup>&</sup>lt;sup>2</sup> Department of Microbiology and Immunology, Faculty of Biomedical Sciences, Kampala International University, Kampala, Uganda

yellow fever, malaria, and dengue underscores the need for robust vector control strategies and more comprehensive public health approaches. (WHO 2023b).

The COVID-19 pandemic has already had a profound impact on the healthcare sector in Africa, disrupting routine healthcare services and diverting resources towards COVID-19 response (Gao et al. 2023; Tessema et al. 2021). This has left little capacity to tackle other infectious diseases, and recent outbreaks of diseases such as yellow fever, polio, Marburg virus, cholera, diphtheria, Lassa fever, meningitis, and meningitis are placing additional pressure on an already overburdened healthcare system. These outbreaks pose a significant challenge to the already struggling healthcare system in the region. Undoubtedly, the healthcare infrastructure is central to the reduction of COVID-19 cases (Lenharo 2023). Integral elements include diagnostic testing, contact tracing, therapeutics for those affected, and significantly, the orchestration of vaccine campaigns (Lenharo 2023). Effective vaccine dissemination remains pivotal in constraining viral transmission and limiting disease severity. Crucially, the role of health initiatives in promoting preventive education and endorsing healthcare guidelines cannot be understated in the broader context of pandemic management.

There is therefore the need for a comprehensive strategy to address public health issues in the region. Governments and other stakeholders must invest in healthcare infrastructure and human resources to guarantee that healthcare facilities are capable of identifying, treating, and preventing infectious disease outbreaks to solve the problem of epidemic outbreaks in Africa. Increased public knowledge of risk factors and the promotion of early detection and treatment are both necessary. A robust healthcare system must be developed via cooperation between governments, medical experts, and the general population. The development of cutting-edge strategies like telemedicine and mobile health clinics should be investigated, as well as investments in infrastructure for water and sanitation. Last but not least, improving disease surveillance systems and prioritizing the development of vaccines and treatments for infectious diseases can significantly reduce the likelihood of outbreaks by preventing and containing them.

In conclusion, the healthcare system in Africa continues to face a great deal of difficulty as a result of infectious illness epidemics. Prioritizing expenditures in healthcare infrastructure, educating the public about the dangers of infectious diseases, and ensuring that healthcare facilities have the tools and expertise required to correctly identify and treat these illnesses are all critical steps in addressing this problem. Furthermore, cutting-edge approaches like telemedicine and community-based surveillance can

aid in enhancing disease surveillance and management. While these elements are crucial, the creation of a more robust healthcare system also requires the active involvement of national, regional, and international organizations (Shin et al. 2018). Entities such as the WHO and its Africa Office, Cochrane Africa with its promising Global Evidence-Local Adaptation project, Africa Evidence Network, the Africa Regional Community of the Guidelines International Network, African Health Economics & Policy Association, and The African Accreditation Cooperation bring invaluable expertise, resources, and a global perspective. In our interconnected world, their contributions are essential to enhancing Africa's healthcare system. Therefore, it's not only the responsibility of the government, medical experts, and the general population, but also of these national, regional, and international organizations to work together towards improved healthcare outcomes in Africa.

### **Abbreviations**

WHO World Health Organization COVID-19 Corona Virus Disease 2019

UNICEF The United Nations International Children's Emergency Fund

### Acknowledgements

Not applicable.

### **Author contributions**

BHG conceived the idea and participated in manuscript writing, review, and editing. KAL and MAB participated in manuscript writing, review, and editing. All authors read and approved the final manuscript.

### Funding

Not applicable.

# Availability of data and materials

Not applicable.

### **Declarations**

### Ethics approval and consent to participate

Not applicable

### Consent for publication

Not applicable.

# **Competing interests**

The authors declare that they have no competing interests.

Received: 28 March 2023 Accepted: 10 July 2023 Published online: 13 July 2023

### References

Agrawal R, Murmu J, Kanungo S, Pati S (2023) Nigeria on alert: diphtheria outbreaks require urgent action—a critical look at the current situation and potential solutions. New Microbes New Infect. 52:101100. https://doi.org/10.1016/j.nmni.2023.101100

Baker RE, Mahmud AS, Miller IF, Rajeev M, Rasambainarivo F, Rice BL, Takahashi S, Tatem AJ, Wagner CE, Wang L-F, Wesolowski A, Metcalf CJE

- (2022) Infectious disease in an era of global change. Nat Rev Microbiol 20:193–205. https://doi.org/10.1038/s41579-021-00639-z
- Bawage A, Uba N (2023) There has been an outbreak of vomiting and diarrhea in East and Southern Africa—UNICEF [WWW Document]. BBC News Hausa. URL https://www.bbc.com/hausa/live/labarai-64912604. Accessed 13 March 2023
- Gao L, Shi Q, Liu Z, Li Z, Dong X (2023) Impact of the COVID-19 pandemic on malaria control in Africa: a preliminary analysis. Trop Med Infect Dis 8:67. https://doi.org/10.3390/tropicalmed8010067
- Gulumbe BH, Idris I, Salisu N (2023) The outbreak of meningitis amidst Lassa fever and diphtheria crisis in Nigeria: an urgent call for action. Trop Dr. https://doi.org/10.1177/00494755231162523
- Lenharo M (2023) WHO declares end to COVID-19's emergency phase. Nature. https://doi.org/10.1038/d41586-023-01559-z
- Shin Y, Yeo J, Jung K (2018) The effectiveness of international non-governmental organizations' response operations during public health emergency: lessons learned from the 2014 Ebola outbreak in Sierra Leone. Int J Environ Res Public Health 15:650. https://doi.org/10.3390/ijerph15040650
- Tessema GA, Kinfu Y, Dachew BA, Tesema AG, Assefa Y, Alene KA, Aregay AF, Ayalew MB, Bezabhe WM, Bali AG, Dadi AF, Duko B, Erku D, Gebrekidan K, Gebremariam KT, Gebremichael LG, Gebreyohannes EA, Gelaw YA, Gesesew HA, Kibret GD, Leshargie CT, Meazew MW, Mekonnen A, Mirkuzie AH, Mohammed H, Tekle DY, Tesfay FH (2021) The COVID-19 pandemic and healthcare systems in Africa: a scoping review of preparedness, impact and response. BMJ Glob Health 6:e007179. https://doi.org/10.1136/bmjqh-2021-007179
- WHO (2023a) WHO Coronavirus (COVID-19) Dashboard [WWW Document]. https://covid19.who.int. Accessed 9 June 2023a
- WHO (2023b) Disease Outbreak News [WWW Document]. https://www.who. int/emergencies/disease-outbreak-news. Accessed 13 March 2023b
- WHO (2023c) Cholera in the WHO African Region: weekly regional cholera bulletin. [WWW Document]. WHO Regional Office for Africa. https://www.afro.who.int/health-topics/disease-outbreaks/outbreaks-and-other-emergencies-updates. Accessed 13 March 2023c

### **Publisher's Note**

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

# Submit your manuscript to a SpringerOpen journal and benefit from:

- ► Convenient online submission
- ► Rigorous peer review
- ▶ Open access: articles freely available online
- ► High visibility within the field
- Retaining the copyright to your article

Submit your next manuscript at ► springeropen.com