

Winning The War Against Infectious Diseases In Africa: Insights from Covid-19 and MPOX

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Dear Editor,

In recent years, we have seen an increasing number of outbreak reports of various emerging and re-emerging infectious diseases (Table 1). Africa continue to be plagued with infectious diseases like HIV/AIDS, malaria, tuberculosis, trachoma, Ebola, Lassa Fever, COVID-19 and MPOX (monkeypox). It is therefore pertinent to draw lessons and insights from the most recent outbreaks to guide response strategies for the future. The COVID-19 pandemic was accompanied by rapid prophylactic and therapeutic interventions. This came in handy and was beneficial to saving a number of lives that could have been lost. Within a short period of time, we saw the release of multiple vaccines that have been approved for use against the coronavirus¹. Similarly, a monkeypox vaccine popularly known as JYNNEOS (the Imvanex vaccine) has been approved by the U.S. Food and Drug Administration (FDA). However, limited supply and vaccine inequity remains a major challenge. Research shows that just one company produces the vaccine and Africa, the origin of the current outbreak is still yet to receive supplies². More than ever before, there is a dire need for skilled workers training and extensive capacity strengthening for local vaccine development in Africa. While building Africa's capacity for vaccine development, we also must not lose sight of tackling the ongoing vaccine inequity which has always posed a challenge to the global effort against infectious diseases outbreaks. The G7 and high-income countries should take solidarity actions by supporting African countries with supplementary supplies of available vaccines to combat future outbreaks.

Table 1. Reported Outbreaks in Africa²

Infectious Disease	Total Cases (Till 2019)
Chikungunya	22,382
Cholera	235,451
Crimean-Congo Haemorrhagic Fever	62
Dengue Fever	27,690
Ebola Virus Disease	31,143
Hepatitis E Virus	1,006
Lassa Fever	1,182
Marburg Virus Disease	24
Measles	25,830
Meningococcal Meningitis	37,028
Plague	2,543
Poliomyelitis (polio)	791
Rift Valley Fever	1,432
Yellow Fever	3,035
Zika Virus	4,744

Stigmatization is another challenge that has accompanied the outbreak of infectious diseases like the monkeypox. For instance, monkeypox has been prevalent amongst men who have sex with men (MSM) group in some nations of the world. Report shows that the MSM group has recorded a high number of cases which has led to discrimination from external communities³. It tends to be an infringement on human rights. A similar experience

goes for the African community who have been posed as the ‘face of monkeypox’. The danger of these acts of discrimination is the ripple effect it could have on the mental health of the involved individuals and already fragile healthcare system in Africa ultimately undermining health equity. Antistigma framework should be incorporated into diseases outbreak preparedness and response across all countries to address the mental health consequences that accompany disease-related stigmatization.

Moreover, certain containment measures have proven effective in mitigating against the spread of COVID-19. These same practices have been recommended in managing the recent outbreaks of monkeypox. This includes isolation of the infected patient; use of proper hand-washing procedures; use of disinfectants; and use of personal protective equipment (PPE) especially by healthcare workers. However, Africa has failed in maximizing these measures because of her current poor health systems which has resulted in high fatality rates from infectious diseases. Health financing must receive superior priority in most African countries as a large percentage of their population can barely afford these safety materials. To maximize the effectiveness of health financing, interventions must first be targeted to those who are most at risk of infections in settings with constrained resources. Interventions should also include targeted education of at-risk groups as innovative health education is crucial to disease prevention and control.

The media is also an important entity in the outcome of disease outbreaks through its role in communication of health information. We saw an avalanche of misinformation spread across territories at the peak of the COVID-19 pandemic⁴. Despite the misinformation linked to the media, it eventually served as an effective channel for innovative health education programs that helped in flattening the pandemic curve. For instance, Nigeria, Burkina Faso and Senegal reportedly maximized the media in communicating accurate health information to their citizens and daily statistics of cases to the general public^{5,6}. The same media played a crucial role in addressing vaccine hesitancy when the COVID-19 vaccines became available. The media must therefore be constantly leveraged as it will prove effective in enhancing the uptake of monkeypox vaccine and other infectious diseases vaccines when they finally become available in Africa.

It is of a truth that diseases are equally distributed but access to healthcare is not. A good number of African countries have been plagued with weak health system and poor health financing. This has led to a wide gap in health inequity compared to their global counterparts. In addressing this, early warning systems and adequate

surveillance of epidemics must be instituted, even after an outbreak. Another strategy is the promotion of self-help in disease endemic communities, along with practical indigenous survival techniques and ethnoveterinary medicines to combat outbreaks. Furthermore, promoting traditional medicine and model survival techniques that have been successful in the past might have to be revisited. It is high time we rose unitedly against the microbes who are ready to render the human race extinct.

Author’s Contribution

MJO: Conceptualization, Conducting literature review, Writing—First Draft, Writing—Review and Editing.

Ethical Approval

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Competing Interests

The author has no conflict of interest to declare.

References

1. Costanzo M, De Giglio MA, Roviello GN. Anti-Coronavirus Vaccines: Past Investigations on SARS-CoV-1 and MERS-CoV, the Approved Vaccines from BioNTech/Pfizer, Moderna, Oxford/AstraZeneca and others under Development Against SARS-CoV-2 Infection. *Curr Med Chem.* 2022;29(1):4-18. doi: [10.2174/0929867328666210521164809](https://doi.org/10.2174/0929867328666210521164809)
2. Grid. The World had a head start with monkeypox vaccines. It has largely squandered it. 2022. <https://www.grid.news/story/science/2022/08/04/the-world-had-a-head-start-with-monkeypox-vaccines-it-has-largely-squandered-it/>
3. Ennab F, Nawaz FA, Narain K, Nchasi G, Essar MY. Rise of monkeypox: Lessons from COVID-19 pandemic to mitigate global health crises. *Ann Med Surg.* 2022;79:104049. doi: [10.1016/j.amsu.2022.104049](https://doi.org/10.1016/j.amsu.2022.104049)
4. Himelein-Wachowiak M, Giorgi S, Devoto A, Rahman M, Ungar L, Schwartz HA, et al. Bots and misinformation spread on social media: Implications for COVID-19. *J Med Internet Res.* 2021;23(5):e26933. doi: [10.2196/26933](https://doi.org/10.2196/26933)
5. Ihekweazu V, Ejibe U, Kaduru C, Disu Y, Oyebanji O, Oguanuo E, et al. Implementing an emergency risk communication campaign in response to the COVID-19 pandemic in Nigeria: lessons learned. *BMJ Glob Health.* 2022;7(6):e008846. doi: [10.1136/bmjgh-2022-008846](https://doi.org/10.1136/bmjgh-2022-008846)
6. European Union. Media Coverage of COVID-19 in West Africa: adapting and reinventing. 2021. <https://europa.eu/capacity4dev/articles/media-coverage-covid-19-west-africa-adapting-and-reinventing>
7. Africa CDC. Disease Information. 2022. <https://africacdc.org/disease/>