



Caught between violence: Mpox virus and the perils of neglect in Africa

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INTRODUCTION

As the world recovers from the impact of the SARS-CoV-2 pandemic, countries in Africa are grappling with yet another worrisome challenge: the ongoing outbreaks of the Mpox virus (formerly known as monkeypox). The Mpox virus was first discovered in 1958 among laboratory monkeys in Denmark¹; however, it was not until 1970 that the first case in humans was reported in the Democratic Republic of Congo (DRC). Since then, the Mpox virus has been endemic in most parts of East, Central and West Africa.

This commentary underlines the perils of neglecting Mpox, exploring three key factors that have contributed to its re-emergence and spread.

Caught between clade I and clade II—shifting epidemiology of the Mpox virus

The Mpox virus, originally driven by zoonotic spill-over via infected monkeys, and later human-to-human transmission, belongs to the same family as the smallpox virus (eradicated in 1980). Two distinct ancestral strains are recognised: clade I, seen mainly in Central and Eastern Africa, and clade II, which is largely confined to West Africa. While both strains share certain epidemiological traits, a series of multi-country outbreaks in 2022 suggested clade II may also spread through sexual contact.² This prompted the WHO to declare Mpox a public health emergency of international concern (PHEIC) in 2022 as rapid and sustained spread beyond endemic countries clustered in the men who have sex with men communities in the USA and countries in Europe.³

The global response following the PHEIC led to a decline in the number of cases outside the African region, and WHO later called an end to the PHEIC in 2023.⁴ However, in August 2024, WHO once again declared

SUMMARY BOX

- ⇒ Countries in Africa are grappling with an ongoing multi-country outbreak of the Mpox virus. Despite the longstanding presence, there are significant limitations, including restricted access to medical countermeasures such as diagnostics, therapeutics and vaccines.
- ⇒ This commentary examines three forms of 'violence' driving the Mpox outbreaks: the shifting epidemiology of the virus, socio-economic inequalities and insecurity, and global inequities in access to research funding, testing, treatments and vaccines.
- ⇒ To mitigate the ongoing outbreak, we call for the deployment of a strengthened frontline health workforce, systems for socio-economic support for the worst affected groups and equitable access to life-saving medical countermeasures including diagnostics, therapeutics and vaccines.
- ⇒ Additionally, the sequential declaration of Mpox as an international emergency also calls for synergy among key stakeholders to enhance operational efficiencies. The ability to work together will be crucial for the control and elimination of Mpox.
- ⇒ Long-term strategies require a paradigm shift in resource allocation towards efficient and resilient primary and public health structures, a shared regional epidemic framework and funding mechanism, and equitable participation in governance that fosters access to medical countermeasures, research opportunities and funding.

Mpox a PHEIC⁵ following the emergence of a new strain of Mpox (clade 1b). Although clade II led to a global emergency in 2022, clade I is more life-threatening, with a case fatality rate of over 4% in adults and 10% in children. For immunosuppressed individuals, pregnant women and children, exposure to clade I can be particularly devastating.

Since early 2023, African countries have been grappling mainly with this new strain of clade I.⁶ As of 13 September 2024, according to the Africa Centre for Disease Control and Prevention (Africa CDC), a total of 27 975

suspected cases and 738 deaths have been reported by 15 countries.⁷ The DRC accounts for over 90% of cases; cases have been reported in all 26 provinces in the DRC, including the capital, Kinshasa. Nearly half of these cases have occurred in children under 5, signifying ongoing household transmission.

Worrisomely, findings from the ongoing outbreak suggest that the new strain is driven via heterosexual contact due to a higher incidence among female sex workers.⁸ This was first observed in April 2023 in Kamituga, a densely populated and impoverished mining town in the eastern South Kivu province of the DRC.⁸ Complicating this shift, the porous nature of many borders, cross-border movement of miners, high mobility of at-risk groups and forceful displacement of persons due to ongoing internal conflict in the DRC risk a global outbreak.^{9,10} Travel-associated clade Ib cases have also been reported in non-endemic countries, including Sweden, Thailand and Morocco. Yet, like many countries on the continent, the DRC is faced with challenges in curtailing the outbreak.

While the shifting epidemiology presents significant challenges, these biological factors are deeply intertwined with the social, economic and political realities on the ground, creating a complex landscape of risk and vulnerability in affected regions.

Caught between socio-economic inequalities and insecurities—the urgent need for community engagement

To understand the factors which predispose individuals to at-risk groups, it is crucial to also recognise the underlying determinants of Mpox emergence and transmission. For instance, despite the Mpox virus endemicity, risk awareness remains low.¹¹ Local health workers in the mining town of Kamituga noted that many persons 'had Mpox symptoms but did not seek care'.⁸ Although a higher incidence has been reported among women who engaged in commercial sex, who may be prone to stigmatisation, it is unclear how accessible health facilities are to these already vulnerable, and potentially stigmatised, at-risk groups

Yet, individuals who are infected may require hospitalisation or social isolation. Given, however, the rise in the number of cases, public health measures are only as effective as the proportion of the population that adheres to them. The gap in knowledge of the virus and care-seeking behaviours, coupled with potential stigma or fear of discrimination at health facilities, not only hinder early case detection but could also underestimate the true burden of disease.

Moreover, we also need to be aware that about 74.6% of Congolese live on less than \$2.15 per day.¹² Among persons who seek care, one expert recounts that 'some patients have left isolation to buy food or continue their professional activity'.¹³ We cannot ascertain if they were disadvantaged socio-economically. But, for those who rely on daily income for sustenance and survival, the choice

between protecting their health and livelihood could prove to be a false one.

The outbreak may be even more worrisome in and around overcrowded camps in Goma in the eastern fringes of the DRC, where many people are caught in an aggravated cycle of violence and displacement due to decades of fighting between the Congolese armed forces (FARDC) and the M23 rebel group in the country's troubled North Kivu province.¹⁴ In many ad hoc settlements, poor socio-economic conditions expose a significant number of women to sexual violence as they search for daily subsistence, and in instances where they sought protection, armed gangs have exploited their vulnerability.¹⁵ These vulnerabilities could further exacerbate the spread of infectious diseases, of which the Mpox virus is only one of many health threats in the DRC. Although the government plans to boost economic growth and address the prolonged security crisis following the re-election of the governing party in 2023,¹⁶ public distrust persists due to alleged widespread misappropriation of funding meant for the Ebola virus outbreak response in 2018.¹⁷

The challenges posed by the Mpox virus are complex and require a comprehensive and collaborative approach. To get individuals and communities to adhere to planned behavioural interventions, they must be effectively engaged at the community level. Urgent measures call for innovative and adaptable global health strategies such as the deployment of mobile, well-equipped and adequately compensated frontline health workers to enhance early case detection, contact tracing and community mobilisation. In the past, community health workers have shown to be effective in building trust and bridging the gap between service providers and their immediate communities by creating links within existing local social networks and the health system.¹⁸ This cadre of health workers may be far less likely to receive resistance from communities and could help dispel widespread misinformation, especially in the age of devices, easy internet access and social media.

In addition to deploying a robust frontline health workforce, it is also crucial to ensure systems for socio-economic support for worse affected groups, such as economic palliatives for infected persons and their close contacts who may require prolonged hospitalisation or social isolation. In doing so, it is not only imperative that the remote disbursement of such funds be marked with equity, transparency and accountability but that the people also perceive it to be so. A public health response grounded in these intersecting trajectories would go a long way to help rebuild the trust needed to curb the outbreak.¹⁹

Overall, however, a more equitable system is one that prevents the conditions that give rise to epidemics. Long term strategies call for a paradigm shifts in resource allocations toward efficient and resilient primary healthcare structures as well as national public health institutions that engages with upstream political, social, economic,

and environmental forces to promote health, equity, and social justices.

Caught between inequities in access to vaccines and research funding—the urgent need for regional and global cooperation

Undoubtedly, the outbreak poses a significant public health threat that requires urgent and coordinated action. Given the high mortality rates, especially among children, vaccination remains the most effective strategy. In April 2024, the Africa CDC held a high-level meeting in the DRC to discuss urgent measures, including the emergency approval of two vaccines, LC16m8 and MVA-BN.²⁰ The WHO Strategic Advisory Group of Experts on Immunization also recommended the use of the attenuated version of these vaccines, especially for at-risk and vulnerable groups.²¹

Despite pledges from high-income countries with stockpiles, public health experts in the DRC lamented that the ‘response remained somewhat limited, and efforts’ were minimal compared with what was needed to effectively stop the spread of disease earlier. As of August 2024, there were ‘no vaccines available in the DRC, and no approved medicine for Mpox available for the population’, despite promises.²² Elsewhere on the continent, the situation was not so different.²³ Given a higher risk of Mpox infection amongst persons living with HIV, South Africa hurriedly approved the emergency utilisation of the antiviral, tecovirimat, as cases soared.²⁴ Although, it has been shown to be ineffective against circulating Clade I that is dominant in East Africa—a region which also carries a substantial burden of HIV/AIDS.

Mpox-affected countries should be supported with existing tools, including diagnostics, therapeutics and vaccines, to forestall the collapse of already stretched healthcare systems and further global transmission. Yet, the global neglect to ensure timely and equitable access to Mpox vaccines and therapeutics further undermines trust in the international health system for managing health emergencies. It underscores the urgent need to regionalise research and development to contribute toward greater regional self-sufficiency and resilience and to stop epidemics when and wherever they occur.²⁵

Although vaccine donations have begun,²⁶ and UNICEF has also issued emergency tenders²⁷ to help secure more doses alongside mobilisation from Gavi²⁸ following WHO’s prequalification,²⁹ these processes were long overdue,³⁰ a limitation that further underlines the urgent need for the African Medicines Agency.³¹ Once again, a dose of charity diverts our attention from the profound moral, political and economic questioning on how we finance, govern, and ensure the development and use of medical countermeasures for health emergencies.³² Nevertheless, turning donated vaccines into doses in arms will benefit from adequate planning and coordination at the regional and national level, including speedy regulatory approval, health system optimisation

and community sensitisation to facilitate delivery and uptake.

Additionally, there is also a need for analytical studies to better understand the evolving epidemiology, risk factors and transmission dynamics, as well as implementation research to characterise the distribution, safety and effectiveness of non-pharmacologic interventions such as vaccines, particularly in children, pregnant and lactating women. Yet, researchers on the continent have continued to voice their struggle to secure funding despite repeated warnings of the perils of neglect.¹⁰ Similarly, the WHO Health Emergencies programme had decried the lack of funding, with ‘not one dollar’ donated to support its response efforts.³³

As opposed to ‘so-called parachute research directed by foreign scientist’,³⁴ experts are advocating for ‘the establishment of an African-led, multidisciplinary, multi-country Mpox Research Consortium (MpoxReC) in Africa with an overarching goal of establishing a research network to advance the elimination of Mpox as a public health problem’.¹⁰ We applaud the multi-disciplinary approach and the ‘call for action’ endorsed by the Africa CDC²⁰ to coordinate research activities at a regional level, thereby ensuring that all countries can contribute to and benefit from a unified approach to knowledge production. “The world can only ever be as equal as the knowledge it is built upon”.³⁵

Undeniably, the damage inflicted by Mpox underlines the perils of neglect. The ongoing outbreak has proven to be a social, economic and political problem as much as an epidemiological one. The danger posed by these complexities alongside the vulnerabilities of the global system³⁶ reifies the need for a shared regional epidemic preparedness and response framework that is fit for purpose, granted the amended statute of the Africa CDC as an autonomous entity of the African Union (AU).³⁷

Thus, the historical declaration of Mpox as a Public Health Emergency of Continental Security (PHECS) by the Africa CDC signifies a step in the right direction.³⁸ The need for regional ownership³⁹ in outbreak response has never been greater than in the wake of COVID-19. Yet, - the outbreak is far from being controlled-⁴⁰ more must be done to unlock access to emergency resources to act on the PHECS, including funding, personnel and technical support.⁴¹ Failure to adequately respond as Okereke argues,³⁶ not only risks undermining the credibility of the Africa CDC as a leading public health institution in the continent, but also a global calamity. Thus, while the AU and Africa CDC’s decisive leadership is noteworthy,⁴² there is a need for a dedicated funding stream to support pandemic prevention, preparedness and response (PPPR) capabilities in tandem with the clarion for a New Public Health Order (NPHO) for Africa. In this regard, the AU proposed financing mechanism for PPPR, the Africa Epidemic Fund, holds prospects and could serve as a means of building continental capacities. But progress towards its operationalisation has remained

slow.⁴³ AU leaders must strive toward the NPHO through sustained and demonstrable action.

Ultimately, however, outbreaks are not limited by borders, and an effective response should not be restricted by regional expenditure or epidemic framework. While the Africa CDC declaration represents the latest symbolic gesture of the AU to strengthen health security, capacities to do so vary in the continent. Moreover, the persistent burden of debts amidst austerity measures propagated by international financial institutions has led to a cut in social sector spending including on health, in many countries.⁴⁴ These challenges severely impede the continent's ability to effectively develop PPPR capabilities.⁴⁴

Navigating these constraints would require fostering equitable participation in global health governance that is responsive to the needs and voices of affected communities in line with the Lusaka Agenda.⁴⁵ Particularly, a shift in the way we finance and govern health emergencies.^{32 46} In this regard, strengthening African leadership will be crucial to shaping a robust and effective Mpox response.⁴⁷ We therefore re-echo the African CDC's call for 'speed and agility'⁴⁸ for the second round of disbursement by the Pandemic Fund to support affected countries, regional bodies and continental organisations. Other global financing facilities, funders and philanthropies should seek to strengthen and support existing regional mechanisms, such as the Africa Epidemic Fund in their PPPR portfolios, and as the negotiations of the Pandemic Agreement unfolds.⁴⁹ The COVID-19 pandemic and the ongoing Mpox epidemic have shown the increasing role that regional institutions play in building capacity for global health security. In envisioning a resilient world, a strengthened and well-funded Africa CDC could better support countries to respond rapidly to outbreaks.⁵⁰

Finally, the sequential declaration of the Mpox virus as a PHEIC by the WHO further affirms the scale of the tragedy, and the urgency for a multi-stakeholder action highlights the need for coordination⁵¹ among the key organisations to enhance operational efficiencies. The unified Continental Mpox Preparedness and Response Plan between the Africa CDC, WHO and other regional and global partners echoes this sentiment.⁵² The ability to work together will be essential for the control and elimination of Mpox as a public health concern.

CONCLUSION

The recurrent outbreak of the Mpox virus in most parts of Africa serves as a daily reminder of the perils of neglecting the underlying drivers of emerging and re-emerging diseases. Understanding the interplay of factors that predispose individuals and communities, especially high-risk groups, is crucial to designing appropriate community-led, behavioural and pharmacological response efforts to control and eliminate Mpox as a public health concern.

Without caution, the growing burden of endemic African Mpox could indeed be a recipe for an impending global disaster. An uncontrolled outbreak of this magnitude exposes our mutual vulnerability underscoring that 'a problem for Africa, is a problem for the world'.³⁴ Together, the world must act while we still have time.

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