

Perspective

# Global Mpox transmission and stigma: addressing barriers in affected communities

Majani Edward<sup>1,2</sup> · Odongo shadrack<sup>3</sup> · Stephen Tetteh Engmann<sup>4,5</sup> · Alfred Jubilate<sup>6</sup>

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## Abstract

The ongoing mpox outbreak, characterized by the ongoing global circulation of clade II mpox since 2022, has disproportionately impacted marginalized communities and underscores the importance of addressing both the epidemiological aspects and the societal impact of the disease on affected communities. This article examines mpox transmission dynamics globally, with a focus on populations whose proactive health-seeking behaviors have enabled early identification of cases. Yet, these communities also face stigma rooted in homophobia, racism, and misinformation, which hampers healthcare access and fuels discrimination. This stigma results in delayed care-seeking and barriers to effective public health interventions. The article advocates for continuous monitoring, adaptive public health strategies, and anti-stigma efforts to ensure that affected populations receive the support they need. While mpox primarily spreads through close contact, including sexual contact, the article highlights regional differences in framing and addresses misconceptions.

## 1 Introduction

The resurgence of Mpox has brought into focus a complex intersection of health, social stigma, and inequities within marginalized populations including men who sex with men and sex workers [1]. Although initially confined to regions in Central and West Africa, the spread of mpox has rapidly expanded, affecting communities across the globe [2]. Since its re-emergence, the global health community has had to confront not only the biological and clinical aspects of the disease but also the social consequences that accompany it, particularly stigma and discrimination [3]. The current outbreak, characterized by the ongoing global circulation of clade II mpox since 2022, has disproportionately impacted marginalized communities, leading to increased surveillance and early detection. However, these advances have been overshadowed by the stigmatization of affected individuals, driven by harmful stereotypes that exacerbate existing social inequities [4]. This article examines the dynamics of Mpox transmission, global stigma, and their impact on marginalized populations, advocating for an inclusive public health strategy that tackles both the epidemiological and social dimensions of the Mpox crisis.

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✉ Majani Edward, majanimEdward@gmail.com | <sup>1</sup>Department of Public Health, St. Francis University College of Health and Allied Sciences, Ifakara, Tanzania. <sup>2</sup>Youth Health Action Network, Dar es Salaam, Tanzania. <sup>3</sup>Faculty of Medicine, Gulu University, Gulu, Uganda. <sup>4</sup>Family Medicine Unit, Manna Mission Hospital, Accra, Ghana. <sup>5</sup>Department of Dietetics, University of Ghana, Accra, Ghana. <sup>6</sup>Muhimbili University of Health and Allied Sciences (MUHAS), Dar es Salaam, Tanzania.



## 2 Epidemiological profile

Mpox was first identified in humans in 1970 in the Democratic Republic of the Congo (DRC). However, it wasn't until May 2022 that the virus gained global attention, leading the World Health Organization (WHO) to declare it a Public Health Emergency of International Concern on June 23, 2022. By October 28, 2022, 76,871 cases had been reported across 19 non-endemic countries [5]. The virus continued circulating globally, and by 2024, new outbreak emerged with serious dermatological, neurological, and respiratory manifestations, with distinct modes of spread linked to sexual behavior and immune status [2, 6]. Between January 1 and June 30, 2024, the WHO received reports of 99,176 cumulative cases from 116 countries. In June 2024 alone, 934 new cases were reported, with 61% originating in Africa, followed by 19% in the Americas and 11% in Europe [2]. The DRC remains the epicenter, contributing 96% of confirmed cases, with neighboring countries such as Rwanda, Uganda, Burundi, and Kenya reporting their first cases [6]. Of the 934 cases reported globally by June 2024, 567 were in Africa. Epidemic trends suggest low transmission levels in the Americas, Europe, Southeast Asia, and the Western Pacific, while cases continue to rise rapidly in Africa [7]. Notably, 96.4% of confirmed cases are males aged 29–41, with a small percentage affecting children under 18, predominantly in the Americas. The dominant transmission route remains sexual contact, accounting for 83.3% of new cases, although non-sexual person-to-person transmission also plays a role. Historical transmission was primarily linked to animal contact, but human-to-human spread has become more prominent in recent decades [2]. Among symptomatic cases, rash is the most common feature (88.5%), with genital and mucosal lesions observed primarily in cases linked to sexual transmission [6].

## 3 Stigma associated with Mpox and its consequences

The Mpox outbreak has given rise to significant stigma that profoundly impacts the mental health, quality of life, and healthcare access for affected individuals [8]. The fear of stigmatization often results in delayed disclosure of illness, disengagement from healthcare services, and heightened morbidity and mortality. This stigma is fueled by misinformation, conspiracy theories, and media portrayals framing mpox as a sexually transmitted infection. Although sexual transmission is predominant, the framing varies by region, and such portrayals may oversimplify the transmission dynamics. WHO and CDC guidance recognize the high levels of sexual transmission associated with mpox, particularly clade IIb, while cautioning against overgeneralization [9, 10]. As a result, individuals may hide their sexual behaviors or gender identities from healthcare providers due to fear of ostracism, further complicating care and prevention efforts [9]. The societal norms that perpetuate this stigma demand comprehensive and nuanced interventions. Discrimination based on race, sexual orientation, and other factors only exacerbates the challenges faced by these communities, drawing parallels with the historical stigmatization of HIV. Homophobic and racist stereotypes continue to amplify these barriers, making it crucial to address both the medical and social dimensions of the outbreak [10].

The intersection of Mpox transmission and stigma highlights the social determinants of health that compound the disease's impact. Marginalized populations including LGBTQ+ communities, racial minorities, and economically disadvantaged individuals, face specific challenges, including discrimination in healthcare settings and societal ostracization, which further delay treatment and worsen health outcomes. Addressing these social determinants requires a framework that considers the individual, community, organizational, and policy levels, where stigma operates and reinforces existing inequities.

## 4 A socio-ecological model for anti-stigma interventions

Addressing the stigma surrounding monkeypox requires a multi-pronged strategy that integrates education, community engagement, and policy reforms [11]. A socio-ecological model provides a valuable framework for developing anti-stigma interventions at multiple levels—individual, organizational, community, policy, and research [12]. At the individual level, public health campaigns need to focus on accurate information dissemination and reducing

fear through culturally sensitive approaches. Healthcare providers, especially those at the community level, should receive training on delivering non-judgmental care and fostering trust with marginalized groups. Organizationally, institutions should establish guidelines that actively combat discrimination and promote inclusivity. Public policies must be designed to ensure equitable access to healthcare, with special attention to vulnerable populations. Finally, research should continue to inform evidence-based strategies, particularly regarding the dynamics of stigma and its impact on healthcare access.

## 5 Conclusion and prospects

Addressing Mpox-related stigma requires a comprehensive strategy that goes beyond clinical interventions to address the social challenges that exacerbate the epidemic. The global nature of Mpox's spread demands vigilant monitoring and adaptable public health responses that incorporate both the medical and social dimensions of the disease. Public health initiatives should prioritize equity, inclusivity, and community-centered approaches to mitigate Mpox transmission and reduce stigma. The intersectional approach outlined here, using a socio-ecological framework, provides a blueprint for tackling both the disease and its societal impact, ensuring that future responses are more inclusive and effective.

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## Declarations

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