

BRIEF COMMUNICATION

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Public health response to Mpox: Safeguarding vulnerable Key Populations and People Living with HIV in Zanzibar

Mansour Maulid Mshenga^{1*}, Issa Abeid Mussa² and Shaaban Hassan Haji³

Abstract

Mpox, caused by the Monkeypox virus (MPXV), has emerged as a significant global public health concern, particularly affecting vulnerable populations. The recent outbreak in the Democratic Republic of the Congo (DRC) is the largest recorded, driven by the highly virulent clade 1 strain. Transmission has shifted from animal contact to primarily sexual contact among Key Populations (KPs) such as Sex Workers (SW) and Men who have Sex with Men (MSM). In Zanzibar, where HIV prevalence is significantly higher among Key Populations, People Living with Human Immunodeficiency Virus (PLHIV) are at increased risk of Mpox infection due to socioeconomic challenges and immunosuppression. Despite no reported cases in Zanzibar, the spread of Mpox in non-endemic areas highlights the need for proactive measures. Leveraging Zanzibar's strengthened public health infrastructure, key strategies include tailored awareness campaigns, improved vaccine access through existing COVID-19 vaccination models, healthcare infrastructure enhancement, and mental health support. These targeted actions aim to protect Zanzibar's most vulnerable populations and bolster preparedness against Mpox, emphasizing the importance of resource-appropriate interventions to mitigate potential outbreaks.

Keywords Mpox, Key populations, HIV, Transmission

Background

Mpox, formerly known as Monkeypox, is a zoonotic disease caused by the Monkeypox virus (MPXV), part of the genus Orthopoxvirus [1]. The recent outbreak began in Kwango province, in the Democratic Republic of the Congo (DRC) in May 2022, leading to 7851 cases and 384 deaths by May 2024, marking it the largest Mpox outbreak recorded in the country [2]. Mpox is related to smallpox and is endemic in Central and West Africa, with

two clades: clade 1, the more virulent strain driving the current outbreak, and clade 2, associated with the 2022 outbreak in London [3, 4].

The World Health Organization (WHO) has recognized Mpox as a global public health concern, urging effective response strategies as cases have spread to other regions of Africa, Europe, and Asia [5]. While traditionally transmitted through animal contact, recent data indicate that novel clade 1 is primarily spreading through sexual contact, especially among Key Populations (KPs) of Sex Workers (SW) and Men who have Sex with Men (MSM) in hotspot areas of the DRC [6, 7].

In light of the recent observations of sexual transmission of Mpox disease among Key Populations in the DRC, Key Populations in Zanzibar are also at higher risk of contracting Mpox due to socioeconomic

*Correspondence:

Mansour Maulid Mshenga
hajjmandoctor@gmail.com

¹ Zanzibar Integrated HIV, Hepatitis, TB and Leprosy Programme, Zanzibar, Tanzania

² D-Tree International, Zanzibar, Tanzania

³ School of Health and Medical Sciences, State University of Zanzibar, Zanzibar, Tanzania



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conditions, in addition to People Living with HIV (PLHIV) who have impaired immune systems [8].

The semi-autonomous islands of Zanzibar, located in East Africa, have a concentrated HIV epidemic; its HIV prevalence is higher among her key Populations, 21.1% among Female Sex Workers (FSWs) and 11.4% among MSM compared to the general population (0.4%) [9]. Although no Mpox cases have been reported in Zanzibar, the spread of Mpox in non-endemic areas calls for heightened vigilance to protect these vulnerable groups.

Zanzibar's public health infrastructure, strengthened through managing past outbreaks such as cholera and COVID-19, includes surveillance systems, rapid response teams, and community health initiatives that can be mobilized to prevent an Mpox outbreak. These resources, along with targeted preventive measures, can play a crucial role in safeguarding PLHIV and Key Populations from potential Mpox infection [10].

This brief communication highlights the need for proactive measures to enhance Zanzibar's preparedness against Mpox and protect its most at-risk Key Populations and immunocompromised PLHIV.

Main text

As Mpox raises global concerns, particularly among vulnerable Key Populations and PLHIV, targeted initiatives are crucial in Zanzibar, where limited resources can heighten the impact of infectious diseases. Below are key strategies to protect Key Populations and PLHIV from Mpox infection.

Awareness and education campaigns

Educating Key Populations and PLHIV about Mpox symptoms, transmission, and prevention is critical. Zanzibar can leverage organizations like the Zanzibar Association of People Living with HIV (ZAPHA+), Key Populations-led organizations including The Zanzibar Youth Education Empowerment Development Support Association (ZAYEDES), Zanzibar Youth Forum (ZYF), Association of Young People Against HIV/AIDS in Zanzibar (AYAHIZA), Zanzibar Youth Empowerment Association (ZAEYA), and Bridge Initiative Organization (BIO) to disseminate information through workshops, pamphlets, and community outreach programs. Specific messaging should be tailored to address the unique fears and misconceptions within these groups. Using existing networks of Community Health Workers (CHWs) who regularly engage with these populations will be crucial in ensuring the information reaches the intended audience effectively.

Access to vaccination

Prioritizing vaccination for Key Populations and PLHIV is vital for enhancing their immunity against Mpox. Zanzibar's existing infrastructure for vaccination, established during the COVID-19 pandemic, provides a valuable model. The COVID-19 vaccination campaign in Zanzibar relied on a mix of fixed clinics, mobile health units, and community-based distribution points, which successfully reached various populations, including rural and remote areas. Similarly, leveraging outreach mobile clinics to hotspot areas for Key Populations and community health initiatives currently used to deliver ART services, such as the ZAPHA+ community refill centre at Welezo, can be adapted to improve vaccine access for Mpox, especially in the underserved and hard-to-reach communities.

Strengthening healthcare infrastructure

Improving healthcare facilities to manage Mpox cases effectively involves several specific steps. Training healthcare workers, including nurses, clinical officers, and community health workers, is critical. These trainings can be coordinated through partnerships with institutions such as the Ministry of Health Zanzibar and international health organizations, utilizing funding from global health bodies like the WHO or President's Emergency Plan for AIDS Relief (PEPFAR) and the Global Fund (GF), among other. The training should cover Mpox case management, infection prevention, and control practices tailored to the needs of Key Populations and PLHIV.

Establishing referral systems refers to creating clear protocols for transferring Mpox cases from primary health centers to more equipped facilities when advanced care is needed. This can include setting up communication lines between CHWs and hospitals, ensuring transport availability, and defining the roles and responsibilities of healthcare providers at each level of care.

Mental health support

The fear and stigma associated with Mpox can significantly impact the mental well-being of Key Populations and PLHIV. Expanding mental health support through existing community structures, such as ZAPHA+, all KPs-led organizations and other local support groups in Zanzibar, will provide an accessible platform for counselling and psychological support. These groups can offer both individual and group counselling sessions, helping mitigate anxiety and stress. Partnerships with mental health professionals and local Non-Government Organizations (NGOs) specializing in psychological care can further enhance the support available to these vulnerable populations.

These targeted actions, grounded in the current capabilities and needs of Zanzibar, aim to bolster the region's preparedness against Mpox and protect its most at-risk communities.

Conclusion

Mpox, a serious public health threat, poses significant risks to vulnerable Key Populations and PLHIV in Zanzibar. Despite no reported cases, proactive measures, including targeted education, improved vaccine access, healthcare infrastructure strengthening, and mental health support, are crucial to enhance preparedness and protect at-risk groups in the Islands. By investing in research to better understand the intersection of novel clade 1 and sexual transmission of Mpox disease, Zanzibar, in collaboration with WHO, can inform public health strategies against Mpox not only in the islands but also across the globe.

Abbreviations

MPXV	Monkeypox virus
HIV	Human Immunodeficiency Virus
DRC	Democratic Republic of the Congo
WHO	World Health Organization
KPs	Key Populations
SW	Sex Workers
MSM	Men who have Sex with Men
PLHIV	People Living with HIV
ART	Anti-Retroviral Therapy
ZAPHA+	Zanzibar Associations of People Living with HIV
ZAYEDESA	Zanzibar Youth Education, Empowerment Development Support Association
ZYF	Zanzibar Youth Forum
AYAHIZA	Association of Young People Against HIV/AIDS in Zanzibar
ZAYEA	Zanzibar Youth Empowerment Association
BIO	Bridge Initiative Organization
CHWs	Community Health Workers
NGOs	Non-Government Organizations

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Competing interests

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