



Mpox: a public health emergency demands, urgent action

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In recent years, global health has become more and more defined by the rise and return of viral diseases that test our preparation and resilience. One such disease was once known as monkeypox, or mpox. Since the beginning of mpox monitoring in 2022 and until 31 July 2024, 102 977 confirmed cases of mpox due to MPXV clade I and clade II, including 219 deaths, have been reported by 121 countries globally, according to WHO^[1]. In 2024, over 20 000 mpox cases due to MPXV clade I and clade II have been reported from 13 African Union Member States, including over 3000 confirmed cases and over 500 deaths (CFR 2.9%) according to the Africa CDC Epidemic Intelligence Report issued on 25 August 2024^[2]. In 2022, a comparatively milder strain of the virus spread to more than 100 countries, mainly through sexual contact. As a result, the World Health Organization (WHO) raised the alert level to public health emergencies of international concern. Ten months later, the WHO declared the health crisis under control and lifted the emergency^[3].

The Africa Centers for Disease Control (Africa CDC) has again warned that the virus is spreading alarmingly and the illness has spread. In the current year, 461 documented deaths and almost 15 000 cases of Mpox were reported across the continent. This is almost a 160% increase from last year. To handle the expanding Mpox outbreak, the Africa Centers for Disease Control and Prevention (Africa CDC) director declared a public health emergency and called for immediate and coordinated action. This situation highlights global health security's unpredictability and the need to create comprehensive strategies to halt the spread of viral infections.

The World Health Organization (WHO) has declared Mpox a global infectious disease of concern for the world community. To counter Mpox, the world needs an immediate and collective response. The widespread virus in landscapes of the world increases the challenge of a new pandemic, specifically in terms of alertness and resilience^[4].

Monkeypox virus, which causes Mpox, is part of the genus Orthopoxvirus, which contains variola, the leading cause of smallpox^[5]. Mpox was previously only found in Central and West Africa, where people transmitted disease to animals. However, the latest Mpox outbreak in non-endemic areas highlights the potential of the virus to be much more widespread, especially in a globalized world where infectious diseases may spread quickly across borders^[6,7]. The World Health Organization's declaration of a public health emergency highlights the significance of the outbreak and the necessity for global vigilance. Rapid response systems and monitoring are crucial for tracking and mitigating the spread. Early outbreak control prevents escalation, necessitating effective healthcare systems and rigorous laboratory testing. Countries must improve their healthcare systems and take adequate measures to react quickly to emerging risks such as the Mpox virus^[8].

To control the Mpox outbreak, public health communication must be done adequately. Healthcare officials must deliver timely and transparent data since misinformation and the virus's stigma may hinder public health measures. Reducing anxiety and fostering compliance with public health recommendations can be achieved by implementing efficient communication strategies that inform the public about the dangers, symptoms, and steps to avoid^[9]. Establishing public trust is also essential to ensuring individuals participate in vaccination campaigns and obey medical guidance.

The vaccination process continues to be a key component in efforts to fight against Mpox. It can be prevented with the smallpox vaccination, but getting vaccinations for all people is somewhat challenging, especially in developing and lower-economy countries. The international community must not reproduce the unfair systems resulting from the COVID-19 pandemic, in which wealthy countries controlled the majority of the vaccine supply and thereby exposed vulnerable populations in less developed countries^[10]. A more significant challenge or concern is ensuring that vaccines are given fairly and that every nation has the resources to protect its populations.

It is equally crucial to address the underlying reasons for the introduction of zoonotic diseases such as Mpox. Deforestation, wildlife business, and changing environmental conditions have all contributed to increased human and wildlife encounters, which has increased the risk of zoonotic disease outbreaks in human populations. Rigid rules and regulations are significant for regulating the trade in animals; conservation efforts and

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sustainable development are necessary to reduce the probability of future disease outbreaks^[11].

The Mpox outbreak highlights the need for financing for global health security. The COVID-19 pandemic revealed substantial weaknesses in global preparation, and the ongoing Mpox epidemic highlights the urgent need for enhanced health systems, robust monitoring frameworks, and continuous research and development in vaccinations, treatments, and diagnostics^[12]. Global health collaborations and investing procedures are crucial to help ensure a collective response to health-care emergencies.

Finally, the Mpox outbreak represents a remarkable public health emergency demanding a quick and collective worldwide response. Governments, international organizations, and the global health community must emphasize monitoring, vaccinations, communication, and addressing environmental variables to prevent the spread of zoonotic diseases. Prompt and collaborative action could prevent Mpox from becoming a significant global health crisis. Immediate action is necessary to establish a more efficient and transparent global health system. Research gained from prior pandemics should inform our responses accordingly^[13].

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