



## Letter to the Editor

# From shadows to spotlight: Unearthing Pakistan's first monkeypox case and navigating the way forward

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### To the Editor

Each passing decade is bringing fresh viral infections that captures public attention and poses a global threat to healthcare systems. The growing impact of globalization and human encroachment on natural habitats results in an increased occurrence of new diseases transmitted from animals to humans. The close proximity between humans and infectious agents through different animal species is responsible for this occurrence [1, 2]. Some of the main zoonotic infections include cowpox, smallpox, coronavirus disease (Covid-19), and the recent addition of monkeypox [3].

The emergence of monkeypox as a novel threat to the human race occurred during the peak of the Covid-19 pandemic. Monkeypox disease is a neglected viral zoonotic disease caused by the monkeypox virus (MPV), which belongs to the

Orthopoxvirus genus in the Poxviridae family [4]. The disease can be transferred from the infected animals to humans or from infected people to healthy people through close contact or droplets [5]. MPV was initially identified in research monkeys in a Danish laboratory in 1958, and the first human case of monkeypox infection was reported in the Democratic Republic of Congo (DRC) in 1970 [6]. Since then, monkeypox infections have been reported in several countries in West and Central Africa, including Cameroon, Central African Republic, Cote d'Ivoire, Gabon, Liberia, Nigeria, Republic of the Congo, and Sierra Leone. The majority of these infections occur in the DRC [7]. On July 23, 2022, the World Health Organization (WHO) declared the spread of monkeypox infection to be "a public health emergency of international concern" [8]. Brazil, the United States, France, Spain, and Colombia are among the non-endemic nations with the highest monkeypox virus prevalence [9]. According to WHO, since the onset of last year, over 87,301 laboratory confirmed cases of monkeypox have been reported from 111 countries, with a death toll exceeding 130 individuals [10].

The recent surge of the monkeypox virus in the non-endemic countries especially in developing countries including Pakistan is alarming as the burden of the Covid-19 has already weekend healthcare system. The National Institute of Health (NIH) confirmed the first incidence of monkeypox in Pakistan on April 26, 2023, in a 25-year-old male who had just returned from Saudi Arabia. While the risk of widespread transmission is currently

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considered low, it is essential to understand the potential impact on the healthcare system in Pakistan. Pakistan's healthcare system is already under strain due to various factors, including the ongoing burden of the Covid-19 pandemic. The healthcare infrastructure may face challenges in effectively detecting, diagnosing, and managing monkeypox cases, especially if the number of cases increases. This could lead to additional pressure on healthcare facilities, healthcare workers, and resources. Furthermore, the public health response and containment efforts require coordination among multiple stakeholders, including healthcare authorities, public health agencies, and local communities. Pakistan's healthcare system may need to enhance surveillance capabilities, strengthen laboratory testing capacities, and establish efficient contact tracing mechanisms to control the spread of the virus effectively. In addition to the immediate healthcare challenges, there are potential long-term consequences for the healthcare system in Pakistan. The introduction of a new infectious disease like monkeypox may necessitate the development of specific protocols, guidelines, and training programs for healthcare professionals to effectively manage cases, prevent transmission, and provide adequate care.

Resource allocation is another critical aspect to consider. The healthcare system will need to ensure the availability of necessary medical supplies, including personal protective equipment (PPE), antiviral medications, and vaccines if they become available. Adequate funding and resource allocation will be crucial to support the response efforts and ensure the healthcare system's resilience.

To address these challenges, it is imperative for the Pakistani government and health authorities to prioritize the monkeypox situation. This includes investing in healthcare infrastructure, enhancing surveillance and laboratory capacities, providing appropriate training to healthcare workers, and raising public awareness about preventive measures. By proactively addressing the potential challenges and strengthening the healthcare system's preparedness, Pakistan can effectively respond to the arrival of Monkeypox and minimize its impact on public health.

Pakistan should enforce mandatory virus screening at airports for passengers arriving from regions experiencing a surge in monkeypox cases. Individuals suspected or confirmed to have the virus should be placed in quarantine during the early

symptomatic phase. It is recommended that healthcare planning committees take the lead in developing strategies to address the initial stage of the outbreak, including implementing measures for controlling the spread of the disease within close-knit communities, schools, and daycare centers which may serve as primary transmission hubs. Additionally, the government should establish a comprehensive program aimed at preventing potential economic, business, and commercial losses in the event of similar unfortunate circumstances in the future.

In conclusion, even though public-health experts have classified monkeypox as a "containable disease" in contrast to Covid-19, it is crucial for the Pakistani government and health ministries to prioritize this matter and make diligent preparations for a potential outbreak.

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