SPECIAL COMMUNICATION

MPOX IN PAKISTAN: A CALL FOR VIGILANCE AND GLOBAL HEALTH SOLIDARITY

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With 11 cases and one death in 2024, the Mpox virus was by and large under control in Pakistan as the country followed the screening and surveillance guidelines when Mpox was declared a global emergency. The screening of suspected patients is being done across the country, and those showing symptoms are being sent to isolation wards in hospitals to avoid local transmission of the virus. A recent report published on community-based Mpox and sexually transmitted disease surveillance using discarded condoms in the global south presents an innovative approach to disease monitoring that has significant implications for global health security. This new discovery presents another urgency for Pakistan to deal with in a population which has several high-risk groups involved in unsafe sexual practices. The urgency to integrate such surveillance methods into our health system becomes increasingly evident. This brief narrative explains how Pakistan's response to Mpox can align with global health security frameworks emphasizing surveillance, capacity building, stigma reduction, and enhanced border vigilance.

Keywords: Mpox; Global emergency; Monkeypox virus; Pakistan

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Mpox, formerly known as monkeypox, is a viral illness caused by the monkeypox virus, a member of the Orthopoxvirus genus. The virus comprises two main clades: clade I (with subclades Ia and Ib) and clade II (with subclades IIa and IIb), with the 2022–2023 global outbreak primarily caused by the clade IIb strain. Recent cases, especially from clades Ia and Ib, continue to pose a threat, notably in the Democratic Republic of the Congo and other countries.[1]

In 2024, Pakistan reported 11 cases of Mpox and one death. The country has largely contained the virus by adhering to screening and surveillance guidelines implemented when Mpox was declared a global public health emergency. Nationwide screening of suspected patients is ongoing, with symptomatic individuals being isolated in hospitals to prevent local transmission.[2] A recent community-based surveillance report on Mpox and sexually transmitted diseases, which utilized discarded condoms in the Global South, introduces an innovative approach with important implications for global health security.[3] This discovery underscores the need for Pakistan to implement such surveillance methods, especially given its high-risk groups engaged in unsafe sexual practices. Nevertheless, the virus can also spread through non-sexual routes such as direct contact with infected lesions, contaminated materials (like bedding or towels), and respiratory droplets during prolonged face-to-face contact. Integrating these surveillance strategies into the health system is increasingly vital. This perspective outlines how Pakistan's response to Mpox can align with global health security frameworks through enhanced surveillance, capacity building, stigma reduction, and fortified border controls.[4]

Once a rare zoonotic disease, Mpox has emerged as a global public health concern, with outbreaks now reported in diverse regions, including Pakistan.[5] The spread of Mpox from its usual areas in Central and West Africa to other parts of the world underscores the global interconnectedness and permeability of our borders.[6] This situation highlights the importance of global efforts to monitor and respond to the disease. Effective control requires not only robust domestic surveillance but also transparent information sharing and cross-border collaboration to avert large-scale epidemics.[7] Rapid detection and response to new infectious threats are fundamental pillars of protecting global health security.[8] The aim of this paper is advocate for enhanced Mpox surveillance and response in Pakistan through innovative strategies, stigma reduction, and strengthened global health collaboration. The community-based surveillance approach discussed in the article emphasizes how innovative strategies can enhance disease detection, especially in places with limited resources.

Furthermore, embracing an integrated 'One-Health' approach that encompasses human, environmental, and animal health, is critical for mitigating outbreak risks, and warrants urgent commitment from political leaders and donors.[9]

Pakistan's health system response

Adopting similar strategies could help Pakistan enhance its surveillance system, enabling faster and more accurate identification of Mpox cases.[2] Historically, the country's health system has faced challenges related to underreporting and delayed detection of infectious diseases, which pose significant risks to both national and global health security.[10] It is also challenging to generate early warning alerts for potential zoonotic outbreaks and coordinate preventive measures, exposing gaps in public health efforts.[11] Incorporating community-based surveillance methods such as using discarded condoms to detect Mpox may offer a cost-effective and culturally sensitive approach. Such measures would complement global efforts to monitor and control Mpox, aligning with the International Health Regulations (IHR), which emphasize timely and transparent disease reporting. Beyond surveillance, building the capacity of healthcare workers is essential for safeguarding global health.[12] Proper training for healthcare providers, equipping laboratory personnel with diagnostic skills, and having rapid response teams ready to deploy during outbreaks are critical steps. Achieving this requires strong support from development partners, particularly the WHO, which can provide guidance on protocols and best practices.[13]

Stigma surrounding Mpox and other sexually transmitted infections (STIs) remains a major obstacle to controlling these diseases worldwide. Such stigmatization often causes people to avoid reporting symptoms, delay seeking treatment, and inadvertently contribute to the spread of the illness, thereby hindering global health efforts.[14] The community-based surveillance approach discussed in the article offers a promising way to address this issue by allowing for anonymous and unobtrusive monitoring of Mpox and STIs.[15] In Pakistan, addressing stigma requires a multi-layered approach. Public health initiatives should focus on educating the public about Mpox, clarifying that it is a viral infection that can affect anyone, regardless of their lifestyle or social background. These campaigns should also emphasise the importance of early detection and medical treatment, reassuring individuals that seeking help won't lead to social rejection. Healthcare professionals need training to manage Mpox cases with empathy and sensitivity, ensuring patients feel valued and supported. By reducing stigma, Pakistan can enhance reporting accuracy and disease control efforts.[16]

Lastly, Pakistan's borders serve as a key entry point for travellers from around the world, making them an important area for preventing the spread of Mpox across borders. To do this effectively, increased vigilance is necessary at airports, seaports, and land crossings to identify and isolate cases before they can enter or spread within the country. This involves implementing screening procedures, training border officials to recognize symptoms, and establishing quarantine protocols for suspected cases. Strengthening border security not only protects Pakistan's population but also supports global efforts to contain Mpox, especially as the virus continues to spread through regions with heavy international travel.[17] It is also imperative to improve surveillance, enhance diagnostic capabilities, and implement targeted public health measures to prevent outbreaks and minimize the disease's impact.[18]

Public health implications

Though the immediate risk of contracting Mpox is currently low, the virus continues to pose a significant challenge to public health due to its emerging nature. It has the potential to affect anyone, regardless of sex, race, gender, or location, and can spread easily if not addressed swiftly. Without prompt measures such as testing, treatment, and vaccination, the general population may become increasingly vulnerable to Mpox. As the threat persists on a global scale, Pakistan has a vital chance to enhance its role in international health security. By bolstering its healthcare infrastructure, improving preparedness, and expanding its capacity to respond effectively to such health emergencies, the country can play a crucial part in controlling the spread and impact of this emerging infectious disease.

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