

Viewpoint

Tackling Mpox Situation in India – A Need for Global Surveillance

Running Title: Tackling Mpox Situation in India

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Abstract: The recent rise of cases of Mpox (monkeypox) is a reason for great adversity and a challenging situation for public health globally. Mpox has been spreading in African countries since 2022. Earlier in the year 2022, the WHO had declared a Public Health Emergency of International Concern (PHEIC) for the outbreak of Mpox. According to WHO, since 2022, there have been 99,176 Mpox cases and 208 deaths reported globally from 116 countries, and the number of cases and deaths has increased significantly in 2024 so far, with over 15,600 cases and 537 deaths reported. In India, to date, a total of 32 cases of Mpox have been detected, with a death occurring in Kerala in March 2024. The Indian government is very vigilant and taking necessary measures. However, the viewpoint argues that the fight against Mpox cannot be confined to national borders. The nature of infectious disease threats necessitates international collaboration to strengthen disease surveillance, share data, and develop new vaccines and treatments. Strengthening the infrastructure by investing in the healthcare systems for quick response to outbreaks and disease control, increasing the healthcare workforce, and enhancing the logistics and supply chain in developing the emergency response. Preventive measures, including vaccination and international collaborations, should be prioritized globally.

Keywords: Global surveillance, Monkeypox (Mpox), Mpox outbreak preparedness, Public Health Emergency of International Concern (PHEIC), Public Health response.

Introduction

The rising cases of Mpox (Monkeypox) are a reason for great adversity and a challenging situation for public health

globally, it has necessitated several countries to raise their alert levels. 1958, was the first time when monkeypox was

discovered in the colonies of monkeys that are kept for research purposes, in 1970, the first human case of Mpox was originally traced to the Democratic Republic of the Congo (DRC) [1]. Mpox has been spreading in African countries since 2022 [2]. Earlier in the year 2022, WHO had declared a Public Health Emergency of International Concern (PHEIC) for the outbreak of Mpox [1]. In early May 2022, Mpox cases have been reported from countries where the disease is not endemic and continue to be reported in several endemic countries [3]. In 2023, a new strain known as the Clade 1b variant was discovered in the country which is of the Clade 1 variant; both Clade 1 and Clade 1b strains are reported in African countries [2].

However, the WHO has declared Mpox infection to be a PHEIC again on 14th August 2024. According to WHO, since 2022 there have been 99,176 Mpox cases and 208 deaths reported globally [3]. The number of cases by 2025 so far increased significantly, with over 100000 cases in 122 countries, according to CDC [4]. In India, a total of 30 cases of Mpox have been detected, with a death occurring in Kerala in March 2024 [5]. The neighbouring countries of India, like Pakistan, have few confirmed cases of Mpox. It is imperative to note that the virus may enter India via border roads, international airports and water routes. The risk of a significant Mpox within the country remains very low, reports Indian health authorities. The new strain has become a matter of concern because only this year. Additionally, it has also spread to several African countries where the disease was previously not reported. At present, there are vaccines of MVA-BN or

LC16 vaccines, or the ACAM2000 vaccine recommended by WHO for use against Mpox, but vaccination is considered only for people who are at risk. Mass vaccination is not currently recommended by WHO.

Thus, to keep in mind the spread of the disease, the Indian government is very vigilant and taking necessary measures by sensitizing health units, having separate isolation wards, testing labs set up at the national hospitals across the country, increasing surveillance and alerting border authorities at airports, seaports and other entry points, and raising public awareness in India. District health officials had advised the local health workers to keep a keen vigilance on patients showing wild symptoms of Mpox and having a positive travel history in the last 21 days to any affected countries. Mpox spreads to others through close physical contact, contact with objects and fabrics and by spreading clothing, bedding, and towels of the infected person. Surveillance of the disease is the need of the hour. Developing strategies for managing Mpox is necessary and could be done by strengthening the infrastructure by investing in the healthcare systems for quick response to outbreaks and disease control, increasing the healthcare workforce, and enhancing the logistics and supply chain in developing the emergency response. Improving disease surveillance and reporting is necessary by expanding the surveillance networks with robust global surveillance and international collaboration for timely management. WHO and CDC should play a major role by collecting and analysing real-time national data of Mpox cases and managing the outbreak efficiently at the global level

through global surveillance. Countries should also invest in scientific research with global collaborations. Enhancing vaccination programs is also important to roll out in the endemic regions. Government and NGOs should take the initiative in promoting health education and awareness. Also, address the high-risk populations like people who are living in overcrowded or poor sanitary conditions.

In conclusion, the Mpox outbreak is a public health emergency that needs to be taken into serious consideration globally, particularly in low-middle-income countries where healthcare systems are often under-resourced. Vigilant surveillance across countries and international borders is the salient pillar for the Mpox outbreak preparedness. It is imperative to address, screen and track patients who are infected with Mpox and screen those who are travelling (via road, air and water routes) from the affected countries. Thermal scanners, screening, quarantine rooms, and isolation wards should be set up at airports, seaports, and international borders. Since the disease can be spread through contact, the post-exposure population needs to be notified. Such an outbreak is a great burden on public health globally because this disease has the potential to surpass any international border, so setting up testing centres to develop containment strategies like contact tracing and isolation should be done. Preventive measures, including vaccination, and international collaborations, should also be prioritized globally.

Ethical Approvals

Not applicable.

Conflict of Interest

None

Acknowledgements

None

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