



## Monkey Pox: An Emerging Public Health Concern for Pakistan



Umair Maqbool<sup>1</sup>, Imtiaz Hussain<sup>1</sup>, Sajid Soofi<sup>1</sup>

The Monkeypox virus has become an emerging Public health predicament for Pakistan and around the globe. It is a zoonotic disease that transmits from animals to humans. The main symptoms which are recognized in affectee are body aches, headache, fatigue, low energy and swollen lymph nodes, and skin rashes. The rashes can critically affect the face, palms of hands, soles of feet, groin, and genital regions. Its first-ever case in history was discovered in monkeys in the year 1958 at a Danish laboratory. However, its first-ever human case was diagnosed in the Democratic Republic of Congo in a nine-month-old baby in the year 1970 (1). Further, owing to several and plethora of cases the virus was considered as a Public Health Emergency of International concern by World Health Organization WHO in July 2022 (2). In addition, with the sole aim of refraining the population stigmatizing and hurling racial comments at the people associated with the virus, the WHO changed the disease name to Mpox, on the numerous requests of Public health experts and researchers. Indeed, with time, the virus has gained clinical relevance as the subsequent lack of vaccination efforts have paved the way for it. To date, the virus is reported to have been identified in more than 100 countries, whereas exceeding numbers of 66,000 confirmed cases have been reported globally (3). Mainly, it has been recognized, that due to the abrupt rise in urbanization and environmental deterioration, uneven outbreaks have been witnessed in around 20 countries which include England, Spain, Portugal, Germany, Netherlands, Canada, Italy, Belgium, France, United States, and Australia.

Since the rising number of monkeypox virus cases is triggering an alarm in non-endemic countries and across Europe, Hence, Pakistan also appears to have been no exception in this regard to have faced its potential threat (4). Although the severity of this zoonotic disease is yet to be indicated in the country, undoubtedly it poses serious public health impediments. Considering, the jeopardy amid the Covid 19 crisis the country had gone through (5), therefore, up-ticking of this re-emerged virus can prove to be devastating for the already frail health system of the country. Despite the fact, that no up-surge of positive cases is recorded in the country, however, the daunting challenge of this virus still looms large and cannot be overlooked due to densely packed urban hoods and inadequate resources to

combat any immediate outbreak. Albeit, an alert from Pakistan National Institute of Health, has been issued, to increase the surveillance of the outbreak, but still considerable efforts would be required to mitigate this acute public health challenge to come. Further, it is relevant to postulate that we as a country are yet to fully eliminate the viruses like polio as pertinent concepts like contact tracing and partner notification are almost nonexistent. Moreover, we are a low-middle-income country, with inequitable distribution of scarce resources, which can intensify the problem to a great extent. It is also imperative to put forth that in the year 2021, the government spent 1.2 percent of the GDP on health, this amount is far less than the WHO recommendation of five percent (6). Further, the robustness of our health system is another crucial issue, which is relied on a reactive instead of a proactive approach, as the problems are usually identified when they have already been complicated. The same holds equal relevance when the country is faced with disasters of varying intensity and vigor. Apart from it, it is also a notable highlight, that our literacy rate is abysmally low, which is recorded as less than 40%. Hence, in this very context, a study also demonstrates the findings which depict the considerable knowledge gaps among university students about how they construe this zoonotic disease (6). Thus, due to a lack of knowledge and rampant illiteracy, it is also inevitable to raise mass campaigns, apprise the populous and prevail awareness about taking apt measures to prevent themselves from this ailment.

Indeed, the vigorous lesson that we have attained from Covid -19 pandemic is that health crises can have a crippling impact on the social and economic prospects of the country. Therefore, considering the probability of any potential outbreak, the provision of public health guidance must be made assured. Since, it is evident, that the Mpox virus does not spread rapidly, therefore prompt isolation and vaccination of close contacts should be prioritized among health-care professionals. Further, Pakistan has a massive number of flights coming from the regions where monkeypox cases are mounting (7), the immediate screening for the virus will be significantly helpful to overcome any untoward challenge of the disease. Conclusively, as Pakistan lacks the diagnostic facility for the virus (8), thus formulating prudent strategies for it, will be helpful to prevent the country's healthcare system from the verge of collapse.

<sup>1</sup> Centre of Excellence in Women and Child Health, Aga Khan University, Pakistan

Correspondence:  
Umair Maqbool  
umair.maqbool@aku.edu

## References

1. Kmiec D, Kirchhoff F. Monkeypox: a new threat? *International journal of molecular sciences*. 2022;23(14):7866.
2. Altindis M, Puca E, Shapo L. Diagnosis of monkeypox virus—An overview. *Travel medicine and infectious disease*. 2022:102459.
3. Li H, Zhang H, Ding K, Wang X-H, Sun G-Y, Liu Z-X, et al. The evolving epidemiology of monkeypox virus. *Cytokine & growth factor reviews*. 2022.
4. Malik S, Asghar M, Waheed Y. Mitigation Measures to Control the Expected Mpox Outbreak in a Developing Country—Pakistani Scenario. *Vaccines*. 2023;11(3):502.
5. Maqbool U, Tabassum F, Habib MA. Pakistan Preparedness and Response in Alleviating Covid Catastrophe. *Pakistan Journal of Public Health*. 2022;12(2):41-3.
6. Kumar N, Ahmed F, Raza MS, Rajpoot PL, Rehman W, Khatri SA, et al. Monkeypox cross-sectional survey of knowledge, attitudes, practices, and willingness to vaccinate among university students in Pakistan. *Vaccines*. 2022;11(1):97.
7. Mansoor H, Abbas S, Rehan ST, Hasan MM. Monkeypox virus: A future scourge to the Pakistani Healthcare system. *Annals of Medicine and Surgery*. 2022;79:103978.
8. Siddiqui JA, Aamar H, Rija A, Essar MY. Preparedness of Pakistan in view of monkeypox emergence: a call for action. *International Journal of Surgery*. 2023;109(1):34-5.