

## Monkeypox Disease Outbreak (2022): Correspondence

We would like to put forth our views on monkeypox disease, in the light of the recent article by Lahariya, et al. [1].

First, the precise nature of the issue is yet unclear. The illness was formerly exclusive to Africa. It is still unclear how the illness spreads to become a new emergent disease in Europe, America, and Asia. The propagation of zoonotic diseases is verified in Africa, but the new situation outside of Africa in 2022 may or may not be tied to animals [2]. The newly imported animal could provide a problem, but the precise epidemiological pattern in instances outside of Africa at the moment is unclear. Additionally, the condition may be diagnosed as an acute febrile illness with rash, albeit it may also present otherwise. Only atypical manifestations in some patients, like diarrhea and dysphagia, are possible [3,4]. As a result, the practitioner must be aware of the potential for atypical clinical characteristics in monkeypox.

The term 'prevention' is frequently invoked, but the question is "how to prevent?" It may be difficult to handle the issue because the specific pathophysiological process of transmission of the 2022 monkeypox is still unknown. It has to be seen whether there is a genetic variant problem that is causing the outbreak.

At the moment, prevention should be based on universal principles that include both human and animal contact as a single health concept [5]. The problem of recycling smallpox vaccine to prevent sickness has been thoroughly researched, and expert consensus is essential. Since sickness progresses, we should advance to prepare for any potential crises, just as we did for the coronavirus disease 2019 (COVID-19).

**RUJITTIKA MUNGMUNPUNTIPANTIP,<sup>1\*</sup> VIROJ WIWANITKIT<sup>2</sup>**

<sup>1</sup>Private Academic Consultant, Bangkok, Thailand;

<sup>2</sup>Dr DY Patil University, Pune, India.

\**rujittika@gmail.com*

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### AUTHORS' REPLY

We thank authors of this correspondence for their observations [1]; however, we do not agree with some of the observations.

Our paper; although, about monkeypox disease and outbreak [2], also raises broader issues on emerging and zoonotic diseases. We do not fully agree with the authors of the correspondence that "the precise nature of the issue is not clear [1]." Though there is need for better understanding; the monkeypox disease has been known for more than five decades and there is enough scientific understanding to act and take measures. It is just that the disease was never given due priority in global health, which reflects the challenge of global health inequities [3].

The authors of correspondence suggest that atypical presentation is a possibility and should be given importance. Though the idea of atypical presentation is worth exploring; in settings where there are only a few cases, it may put undue burden on the health system and may also result in unnecessary panic amongst citizens. Nonetheless, the medical and scientific community should epidemiologically analyze the emerging data and document the atypical presentations for informed decision making.

In case of emergence and re-emergence of diseases, prevention must be one of the key strategies along with preparedness and response, and stronger disease surveillance etc. The pathophysiology of monkeypox has been known for a long time and there is no evidence to assume that the 2022 outbreak situation is different in terms of pathophysiology. Understandably, there is need for continuous research and additional epidemiological analysis, supported by data collection, not only for monkeypox disease but for all emerging and re-emerging diseases; the neglected tropical diseases and many other infectious diseases which largely affect low- and middle-income countries.

Specifically, the zoonotic diseases are increasingly becoming a major public health problem and potential threats. In the last five decades, around 1,500 pathogens have emerged, most having jumped from animals to humans. Between 1940 and 2004, nearly 330 diseases had emerged, of which nearly 200 were zoonotic in origin and of these, 70 percent were from wildlife [4,5]. A recent study has projected that with an estimated rise in Earth's temperature by 2°C in the next fifty years, by 2070, people could be exposed to about 10,000 to 15,000 new pathogens previously confined to wild animals and forests. This could result in a 4,000 times likelihood of cross-species transmission. Since a majority of these microbes will be new with no prior immunity in people, it will increase the likelihood of disease spread and epidemics [6]

In this backdrop, the stronger implementation of international health regulations (IHR) 2005 and enhanced outbreak, epidemic and pandemic preparedness, and response readiness, should be the priority of every country. It is also the time for a renewed attention on 'One health' approach more than ever and act upon to improve animal, environment, and human health.

**CHANDRAKANT LAHARIYA,<sup>1\*</sup> ARCHANA THAKUR,<sup>1</sup> NONITA DUDEJA<sup>1,2</sup>**

<sup>1</sup>Foundation for People-Centric Health Systems; New Delhi

<sup>2</sup>Human Capital Lighthouse (Consulting) Pvt Ltd, New Delhi.

\**c.lahariya@gmail.com*

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