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Correspondence

Social networks and human monkeypox outbreak 2022: Hazards and opportunities – Correspondence

Dear Editor,

Human monkeypox is a rare zoonosis disease that remains endemic in African countries for many years. However, several sporadic human monkeypox outbreaks have been reported outside the African territories between 2003 and 2022. Before the human monkeypox multiple-country outbreak in 2022, all reported cases were associated with previous travel to endemic areas. There is currently a widespread human monkeypox outbreak in more than 40 non-African countries in North America, Europe, Asia, and Latin-America. Current evidence suggested that climate change, rainforest seasons, military conflicts, hunting of contaminated animals, wildlife trade, high mobile populations and weaned immunity caused the recent greatest human monkeypox outbreak in endemic regions in Africa [1]. Whereas, widespread human-to-human transmission has been reported outside of these areas via close contact, droplet, or body fluids [2]. It has been estimated that the virus may have been circulating undetected due to the lack of a surveillance system.

The disease surveillance system is one important public health function to establish rapid and reliable communications between health service authorities on a local or global scale during outbreaks [3]. However, the long incubation period and untraced contacts of monkeypox lead to rapid dissemination of infection in the current outbreak. Global networks are essential to generate an international awareness on clinical relevance of human monkeypox to general public. Currently, large amounts of data, such as photos, videos, and voice have been created following the largest human monkeypox outbreak in 2022. Social networks such as Twitter, YouTube, and Facebook are some of the most popular social networks that peoples can rapidly share their content freely with easy accessibility throughout the world's populations.

Previously, social networks have been used as a source of information for several outbreaks, particularly for infectious diseases [4,5]. According to the literature review, monitoring, data mining, and analysis of data from social networks have been established as a reliable tool in predicting, controlling and preventing an epidemic. Previous studies have confirmed the importance of data from YouTube on geographical spread, surveillance, and prediction of COVID-19 mortality rates [6,7]. Jahanbin et al., in 2022 suggested the compatibility of tweet data with

reports on surveillance, incidence, and geographical distribution of human monkeypox at WHO and the Centers for Disease Control and Prevention [8]. Martínez et al., in 2022 also revealed the efficacy of YouTube videos in creating broad awareness of human monkeypox transmission and prevention methods in general communities. Nevertheless, their analysis showed that misleading contents have significantly higher likes. Thus, checking YouTube content is an essential step to remove any misleading content that contradicted WHO or national health authorities [9].

The strong, appropriate, and sustained monkeypox response is not reachable without sufficient recognition regarding social, cultural, and ecological factors attributed to disease emergence. In addition, limitation in vaccine access, and the lack of antiviral agents in developing countries, have intensified the current situation. Thus, focusing on sound public health strategies such as social distancing, travel bans, and case quantization coupled with broad awareness by social networks are the simplest, inexpensive, and most comprehensive actions against the human monkeypox outbreak 2022. Monitoring and analysis of data from social networks is a reliable tool in predicting disease trends and geographical distribution in raising awareness to establish methods of education and prevention in both local and international scales. However, continuous assessment and monitoring of social network data should be implemented under the supervision of professional healthcare institutions to avoid any misleading contents.

read and approved the final version of the manuscript.

Data statement

Not applicable for this study.

Registration of research studies

Name of the registry: Not applicable.
Unique Identifying number or registration ID: Not applicable.

Hyperlink to your specific registration (must be publicly accessible and will be checked): Not applicable.

Consent

Not applicable for this study.

Guarantor

All the authors of this paper accept full responsibility for the work and/or the conduct of the study, had access to the data, and controlled the decision to publish.

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Declaration of competing interest

There is no conflict of interest.

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