



Contents lists available at ScienceDirect

Travel Medicine and Infectious Disease

journal homepage: www.elsevier.com/locate/tmaid

Now is the time to set up formal forums for clinical advice with emerging and zoonotic infections: A shared experience

Dear Editor,

We commend the article by Pipito et al., 2024 [1], which serves as a timely reminder that mpox has not disappeared. The clade II global outbreak occurred in 2022 with the World Health Organization (WHO) declaring a Public Health Emergency of International Concern (PHEIC) in July 2022 [2]. Subsequently after 87,000 cases and 140 deaths from 111 countries, the PHEIC was de-escalated in May 2023 [2]. The disease however continues to circulate in large numbers globally, with the European Centre for Disease Prevention and Control (ECDC) reporting 477 cases in the last three months in 27 European Union member states and three additional European Economic Area (EEA) countries [3]. These cases are occurring in countries where vaccine and therapeutics are readily available. Of more pressing international concern is the spread of mpox into countries that previously reported no or minimal cases during the mpox PHEIC period, as well as the large Clade I mpox outbreak occurring in central Africa [4]. The Democratic Republic of Congo appears to be the focal point of the current clade I outbreak with 18,922 reported cases and 1007 deaths [5], along with an alarming shift in demographics, with children under the age of 15 years now representing 70 % of the total cases [4].

The Republic of South Africa (RSA) diagnosed 5 uncomplicated cases during the PHEIC. However as of June 25, 2024, the country has announced a new outbreak of 16 laboratory-confirmed cases with three deaths. All the individuals so far have been HIV positive, with most of the cases self-reporting as being gay or bisexual men or men who have sex with men (GBMSM) [6]. The disease presentations have been more severe than previously encountered in the country due to most patients having advanced and/or poorly controlled HIV, delays in diagnosis, and limited access to tecovirimat. The infections have been confirmed to be Clade IIB mpox, with sequencing performed at the National Institute of Communicable Diseases (NICD) in Johannesburg, RSA, in keeping with the epidemiology of the multi-country outbreak of mpox.

Inter-country collaboration in mpox management and research, such as the descriptive paper of the HIV cohort in the multi-country outbreak [7], must be encouraged in recognition of the ongoing case burden, a shift in case geography and an apparent reduction in such collaborations since the closing of the PHEIC. We write here therefore to remind readers of the continued importance of sustained inter-country collaborative efforts on this disease. There are many reasons for sustaining these relationships, however the most fundamental is that multi-national collaboration remains the cornerstone of future pandemic preparedness. The appropriate sharing of epidemiological, clinical and therapeutic data can lead to enhanced surveillance and successful regional and international health campaigns. Secondly, it is important to maintain the sharing of clinical and therapeutic knowledge especially to countries where the diseases of interest may not have been

encountered at sufficient scale to develop internal clinical expertise. This is also prudent whilst there is still significant disparity between countries with respect to open and readily available access to therapeutics and medical countermeasures, which for mpox includes tecovirimat and the modified vaccinia Ankara (MVA) vaccines.

The authors highlight two further examples of ways in which exchange of epidemiological, clinical and therapeutic knowledge for mpox can be of mutual benefit. The National Health Service in England (NHSE) has an established airborne High Consequence Infectious Diseases Network, encompassing clinical and isolation facilities in five centres across England [8]. During the current outbreak in RSA, members of the UK HCID network were invited to provide clinical and therapeutic support to clinicians managing their first severe case of mpox. This support consisted of providing clinical standard operating procedures (SOPs) relating to the use of tecovirimat and other pharmacy countermeasures including use of MVA vaccines. These SOPs were also a key source in the development of South African national guidelines. Furthermore, one of the UK HCID clinicians experienced in managing mpox cases presented in a series of interactive webinars on the disease to a wide variety of clinicians within RSA, a service that directly reached several thousand South African doctors, many of whom would potentially be on the front lines of clinical care for mpox patients in the country.

While such arrangements are likely to continue in an informal manner, we propose the establishment of more formal networks to optimise access to and learning from the distribution of clinical, epidemiology and pharmacy advice across areas currently experiencing ongoing cases. We acknowledge the work of the WHO in trying to co-ordinate regional and international responses, especially with the SARS-CoV-2 pandemic and mpox PHEIC. The WHO advice and guidance is also often aimed at a population level. We also fully acknowledge and recognise travel medicine networks, such as the GeoSentinel Global surveillance network, and indeed its work at signposting the global nature of the mpox outbreak [9].

What many clinicians want however is the ability to timeously discuss clinical cases in real-time with other clinicians who have faced similar challenges, to assist in quickly determining local pragmatic solutions. This may be especially valuable in relation to non-clinical matters such as pharmacy services, diagnostic services and infection, prevention and control practices. What we propose is the establishment of a more formal process where countries with an outbreak can reach-out to infectious disease networks in countries experienced in that condition and request advice. This may also have further benefit in enabling research collaborations earlier, especially in diseases with outbreak potential.

<https://doi.org/10.1016/j.tmaid.2024.102738>

Received 28 June 2024; Accepted 4 July 2024

Available online 10 July 2024

1477-8939/© 2024 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Funding

This article did not receive any specific grant-funding from agencies in the public, commercial or not-for-profit sectors.

CRedit authorship contribution statement

Stephen D. Woolley: Conceptualization, Writing – original draft, Writing – review & editing. **Jeremy Nel:** Writing – review & editing. **Jacqueline Weyer:** Writing – review & editing. **Anne Neary:** Writing – review & editing. **Lucille Blumberg:** Writing – review & editing. **Michael B.J. Beadsworth:** Writing – review & editing.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- [1] Pipitò L, Trizzino M, Ferraro D, Calà C, Giammanco G, Cascio A. Do not forget mpox. *Trav Med Infect Dis* 2024;60:102728. <https://doi.org/10.1016/j.tmaid.2024.102728>.
- [2] WHO Declares End of Mpox Emergency, Calls for Sustained Efforts for Long-Term Management of the Disease - PAHO/WHO | Pan American Health Organization Available online: <https://www.paho.org/en/news/11-5-2023-who-declares-end-mpox-emergency-calls-sustained-efforts-long-term-management-disease> (accessed on 16 June 2024).
- [3] Joint ECDC-WHO regional office for europe mpox surveillance bulletin. Available online: <https://monkeypoxreport.ecdc.europa.eu/>. [Accessed 16 June 2024].
- [4] Outbreak of mpox caused by monkeypox virus clade I in the democratic republic of the Congo. Available online: <https://www.ecdc.europa.eu/en/news-events/outbreak-mpox-caused-monkeypox-virus-clade-i-democratic-republic-congo>. [Accessed 16 June 2024].
- [5] Mpox - democratic republic of the Congo. Available online: <https://www.who.int/emergencies/disease-outbreak-news/item/2024-DON522>. [Accessed 28 June 2024].
- [6] Mpox outbreak in South Africa – Africa CDC available online. <https://africacdc.org/news-item/mpox-outbreak-in-south-africa>. [Accessed 16 June 2024].
- [7] Mitjà O, Alemany A, Marks M, Lezama Mora JI, Rodríguez-Aldama JC, Torres Silva MS, Corral Herrera EA, Crabtree-Ramirez B, Blanco JL, Girometti N, et al. Mpox in people with advanced HIV infection: a global case series. *Lancet* 2023;401:939–49. [https://doi.org/10.1016/S0140-6736\(23\)00273-8](https://doi.org/10.1016/S0140-6736(23)00273-8).
- [8] Woolley SD, Dermont M, Adam M, Pallet SJC, Reece N, Hoysal N, Holden G, Attridge KK, Fletcher TE, O'Shea MK, et al. The 2022 monkeypox outbreak: a UK military perspective. *Trav Med Infect Dis* 2023;52:102540. <https://doi.org/10.1016/j.tmaid.2022.102540>.
- [9] Angelo KM, Smith T, Camprubí-Ferrer D, Balerdi-Sarasola L, Díaz Menéndez M, Servera-Negre G, Barkati S, Duvignaud A, Huber KLB, Chakravarti A, et al. Epidemiological and clinical characteristics of patients with monkeypox in the Geo-Sentinel network: a cross-sectional study. *Lancet Infect Dis* 2023;23:196–206. [https://doi.org/10.1016/S1473-3099\(22\)00651-X](https://doi.org/10.1016/S1473-3099(22)00651-X).

Stephen D. Woolley*

*Department of Clinical Sciences, Liverpool School of Tropical Medicine, Liverpool, UK
Tropical and Infectious Diseases Unit, Royal Liverpool Hospital, Liverpool, UK*

Jeremy Nel
Division of Infectious Diseases, Department of Medicine, University of the Witwatersrand, Johannesburg, South Africa

Jacqueline Weyer
*Centre for Emerging Zoonotic and Parasitic Diseases, National Institute for Communicable Diseases, National Health Laboratory Service, South Africa
Department of Virology, University of the Witwatersrand, South Africa
Department of Medical Virology, University of Pretoria, South Africa*

Anne Neary
*Department of Clinical Sciences, Liverpool School of Tropical Medicine, Liverpool, UK
Tropical and Infectious Diseases Unit, Royal Liverpool Hospital, Liverpool, UK*

Lucille Blumberg
*Centre for Emerging Zoonotic and Parasitic Diseases, National Institute for Communicable Diseases, National Health Laboratory Service, South Africa
Right to Care, Johannesburg, South Africa
Faculty of Veterinary Science, University of Pretoria, Pretoria, South Africa*

Michael B.J. Beadsworth, on behalf of the NHS England Airborne High Consequence Infectious Diseases Network
*Department of Clinical Sciences, Liverpool School of Tropical Medicine, Liverpool, UK
Tropical and Infectious Diseases Unit, Royal Liverpool Hospital, Liverpool, UK*

* Corresponding author.

E-mail address: stephen.woolley@lstm.ac.uk (S.D. Woolley).