Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

the human host, which once resulted in variola virus.[2] This adaptation is possible by the unique genomic make up of orthopoxviruses and their ability to jumpstart evolution by use of gene loss,[3] rather than by progressive mutation as seen in SARS-CoV-2.

Within orthopoxviruses, a genetic core of about 120 000 base pairs is highly conserved and thought to code for basic viral functions; however, towards the termini the orthopoxvirus genome is plastic, and large regions can be readily deleted (appendix). These regions contain genes related to host adaption. Orthopoxviruses like variola virus that have adapted to a specific host species tend to lose many terminal host-restriction genes during adaptation (appendix), allowing them to spread more easily or cause more severe disease. This loss could optimise both the spread (eg, by droplet-related transmission) via enhanced systemic infection and disease severity.

Circulating monkeypox virus might be undergoing adaption for the human host, so we must keep its genetic changes under tight surveillance so as to be prepared when sudden epidemiological changes and prevent the emergence of a variola virus epigone. This surveillance, however, will require a conceptual shift from observing lone single nucleotide polymorphisms, as with SARS-CoV-2 variants, towards watching closely for the integrity and stability of the monkeypox virus genomic termini. Therefore, the constant sequencing of full monkeypox virus genomes is of utmost importance to detect not only single nucleotide polymorphisms but any intragenic frameshifts or premature stop codons, that might indicate initial signals of gene loss. This surveillance, however, requires the highest-quality genomic data and careful annotation. Currently many sequences from the ongoing outbreak are erroneous or do not have annotation, which makes it difficult to establish useful genomic characterisation.

We declare no competing interests.

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The monkeypox outbreak must amplify hidden voices in the global discourse

Tulio d Oliveira's Comment[1] on the global inattention to infectious disease science done in Africa is timely, as the largest outbreak of monkeypox outside of Africa continues.[2] As of June 15, 2022, 2103 laboratory-confirmed cases of monkeypox have been reported to WHO from 42 countries. The unexpected, unprecedented, and unusual nature of this outbreak in Europe and the Americas has spurred scientific, political, and media attention. Importantly, monkeypox has been known to cause human disease for over 50 years and is endemic in at least ten countries in west and central Africa with over a thousand incidences reported in the Democratic Republic of the Congo in the first 3 months of 2022 alone.[3] Specialists in these countries have decades of experience managing such outbreaks, often with little support, and have repeatedly warned of the potential for monkeypox's globalisation and the need for affordable tools and improved surveillance.

Despite the vast expertise of these specialists, their voices are notably absent from the current discourse and many have struggled for years to raise awareness, publish their findings, or attract funding to study this disease.[4] As with the COVID-19 pandemic, monkeypox highlights inequities in access to vaccines, diagnostics, and treatments. High-resource nations, WHO, other global stakeholders, and government actors must meaningfully recognise the vast lived experience and repeated warnings of public health specialists in Africa. Equity in the global dialogue on pathogens with epidemic potential requires a priority seat at the table for those who have the most experience, despite them being pushed into the shadows for decades.

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See **Online** for appendix

This online publication has been corrected. The corrected version first appeared at thelancet.com on July 8, 2022

For **WHO's monkeypox outbreak situation update** see https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON393