

LETTER TO THE EDITOR

Monkeypox: A global public health threat?*Viruela símica: ¿un peligro para la salud pública mundial?*Kevin Minchola-Castañeda^{1,2,3}  Renzzo Mozo-Marquina¹ ¹ Universidad Nacional de Trujillo - Faculty of Medicine - Department of Medicine - Trujillo - Peru.² Sociedad Científica de Estudiantes de Medicina de la Universidad Nacional de Trujillo - Trujillo - Peru.³ Universidad Nacional de Trujillo - Faculty of Medicine - Growth, Development and Nutrition Research Group - Trujillo - Peru.

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Dear Editor

Monkeypox (Mpox) is a zoonotic disease caused by the monkeypox virus (MPXV), which belongs to the genus *Orthopoxvirus* of the family *Poxviridae* and is carried by primates and small rodents in the tropical forests of West and Central Africa.¹

The first case of mpox in humans was reported in 1970 in a 9-month-old infant in Zaire, now the Democratic Republic of Congo, a country where the disease is endemic.¹ Since then, several cases have been recorded around West and Central Africa. Furthermore, since September 2017, Nigeria has been dealing with the largest outbreak of this disease in its history, with 183 confirmed cases across 18 states as of November 2019.²

The rise in the number of cases of this infectious disease could be explained by three factors: 1) increased interaction between people living in endemic areas and animal reservoirs of the disease due to situations such as deforestation, armed conflicts, and migration of population caused by such conflicts; 2) reduced immunity of the African population due to the discontinuation of the smallpox vaccine, as most confirmed cases of mpox in Africa appeared after the smallpox eradication program ended; and 3) genetic evolution of the viral agent.¹ It should also be noted that these factors are complementary and not mutually exclusive, which contributes to the spread of the virus.

In recent years, the number of mpox cases outside the African continent has also increased. Some of these cases involve travelers who have been to Nigeria or other disease endemic regions.^{3,4} The first outbreak of mpox outside Africa was reported in the United States in 2003, which was caused by a shipment of rodents from West Africa.⁵ Then, between 2018 and 2021, six unrelated individuals who traveled from Nigeria to the United States were diagnosed with this disease.³

MPXV has three known routes of transmission: direct or indirect contact with secretions from animals or humans infected with the virus, prolonged exposure to aerosols or respiratory droplets (typically among caregivers and healthcare workers), and vertical transmission through the placenta in infants born to infected mothers.^{5,6}

The incubation period (i.e., the time between exposure to the virus and the onset of symptoms) of mpox is usually 7 to 21 days.⁷ This disease has an invasive phase characterized by fever, headache, lymphadenopathy, lumbar pain, muscle pain and severe asthenia, as well as an eruptive or skin lesion phase characterized by rash and papular, vesicular, and pustular lesions on the skin of the face, hands, torso, and abdomen.⁷ The clinical manifestations of mpox are similar to those of smallpox, with initial lymphadenopathy being its hallmark.⁶

MPXV does not spread easily between humans and the risk of infection is very low unless there is constant interaction with the infected person.⁸ Therefore, the possibility of viral transmission from person to person is a concern not only among family members living in the same household, but also among the healthcare personnel who provide care to these patients. Fortunately, some measures taken to contain the COVID-19 pandemic, such as the use of facemasks and personal protective equipment, help to reduce the risk of contracting viral infections, including MPXV, in the general population and healthcare personnel.⁹

Given the current context of pandemic threats, mpox should not be overlooked, and this is why public health is so important. The mechanisms for monitoring and epidemiological surveillance of confirmed cases are now quite modern and, together with the use of effective biosecurity protocols, can be very useful in stopping the transmission of MPXV. In addition, the smallpox vaccine, which provides cross-protection against the mpox virus, may be useful in preventing the symptoms of the disease.⁷

In conclusion, contrary to the time when the first cases of COVID-19 were reported, a new disease of which nothing was known about its viral agent, mpox is an already known disease for which vaccines, symptomatic treatments and knowledge derived from previous outbreaks are available. Consequently, we consider that it is very unlikely that mpox will become a global public health threat, as was the case with COVID-19. However, this does not mean that we should be less vigilant; on the contrary, we should continuously reinforce the epidemiological surveillance of MPXV and act in a timely manner to contain the spread of future cases of mpox.

Conflicts of interest

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