

## Monkeypox virus: A potential pandemic?

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*Dear Editor,* The Smallpox disease was eradicated globally in 1980 but the unforeseen re-emergence of Monkeypox amidst COVID-19 pandemic is of grave concern to the frontline health care professionals.

A total of 16,016 laboratory-confirmed cases and five mortalities have been notified from seventy-five countries and in all six World Health Organization (WHO) regions from 1st January 2022 to 22nd July 2022. On 23rd July 2022, WHO Director General proclaimed this outbreak as "public health emergency of global concern".<sup>1</sup>

Monkeypox virus is a zoonotic disease that was first detected in humans in Central Africa in 1970 and has since remained endemic in eleven Central and West African countries to this date. Monkeypox virus is the member of Orthopoxvirus genus of the poxviridae family. There are two distinct variants of Monkeypox virus i.e., Central African and Western African, out of which the Central African strain is more contagious and deadly.<sup>2</sup>

Disease spreads by direct contact with the blood, body fluids, skin, and mucosal lesions of infected animals. Human to human spread occurs by close contact with respiratory droplets and skin lesions of the infected person, or contaminated environments.<sup>3</sup> Sexual history is available in 73% of cases out of which 99% are men. In cases of known sexual orientation, 98% are identified as gay or bisexual.<sup>1</sup>

Fever, headache, lymphadenopathy, myalgia, and asthenia are common symptoms of the condition. The rash occurs 1-3 days after the fever. The lesion starts off as macule, matures into papule, develops into pustule, then finally dries, and crusts off. The rash commonly develops on the face, hands, and soles, and less often on genitalia and conjunctiva.<sup>2</sup>

Children were the common targets of this disease in the past. Now the disease is frequently affecting young adults as well.<sup>4</sup>

When making the diagnosis, diseases with similar presentation like chickenpox, smallpox, measles, bacterial skin infections etc. must be ruled out. Diagnosis is

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**Figure:** Lesions on hands typical of monkeypox virus. Photo courtesy: Public Health Image Library# 12763.<sup>6</sup>

confirmed by Polymerase Chain Reaction (PCR) test by taking samples of skin lesions. Since orthopoxviruses are closely related and cross reactive, antigen and antibody detection tests do not provide conclusive diagnosis.

WHO has recommended that non-endemic countries should conduct surveillance and contact tracing of individuals and proper isolation of the suspected cases.<sup>5</sup>

Pakistan is still battling with the COVID-19 amid political and economic crises. This possible pandemic could be a final blow to the already crumbling health care system of our country. Are we heading towards a budding pandemic?

**Abbreviation:** WHO: World Health Organization, PCR: Polymerase Chain Reaction, etc: et cetera, COVID-19: Coronavirus Disease-19.

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