LETTER TO EDITOR OPEN ACCESS

Monkeypox Virus – A Global Emergency Outbreak

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Dear Editor,

World Health Organization (WHO) has recently declared Monkeypox a global health emergency which raises a serious concern after the COVID-19 pandemic. In 1970, a nine-month-old child in the Democratic Republic of the Congo was diagnosed with monkeypox. Since the 1970s, monkeypox has not only been ubiquitous in Africa, but it has also become a severe public health problem as it has spread to several parts of the world[1].

Human Monkeypox virus (MPXV) is a double-stranded DNA virus that causes the disease Monkeypox. This virus belongs to the family Poxviridae and the genus Orthopoxvirus. Other harmful human species that cause Monkeypox in this genus include Vaccinia virus, Buffalo pox virus, Cowpox virus, and occasional incidences of Camel pox. This group of viruses also includes the variola virus that causes small pox[2]. According to Centres for Disease Control and Prevention (CDC), Monkeypox infection lasts for 2 to 4 weeks. It can be transmitted through direct contact with body fluids, rashes, or scabs. It is transmissible through respiratory secretions and also through contact with fomites. Pregnancy can also lead to vertical transmission of the virus[3]. Further research is required on the transmission of the disease through sexual contact. Although the clinical presentation of monkeypox mimics that of smallpox, some classical characteristics are unique to monkeypox, such as the involvement of maxillary, cervical, or inguinal lymph nodes. Moreover, prodromal symptoms including headache, fatigue and rash along with lesions ranging from a few to a thousand are all the presenting features of MPXV[4]. Vaccines used in the smallpox eradication campaign also offer immunity to monkey pox[1]. However, smallpox vaccination is not been part of the EPI vaccination program in Pakistan since its eradication. Hence this created the stage for monkeypox to develop clinical importance. Furthermore, because the majority of cases of monkeypox occur in rural Africa, suspected underreporting may lead to the underrated potential harm of the virus[5]. When this virus entered non-endemic nations in 2022, a clinically significant epidemic ensued. New vaccinations have been developed, one of which has been licensed for monkeypox prevention. The US Food and Drug Administration has now licensed just two vaccines for the use of the Monkeypox virus. JYNNEOS (also known as Imvamune or Imvanex) and ACAM2000 are examples[3].

There is still a dearth of knowledge about the potential harm the virus holds, its reservoirs and the efficacy of treatment strategies. It is critical for the healthcare personnel in Pakistan to timely understand the epidemiology of the disease and to prevent the virus from entering Pakistan by promptly reporting instances and implementing adequate safety precautions. The primary method of preventing monkeypox is to increase public knowledge of risk factors and inform them of the steps they may take to minimize viral exposure. The most effective and sensitive laboratory test is the polymerase chain reaction (PCR). The best diagnostic samples for monkeypox are from skin lesions, such as the vesicles and pustules as well as dry crusts. Unprotected contact with wild animals must be avoided, especially when they are sick or dead, as well as with their flesh, blood, and other components.

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CONFLICT OF INTEREST
All authors agreed to the publication of this manuscript.

AUTHORS' CONTRIBUTION
SEA did the literature search, reviewed the article, wrote the article, summarized it and analyzed the data. SS referenced the articles using Mendeley and made the revisions and corrections. Both authors critically reviewed and approved the final document.

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