

Monkeypox: A Growing Global Health Challenge and the Need for Vigilant PreparednessNaveed Shuja ^{1*}¹ Dean faculty of Biological Sciences Lahore-UBAS (Lahore Medical & Dental College), Lahore, Pakistan.*Corresponding Author: Naveed Shuja, Email: rananaveedshuja@gmail.com, Cell #: +92-3334205687**Keywords:** Monkeypox, Global health, Infectious diseases, Public health preparedness, Disease surveillance*dmls*Received: 08/04/2024
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The Ongoing Public Health Challenge of Monkeypox:

Monkeypox is relatively a new threat to the global community as it has brought into focus the issue of improved surveillance and response to infectious diseases[1]. Initially, a rather exotic zoonotic pathogen limited to certain regions of Central and West Africa, monkeypox is being detected in the countries that previously did not report its occurrence, which creates new challenges for the health care systems of the world[2].

Understanding the Disease: Monkeypox is an infectious disease that results from the attack of monkeypox virus which is in the Ortho poxvirus group of the virus family Poxviridae though the smallpox virus has been eradicated. The disease has some symptoms are similar to smallpox and includes fever, body aches, and rash that goes through different stages. Despite the fact that monkeypox is less severe when compared with smallpox, significant morbidity and potentially mortality cannot be ruled out[3]. Direct human-to-human transmission is by contact with infected body fluids, aerosols, or fomites such as used clothing, beddings among others. Recent epidemics have been experienced in the urban areas as this makes it easier for the virus to spread due to high population densities. This has transformed the disease from one which affected isolated African communities to a problem in developed, globally connected cities[4].

Why Should We Be Concerned?: The stoppage of smallpox vaccination has exposed the people to Ortho poxviruses such as monkeypox. The constant risk of getting zoonotic diseases due to factors such as deforestation, urbanization and close interaction with animals means that diseases, which are mainly associated

with animals, can easily infect human beings. Furthermore, the flexibility in the global interconnectivity of today's world through travel and business has facilitated the spread of the virus across the borders. In 2022, 34 monkeypox cases were reported in European countries, the Americas, and other areas of the world, where the disease had not been identified[5, 6].

The Public Health Response: To this recent outbreak of the disease, the WHO and the CDC have scaled up awareness campaigns and encouraged surveillance as well as put in place measures to contain the spread of the disease. Mass vaccination campaigns using smallpox vaccines that work against monkeypox have been intensified in the affected countries, however, there are several problems with implementing this approach: the difficulties of delivering vaccines in time and the scarcity of the vaccines themselves[7]. These are important in educating communities on how to avoid the disease and this include avoiding contact with sick persons, washing hands regularly and consulting a doctor when experiencing early symptoms of the disease. It also means that health systems need to be ready and able to identify such patients and isolate them to avoid spreading of the virus[8, 9].

Looking Forward: The spread of monkeypox in the non-endemic countries is a cause of concern and questions the efficiency of our societies' prevention, detection, and controlling of infectious diseases. Even as the current outbreaks have informed the world of the virus, it is important to note that this is not a one-off case[10]. Zoonotic diseases, which can be transmitted from animals to people, will remain a threat into the future as people increase in numbers and expand their living space into the

domain of wildlife. The fight against monkeypox is the fight against all other infectious diseases that can be most effectively fought for with a proper approach and mutual cooperation of all countries[11]. Monkeypox is not as dangerous as some other infectious diseases but looking at the example of how this disease affected people one can conclude that public health cannot be unguarded. Prevention of such diseases in the future would require increased investment in the global health care system, outcome of research on new diseases and vaccination exercises. We cannot afford to wait for another pandemic to happen in order to start acting[12, 13].

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