

Monkeypox : A Global Health Emergency

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Present time is the era of COVID-19 infection for which whole world is sick. Crores in number were infected and death toll counted in millions. Bangladesh is also a poor victim by this tiny monster. But media is now busy for few days with the presence of a rare virus with its attacking mood to human in different countries name of which is monkey pox.

We were aware of two pox virus namely Chickenpox and Small pox. First one is common in our country with minimum fatality but with a significant morbidity and later one is severely fatal but is now vanished long ago due to worldwide vaccinations. Now another pox virus is showing its ugly face to the humanity namely monkeypox though it was prevailing in animals from long ago.

Monkey pox is a zoonotic disease caused by an orthopox virus which belongs to the Poxviridae family, Chordopoxvirinae subfamily, and Orthopoxvirus genus. It results in a smallpox-like disease in humans. Monkeypox in human was initially diagnosed in 1970 in the Democratic Republic of the Congo (DRC). Then it has spread to other regions of Africa (Primarily West and Central), and cases outside Africa have emerged in recent years. There was an overall case fatality rate of 8.7%.

Sudden onset of high fever, followed by a vesicular-pustule eruption presenting predominantly on the face, palms of the hands, and soles of the feet or the presence of at least 5 smallpox type scabs produce a probable diagnosis of monkey pox. Positive IgM Antibody, PCR, or virus isolation confirms the monkey pox disease.

Recently the largest study to date has been published in New England Journal of Medicine. Ninety five percent of cases have been transmitted through sexual activity. Overall 98% of infected people were gay or bisexual men and around a third were known to have visited sex-on-site venues such as sex parties or saunas within the previous month. By July 20, 2022, 15800 people in 72 countries have been infected according to a report published by Centre for Disease Control and prevention (CDC).

The risk factors or risk behaviors for getting monkey pox are sleeping in the same room or bed, living in the same household, or drinking or eating from the same dish were risk behaviors associated with human-to-human transmission. On the other hand, sleeping outside or on the ground or living near or visiting the forest were identified as factors that increase the risk for exposure to animals and subsequent risk for animal-to-human transmission of monkey pox. Unexpectedly, assisting with toileting and hygiene and laundering clothes did not have a significant association with acquiring monkeypox and preparing wild animal for consumption or eating duiker were identified as protective factors. After adjusting for smallpox vaccination status, daily exposure to sick animals or cleaning their cages/bedding were identified as risk factors for acquiring monkeypox in 2003 outbreak in the US. Touching or been scratched by an infected animal sufficient to sustain a break in skin were found to be both significant and non significant risk factors.

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Currently there are no licensed treatments for human monkeypox, two orally bioavailable drugs, brincidofovir and tecovirimat, have been approved in the USA for the treatment of smallpox in preparation for a potential bioterrorism event. Neither drug has been studied in human efficacy trials; however, both drugs demonstrated efficacy against other orthopoxviruses (Including monkeypox) in animal models.

Monkeypox cases have been detected in Belgium, France, Germany, Italy, Portugal, Spain, Sweden, United Kingdom, United States, Canada, and Australia. Monkeypox is most common in central and west Africa. But till date no monkeypox cases have been identified in Bangladesh and nearby countries yet.

It takes 2-4 weeks to recover from monkeypox. People arriving in Bangladesh, particularly those from Africa, must be cautious in order to prevent the virus from spreading. Monkeypox is still being studied. As a result, nothing can be said in great detail. Everyone, however, should be aware. Monkeypox outbreaks will continue to occur in west and central Africa, and health-care workers around the world must remain vigilant to the possibility of monkeypox in travellers presenting with fever and rash. In future new and newer virus would emerge and may be threat for the human race and physicians and scientist need to work on that to combat against those intruders



Figure 1 Small pox-Monkey pox-Chickenpox (Above downward)

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