

Editorial

Mpox : Are We Ready?

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Mpox virus (formerly named as monkeypox virus), a zoonotic orthopox DNA virus related to the virus that causes smallpox, was first described in humans in 1970 in the Democratic Republic of Congo. There are two distinct clades of the virus: clade I (with subclades Ia and Ib) and clade II (with subclades IIa and IIb). The natural reservoir of the virus is unknown. Since early May 2022, more than 3000 monkeypox virus infections have been reported in more than 50 countries across five regions, prompting the World Health Organization to declare monkeypox an “evolving threat of moderate public health concern” on 23rd June, 2022. Since the beginning of mpox, over 100000 confirmed cases including over 200 deaths, were reported by more than 120 countries globally, according to WHO.¹

Transmission of monkeypox virus occurs through large respiratory droplets, close or direct contact with skin lesions, and possibly through contaminated fomites. People can also contact mpox from contaminated objects such as clothing or linen, through needle injuries in health care, or in community settings such as tattoo parlours. Vertical transmission and fetal deaths have been described. People with multiple sexual partners are at higher risk of acquiring mpox.²

Mpox causes signs and symptoms which usually begin within a week but can start 1–21 days after exposure. The occurrence of monkeypox can be detected by the earlier signs which may embrace flulike symptoms i.e. headache, chills, fever, myalgia, lethargy, lymphadenopathy. An observable review of the five stages of monkeypox: Stage 1 (macule): Initially, rash appears as flat, red spots (last for 1–2 days). Stage 2 (papule): The patches develop into hard, raised bumps (last for 1–2 days). Stage 3 (vesicle): The bumps get bigger and look like filled with a clear liquid (last for 1–2 days). Stage 4 (pustule): The lumps become pus-filled (last for 5–7 days). Stage 5 (scabs): The patches crust over and become hard that ultimately flake off (last for 7–14 days).³

Complications include secondary bacterial skin infection, pneumonia, corneal infection with loss of vision, dysphasia, vomiting and diarrhoea causing dehydration or malnutrition, sepsis, encephalitis, myocarditis, proctitis, banalities or urethritis.

Identifying mpox is made by detection of viral DNA by polymerase chain reaction (PCR). The goal of

treating mpox is to take care of the rash, manage pain and prevent complications. Mpox vaccine can help preventing infection in both pre-exposure & post-exposure settings. High risk groups include: health care workers, people sharing same household or close community with mpox affected persons, people who have multiple sex partners. The vaccine should be given less than 4 days as post-exposure prophylaxis & can be given for up to 14 days if the person has not developed symptoms. Some antivirals have received emergency use authorization in some countries and are being evaluated in clinical trials.⁴

As of 31 August 2024, 956 MPX cases were found in Asia & more than 30 cases were reported from India. Since Bangladesh shares a larger common border with India there is no reason for Bangladesh to feel relaxed. UAE also confirms its monkeypox cases among the population. Keeping this in mind that Bangladesh has a large number of a migrant in UAE making it more vulnerable. So far, three suspected cases were found in Bangladesh & after thorough investigation all of them confirmed as negative.

Bangladesh is a vulnerable country to any contagious diseases because of its geographical and ecological condition, population, and transborder communication. Government needs to take appropriate initiative to control and combat mpox by taking following measures: A constructive and efficient surveillance and monitoring system for tracking cases and analyzing them should be implemented. In cases of contagious diseases like MPX, accurately informing mass people through public sessions can significantly help in reducing the chance of an outbreak. Screening tests should be mandated at the ports of entry to the country for the people traveling from the places where the number of MPX cases is increasing. Keeping this in mind, on 22nd May, 2022 the Directorate General of Health Services (DGHS) issued a warning at every possible entry port including all air, land, and sea ports. Suspected cases were ordered to be sent immediately to the hospital and isolated. the Bangladesh government should build a solid infrastructure for immunizing people on a priority basis.^{5,6}

Hence, it is high time that government and non-governmental allies take control of the spark before the fire breaks out.

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