



EDITORIAL

MONKEYPOX – ANOTHER OPPORTUNITY TO ADOPT PUBLIC HEALTH MEASURES AFTER COVID-19

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Monkeypox is a rare disease caused by infection with the monkeypox virus having similar sign and symptom of Measles, but it is not related with Chickenpox. It is a zoonotic disease; a disease that is transmitted from animals to humans. Cases are often found close to tropical rainforests where there are animals that carry the virus. Evidence of monkeypox virus infection has been found in animals including squirrels, Gambian poached rats, dormice, different species of monkeys and others. This is caused by a virus from the the family Poxviridae, subfamily Chordopoxvirinae, and genus orthopoxvirus.¹ There are 12 species in this genus. Diseases associated with this genus include smallpox, cowpox, horsepox, camelpox, and monkeypox. Vertebrates, including mammals and humans, and sometime the arthropods serve as natural hosts for this disease. A pox-like disease occurred as two outbreaks in the colonies of monkeys kept for research in US and named it as Monkeypox, and the cause of the disease was unknown at that time. Later on, similar type of infection was seen in African rodents and non-human primates.² Monkeypox was first recorded in human 1970. Since then, it has been reported in human population sporadically in many countries of central and western African.

Recently, this virus outbreaks as pandemic, spreading rapidly covering 42 countries around the globe. Between 1 January to 15 June 2022, a cumulative new conformed cases of 2,103, and one death have been reported to WHO. The majority of cases (98%) have been reported since May 2022. Out of 42 countries, 7 countries where monkeypox has been detected for years, and 32 newly-affected countries.³ This viral disease alarmingly raised a serious health issues as it has become pandemic within few month.

Clinically monkeypox has symptoms similar to smallpox, but the sign and symptoms are less severe. The smallpox was eradicated in 1980, however, the monkeypox continues to occur in countries of central and west Africa since 1970 till today.⁴ The sign and symptoms are self-limiting. People experience a mild fever followed by a widespread rash (vesiculopustular) over skin involving the palms and soles. Out of which marked lymphadenopathy is a distinguishing feature of monkeypox over other diseases caused by pox virus.³ Other clinical features include: fever, head ache, muscle pain, swelling and tiredness.

Human-to-human transmission is limited, with the longest documented chain of transmission being six generations, meaning that the last person to be infected in this chain was six links away from the original sick person. It can be transmitted through contact with bodily fluids, lesions on the skin or on internal mucosal surfaces, such as in the mouth or throat, respiratory droplets and contaminated objects. Although infection of Monkeypox is self-limiting, and some case may lead to sever illness. Unlike COVID-19, the Monkeypox has multiple routes of transmission ranging from respiratory (droplet) and other non-respiratory route from the serous or mucous fluid from eyes, nose, mouth, etc. and skin lesions of diseased individual to normal one even by sexual contact.

Like COVID-19, Monkeypox is found to be spread through international travelers and through the goods imported from those countries where disease persists. In Nepal also a gentleman, returning from Duwai was suspected with the disease and he was sent to Teku Hospital, and he was found positive. Currently, he is under observation and managed conservatively as this disease has no specific treatment at the same hospital.⁵ Diagnosis is done by PCR Test, taking sample fluid from the blisters, crust and Biopsy. Detection of viral DNA by polymerase chain reaction (PCR) is the preferred laboratory test for monkeypox. The best diagnostic specimens are directly from the rash – skin, fluid or crusts, or biopsy where feasible. Antigen and antibody detection methods may not be useful as they do not distinguish between orthopoxviruses. Measles vaccine is used for the prevention and 85 percent success has been proved and has been suggested for its prevention, and until today there is no specific medical treatment.² Researches have shown that the public health measures are best approaches to control, limit and/or prevent pandemic rather than any other measures.

Government of Nepal has to act promptly to address its preventive aspect like in COVID-19, as this viral disease is spreading rapidly like previous pandemic. The government has to focus to improve public health awareness from different medias like Television, FM/Radios, and via Ring Back Tone in landline and mobile services. Public health measures should be adopted such as; restriction of unnecessary travel in endemic countries. Again, the physical distancing with suspected individuals, use of mask and maintenance of personal hygiene as well as environmental hygiene is must to restrict its spread. Moreover, public awareness is most powerful weapon to fight

against it. As we all recently experienced COVID-19, we can repeat the same practice to prevent this outbreak too. We must adopt preventive measures to stop its spread. If anyone suspect any sign and symptoms of Monkeypox (like rashes,

blisters, muscle pain etc. with mild fever) to prevent its further spread one must strictly follow all measures of prevention like in COVID-19 (frequent hand washing, consult with health worker, staying at home, etc.).

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