

Review Article

**MONKEYPOX OUTBREAK TO WORLD AFTER COVID: A FUTURE
SCOURGE TO THE WORLD HEALTHCARE SYSTEM**



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Abstract:

Monkey pox virus is very harmful infection when it comes to human beings. After COVID-19 immunity level of most of the population is decreased due to multiple uses of medicines. The way monkeypox is increasing as an outbreak from Africa to other countries it increases tautness. World Peoples not came out from the tragedy of COVID-19 monkey pox is creating condition worst for all. A comparison and growth from starting from Africa to till date in world. Some cases of monkeypox found in May at Pakistan. Cases in India found in Kerala on 14th and 18th July 2022.

Keywords: Monkeypox, COVID-19, Immunity, Outbreak, Non-endemic

Introduction:

Several viral diseases with a widespread occurrence of an infectious disease in a community at a particular time has potential are threatening global health security. In COVID-19 peak duration it was proved that virus outbreak can be easily transmit from one human to another human. It also has cross-species communication capability which caused it to turn into global pandemic. Several countries have not fully retrieved from the COVID-19 disaster yet [1]. Two long years of COVID-19 pandemic, another

zoonotic monkeypox virus transmission has been reported in many non-endemic countries in current scenario of viral infections. This is rare, self-limiting sickness, usually lenient than smallpox and not a concern at this step, early observation and rapid response is critical for the viral containment. It has low lethal rate as compared to other diseases. [2].

Monkeypox is a rare viral disease of humans and animals that typically occurs in the regions of

Middle and West Africa for many years. Hailing from the Orthopoxvirus is a genus in the Poxviridae family, the monkeypox virus was first detected in year 1958 [3]. The first human case was identified and confirmed in a 9-year-old child in the Democratic Republic of the Congo in 1970 [4]. According to the World Health Organization (WHO), there are 12 endemic countries where the monkeypox virus prevails those are the Democratic Republic of the Congo, Gabon, Benin, Cameroon, the Central African Republic, Ghana, Côte d'Ivoire, Liberia, Nigeria, the Republic of the Congo, and Sierra Leone. The United Kingdom (UK) has surpassed this list with the highest number of confirmed cases reported between 13th and 21st May, 2022 [5]. The monkeypox outbreak has come out in thirteen countries and rise alarmingly since the 1st confirmed case in the UK on May 7, 2022 [6]. The World Health Organisation has reported 28 suspected and 92 confirmed cases of monkeypox in 12 non-endemic countries commenced on 21st May 2022 [7]. The mortality rate of this virus is 3-6 %. Monkeypox represents a possible public health problem that needs appropriate awareness and attention to avert an outbreak [8].

Discussion

Monkeypox is spreading mainly by contact to animal directly via bodily fluids, blood, aerosol,

or infected injury. It can be communicated by human-to-human physical contact or breathing secretions, as like smallpox in words of the diagnostic features and immunity that is serologically cross-reactive. The WHO has reported MPV preliminary transmission from male to male through physical contact or close contact with each other triggering the most recent surge, however this transmission pathway has not yet been proven [9]. Monkeypox has a (one week to four weeks) 7–21 days -incubation period before the starting of manifestations, such as fever, headache, cough, and pathognomonic lymphadenopathy which are the primary symptoms of monkeypox. Following that, there will be a skin rash on the face, extremities, and over the next one to three days, fever. Since there is no specific vaccination or medication to treat monkeypox, it is managed as a syndrome by controlling symptoms and avoiding consequences. JYNNEOS, a licenced vaccine for preexposure vaccination of those at risk for occupational exposure to orthopoxviruses, has been recommended in certain nations, including the United States [10].

A growth table for monkeypox is shown in following Table no. 1:

Table No 1 Initiate and transmittance of monkeypox Worldwide [11]

Sr. No.	Year	Cases in Africa	Cases other than Africa
1	1958	Monkeypox discovered	-
2	1970	1 st case in Democratic Republic of the Congo	-
3	1970-1979	48 cases	-
4	1980-89	More than 300 cases	-
5	1990-1999	More than 500 cases	-
6	2000-2009	More than 10,000 cases	2003 (USA 47 cases) First outbreak
7.	2010-2019	More than 19,000 cases	Cases found in Israel (2018), UK (2018-2019) and Singapore (2019)
8.	2020-2022	More than 21,000 cases	Cases reported in the USA, Canada, Australia, Israel and several European countries.
9	14 July 2022 1st case in India, 2nd case found on 18th July 2022 in Karnataka, India		

Zee news in India reported on July 18, 2022 (Monday) its 2nd confirmed person of the monkeypox virus in a man from Kannur district of Kerala's. The 31-year-old man had landed at the Mangalore airport in coastal Karnataka from Dubai on July 13th 2022 he was infected and confirmed. Earlier on July 14th 2022, Kerala had also reported India's 1st Monkeypox case, a person who has come in the state from the UAE. Monkeypox virus is currently dealing with the RTPCR test with Gandhi hospital and the samples would be send to a lab situated in Pune in India for confirmation of this virus's positive strain. A figure can say its picture better, so it is shown in following figure no. 1 [12].



Figure No. : 1 monkeypox infection on human

Since the exposure of the monkeypox virus in non-endemic countries such as the US and the UK, national and provincial health authorities in Pakistan were put on high alert on May 23, 2022 as per the notification from the National Institute

of Health (NIH) which emphasized that the virus could also outbreak in Pakistan [13]. India is also on high alert due to the reach of monkeypox in neighbour country Pakistan.

As of May 26, 2022, almost 200 confirmed or suspected cases of monkeypox infection have been reported in non-endemic countries [14]. In the centre of this global trouble, the news regarding monkeypox cases in Pakistan spread like bush fire on media. However, the NIH dismissed these claims and clarified that no case of monkeypox had yet been diagnosed in Pakistan [15].

Monkeypox typically has a milder clinical manifestation with a rash, enlarged lymph nodes fever and most infected people recover within a few weeks. When a new case is suspected or confirmed, appropriate isolation, supportive care, and quarantine procedures should be put in place to respond as soon as possible.

Monkeypox incidence increased as a result of the end of the smallpox vaccination programme in 1980, declining population immunity over time, and an increase in the number of unvaccinated people [16].

It has been proven that the smallpox immunisation protects against monkeypox. Additionally, the only legal vaccine for the prevention of monkeypox is MVA-BN (JYNNEOS in the US, IMVAMUNE in Canada, and IMVANEX in Europe), and Tecovirimat SIGA is a medication approved for the treatment. These

countermeasures were found in 1958, although they are still not commonly used [17].

Some precautions are enlisted hereunder:

1. Wash your hands with soap and water or use an alcohol-based hand sanitizer.
2. Avoid contact with people who have recently been diagnosed with the virus or who may have been infected.
3. Wear a face mask if you are in close contact with someone with symptoms.
4. Avoid contact with animals that carry the virus. This contains animals who has history of sickness and infections, like rats, monkeys and dogs.
5. Condom should be used if having physical intercourse.
6. Use personal protective equipment when caring for patients with confirmed or suspected monkeypox infection.
7. Eat only fully cooked meat.

Conclusion

The significance of infectious disease surveillance, including thorough travel and activity histories, which is essential for the implementation of an effective public health response, is reinforced by recently imported cases. Incident response is aided by the rapid activation and expertise of the health network, with prompt sharing of information with the WHO in accordance with the protocol. The number of potential contacts was reduced using COVID-19 control methods, and secondary transmission only happened within the family. If it bursts in India

with the large population massive destructions can be trepidation. Cases of monkeypox increase as the way these are increasing can make the condition worse. There is a need for its treatment by keeping symptoms in mind.

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Conflict Of Interest No conflict.

Reference

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