Monkeypox is a viral zoonosis (a virus transferred from animals to people) with symptoms comparable to those previously seen in individuals with smallpox, although being clinically less severe. With the elimination of smallpox in 1980 and the consequent discontinuation of smallpox vaccination, monkeypox has become the most significant orthopoxvirus in terms of public health. Monkeypox generally occurs in central and western Africa, often near tropical rainforests, and is becoming more prevalent in cities. A variety of rodents and non-human primates serve as hosts.

A 9-month-old child in a location where smallpox had been eradicated in 1968 was the first person to be detected with monkeypox in 1970 in the Democratic Republic of the Congo. Since then, most cases have been recorded from rural, rainforest parts of the Congo Basin, mostly in the Democratic Republic of the Congo, and a growing number of human cases have been documented across central and west Africa.

Since 1970, eleven African nations have recorded human cases of monkeypox: Benin, Cameroon, the Central African Republic, the Democratic Republic of the Congo, Gabon, Cote d’Ivoire, Liberia, Nigeria, the Republic of the Congo, Sierra Leone, and South Sudan. The actual impact of monkeypox is unknown. For instance, in 1996–1997, the Democratic Republic of the Congo reported an epidemic with a lower-case fatality ratio and a higher attack rate than typical. An epidemic of chickenpox (produced by the varicella virus, which is not an orthopoxvirus) and monkeypox was discovered, which might explain alterations in transmission dynamics, whether actual or perceived. Since 2017, Nigeria has seen a significant epidemic, with over 500 suspected cases, over 200 confirmed cases, and an estimated 3% case fatality rate. Cases are still being recorded to this day.

The relevance of monkeypox to global public health is shown by the fact that it not only affects nations in west and central Africa, but also the rest of the globe. The first monkeypox epidemic outside of Africa occurred in the United States in 2003 and was caused by contact with sick prairie dogs kept as pets. Ghana-imported Gambian pouched rats and dormice were kept with these animals. In the United States, this epidemic caused about 70 cases of monkeypox. In addition, visitors from Nigeria have been diagnosed with monkeypox in Israel in September 2018, the United Kingdom in September 2018, December 2019, May 2021, and May 2022, Singapore in May 2019, and the United States in July and November 2021. Multiple cases of monkeypox were reported in non-endemic nations in May 2022. Currently, research is being conducted to better comprehend the epidemiology, infection origins, and transmission patterns.

Since the beginning of May 2022, instances of monkeypox have been recorded from nonendemic countries, and continue to be reported from endemic nations. The majority of confirmed patients with a travel history reported visiting Europe and North America, as opposed to West or Central Africa, where monkeypox is endemic. This is the first time that many monkeypox cases and clusters have been recorded simultaneously in non-endemic and endemic nations with very different geographical locations.

Too far, most reported instances have been detected via sexual health or other health services at basic or secondary health-care institutions and have mostly, but not solely, involved males who have intercourse with other men.
What India is doing?

As reported by the Times of India on 18 June 2022, the Centre has ordered that all overseas arrivals at ports and airports would be screened for the Monkeypox virus after Kerala reported the second incidence of the illness in India. In recent weeks, instances of monkeypox have increased in non-endemic regions of Europe, North America, and the Middle East, prompting widespread worry on a global scale. Certain African countries have been endemic to the illness for decades. In this regard, unlike Covid, this virus is not new. Government of India has begun pre-emptive safeguards while studies are ongoing to determine the cause of the current increase in monkeypox cases. If Covid has taught us anything, it is that one can never be too prepared for such events. There is no way to predict the course of a prospective pandemic. Thus, it is preferable to err on the side of caution and have ready-to-use systems, even if they are not ultimately needed.

However, let us not panic in this situation. According to existing epidemiological evidence, the Monkeypox virus does not spread nearly as rapidly as the Covid virus, is transmitted by bodily fluids, and hence spreads through intimate contact. In addition, the condition has relatively mild symptoms and is seldom deadly. In addition, it is known that the smallpox vaccination provides sufficient protection against monkeypox and is even beneficial in treating the condition.

In addition to disease monitoring, the government of India should plan for the development of smallpox vaccine in the event of a widespread outbreak of monkeypox. Covid emphasised the need of swiftness in addressing public health concerns. In dealing with Monkeypox, adequate preparedness should be the credo.

The author is Associate Professor in Community Medicine Department at Surat Municipal Institute of Medical Education & Research (SMIMER), Surat, India. He has more than 15 years of experience of working in bio-medical research.