WHO Director-General declares monkeypox a public health emergency of international concern

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24 July 2022

On Saturday, World Health Organization (WHO) Director-General Dr. Tedros Adhanom Ghebreyesus declared the unprecedented global outbreak of monkeypox a public health emergency of international concern (PHEIC), the highest alert before declaring the outbreak a pandemic. In doing so, he overruled the decision of the International Health Regulations (IHR) Emergency Committee (EC) which had reconvened on July 21 to address the continued “unexpected” spread of the disease in non-endemic regions across the globe.

When they first met a month ago, on June 23, the EC decided against declaring monkeypox a PHEIC by a vote of 11 to three. The cumulative case count at the time was 3,621 infections, and the seven-day rolling average was just 225 per day. Since then, cases have exploded to over 16,000 cases in at least 75 non-endemic countries, with a seven-day rolling average of 535 per day.

Despite this massive and global spread of the virus, after several hours of deliberations last Thursday the EC reached a vote of nine to six that there were still insufficient grounds to declare monkeypox a PHEIC. Dr. Ghebreyesus’ decision to overrule this vote is the first such overruling in the history of the WHO.

During a press briefing following the announcement, Dr. Ghebreyesus noted, “Nine and six are very, very close. Since the role of the committee is to advise, I then had to act as a tiebreaker. We believe this will mobilize the world to act together. It needs coordination and not only coordination but solidarity.”

He added, “There are now more than 16,000 reported cases from 75 countries and territories and five deaths. WHO’s assessment is that the risk of monkeypox is moderate globally and in all regions except in the European region, where we assess the risk is high. Although I am declaring a public health emergency of international concern for the moment, this outbreak is concentrated among men who have sex with men [MSM], especially those with multiple sexual partners. That means this outbreak can be stopped with the right strategies in the right groups.”

It has been the failure of governments and their public health institutions over the last three months to contain the spread of the infections that have pressed the Director-General to declare the monkeypox outbreak a PHEIC. Basic tenets of isolating cases and contact tracing could have brought the outbreak under control by late May.

The unprecedented inaction by governments in the face of the ongoing COVID-19 pandemic, as well as growing criticism that the WHO was once again failing to act to swiftly contain what could become another uncontrolled pandemic, clearly played a significant factor in this decision.

Announcing the PHEIC, the WHO included a lengthy list of recommendations and guidelines on conducting surveillance, managing cases and reporting these for various groups of states based on their epidemiological situation, transmission patterns and capacities.

Under the 2005 IHR agreement, states have a legal duty to respond to the declaration of PHEIC, which is defined as “an extraordinary event which is determined to constitute a public health risk to other States through the international spread of disease and to potentially require a coordinated international response,” especially when the situation is “serious, sudden, unusual, or unexpected.”

It must be recalled that smallpox, a deadly disease endemic throughout human history, was infecting 50 million people globally during the 1950s, despite the fact that a vaccine had existed for more than 150 years. Precisely because a globally-coordinated effort to address the scourge had never been attempted, smallpox remained a threat to most of the world’s population.

When the WHO targeted smallpox for eradication in 1967, the annual global caseload was around 10 to 15 million. Ten years after proclaiming the initiative for the eradication of smallpox, the last known case was reported in Somalia in 1977. More than 40 years have passed since smallpox was conquered and the international experiences amassed since then are considerable. Given the resources and technology available today, one must ask how quickly a coordinated effort could end the monkeypox pandemic with only tens of thousands infected?

The timing of WHO’s declaration of a PHEIC on monkeypox, which takes place as the Omicron BA.5 subvariant continues its assault across the globe, underscores the significant challenges facing depleted public health institutions globally. Nearly every country outside China has allowed the coronavirus to surge without considering its impact on the well-being of its population. The tattered state of public health raises the question whether these countries will do anything to address any infectious disease that
threatens the public?

Last week, National Institutes of Health (NIH) Director Dr. Anthony Fauci stated bluntly that the COVID-19 pandemic will go on for another quarter century, while White House COVID Response Coordinator Dr. Ashish Jha claimed, “This virus is going to be with us forever.”

These very same officials whose responsibility is to protect the public from dangerous pathogens are promoting the idea that becoming infected with COVID-19 is no longer a critical or serious matter. In short, they encourage the subordination of public health to the demands of the markets.

Under such conditions, it remains doubtful if much will be done to stem the tide of monkeypox infections across the globe. As Dr. Ghebreyesus said at Saturday’s press conference, current mathematical models suggest that the reproduction number (R0) among the MSM population is above one, meaning there is continued growth in cases among this group. For instance, in Spain, the R0 is around 1.8, and for the UK at 1.6.

It bears reviewing what is known about the virus and the infection it causes.

The following video with Dr. Lisa Iannattone, Canadian dermatologist, on signs and symptoms of monkeypox, has been viewed widely. We encourage our readers to watch the very informative presentation:

The monkeypox virus is an enveloped double-stranded DNA virus, unlike the RNA single-stranded coronavirus. It belongs to the orthopoxvirus genus of which the vaccinia virus, cowpox virus and variola virus (the virus that causes smallpox) are related. The current clade causing the monkeypox pandemic is from West Africa and is known to cause less severe disease.

The demographics of the concurrent monkeypox outbreak in West Africa affect women and children most. However, on Friday, the Centers for Disease Control and Prevention (CDC) reported that two children in the US contracted monkeypox through household transmission. With summer ending, schools and day cares will open their doors again in the coming weeks for the new school year, raising concerns about the monkeypox virus taking hold in these high-risk and vulnerable groups.

One of the features of the monkeypox virus is its ability to resist drying and tolerate changes in temperature and pH on surfaces. The crusts of lesions from infected people or fomites in bed linen can remain infectious for months or years. However, they are sensitive to common disinfectants but less to organic disinfectants.

Air samples have indicated that these infectious particles could become airborne. And though the primary mode of transmission is through contact with infected lesions, if these are on the mouth and oral membranes, there is the risk that the virus can be transmitted via respiratory droplets and aerosol. For these reasons, health care workers should don PPE for airborne precautions.

The incubation period for monkeypox infection can range from five to 21 days, usually around one to two weeks. Symptoms of the disease begin with a combination of fever, headaches, chills, exhaustion, fatigue, muscle aches and swelling of lymph nodes. Three days after these prodrome symptoms, a reddish rash begins at the site of infection and spreads to other body parts.

The lesions progress over a 12-day window from macules to papules, vesicles, pustules, crusts and scabs before falling off. They can be painful or itchy, and secondary bacterial infections can occur if patients scratch themselves. The illness lasts from two to four weeks, and people confirmed to have monkeypox should isolate for the duration under medical supervision.

The current outbreak in non-endemic regions has been more atypical and milder, meaning awareness of the possibility of infection can be overlooked by the infected and physicians treating patients with these symptoms. However, complex and more invasive modes of exposure (i.e., bites from animals) may lead to more severe forms of the disease than through skin contact.

In endemic regions of Africa, the case fatality rate for monkeypox can range from 0 to 11 percent. Complications of monkeypox include encephalitis, skin infections, dehydration, infections involving the cornea and conjunctiva of the eyes, and pneumonia. Mortality with monkeypox has been seen mainly among young children, and the immunocompromised are especially at risk of severe disease.

As of July 23, 2022, there have been 16,353 confirmed and suspected cases. Eighty countries and territories have reported monkeypox cases, and the seven-day global average of cases has plateaued at around 535 cases per day. One could surmise that if testing capacity remains limited, these figures are underestimates, as public health officials have indicated.

Though Europe is the region most severely affected, cases in the US (2,581) and Brazil (614) continue to climb exponentially, accounting for more than 50 percent of all daily cases on July 22 combined. Only Spain leads the US with 3,125 monkeypox cases. It is expected that the US will soon surpass Spain and become the global epicenter of the monkeypox pandemic.

The US Department of Health and Human Services (HHS) issued a statement on July 15, 2022, that an additional order for 2.5 million doses of Bavarian Nordic’s Jynneos vaccine was placed above the 2.5 million doses ordered on July 1.

The initial order will arrive in the Strategic National Stockpile over the next year. The HHS anticipates it will have 7 million doses by mid-2023. A course of the vaccine requires two doses given four weeks apart. Currently, only 300,000 doses have been available to states and jurisdictions.

Dr. Boghuma K Titanji, an infectious disease physician at Emory University in Atlanta, who recently published a contemporary review for health care professionals on monkeypox in the journal Open Forum Infectious Disease, said of the WHO’s declaration, “[It’s] better late than never … [but] one can argue that the response globally has continued to suffer from a lack of coordination with individual countries working at very different paces to address the problem. There is almost capitulation that we cannot stop the monkeypox virus from establishing itself in a more permanent way.”