

Study Guide

Week3

Global response to Mpox

TL;DR

Mpox (monkeypox) has historically been confined to Central and West Africa but since 2022 has spread to over 117 countries, becoming a global health crisis. The virus, which spreads through close contact, has highlighted the vulnerability of specific populations and the urgent need for equitable access to vaccines, particularly in Africa, which is experiencing the most severe outbreaks. Despite the critical need, African countries face significant vaccine shortages and delays due to global inequities, logistical challenges, and reliance on international aid. This situation has led to economic impacts, such as potential supply chain disruptions and fears of recession. There is also debate over travel restrictions and calls for global solidarity and improved health infrastructure in Africa. A coordinated international response is needed to address these challenges and prevent further spread.

1) Introduction

Mpox, also known as monkeypox, is a viral disease that has historically been confined to Central and West Africa. However, since 2022, it has rapidly spread to over 117 countries, creating a significant global health crisis. The virus primarily spreads through close contact, and recent outbreaks have highlighted the vulnerability of specific populations, particularly those with compromised immune systems.

The sudden and widespread transmission of Mpox has prompted the World Health Organization (WHO) to take urgent action. The WHO's response is focused on containing the virus by ensuring equitable access to vaccines and treatments, prioritizing resources for the most affected regions, and advancing research to develop more effective interventions. As Mpox continues to pose a global threat, the need for a coordinated and robust international response has never been more critical.

2) Background information

In 2017, Nigeria experienced a significant outbreak of Mpox, marking the resurgence of the disease in West Africa after nearly four decades. This outbreak, which affected over 200 people, was a pivotal moment that underscored the virus's capacity for significant human-to-human transmission. It also highlighted the need for improved surveillance, public health infrastructure, and global awareness of Mpox, which had largely been neglected outside its endemic regions.

The situation escalated in 2022 when Mpox cases began appearing in countries outside Africa, including Europe, North America, and Asia. Unlike previous outbreaks, this one involved sustained human-to-human transmission, often occurring within close contact networks, including sexual contact. The rapid and widespread transmission across different continents marked the first time Mpox had emerged as a significant global health threat.

The ongoing global situation is a direct result of these recent developments. Mpox is now recognized as a serious global health concern, with active outbreaks in multiple regions and the potential for further spread. The WHO's current response strategy, informed by the past few years' experiences, focuses on containing the virus, ensuring equitable distribution of resources, and advancing research to develop more effective countermeasures. The international community faces a critical challenge in addressing these gaps to prevent further spread and safeguard public health globally.

2.1) Mpox vaccine

Vaccination against Mpox is one of the most effective ways to prevent Mpox. Vaccines for Mpox are used before exposure to the virus and can, in rare cases, be administered 14 days after coming in contact with an infected patient if no symptoms have shown up to that point.

The current high-risk groups for Mpox contamination are healthcare workers, people in the close circle of a patient, People who have multiple sex partners, and sex workers.

As of late August 2024, the global availability of Mpox vaccines remains constrained, especially in regions hardest hit by the outbreak, such as Africa. While wealthier countries in North America and Europe have managed to secure and stockpile substantial amounts of the Mpox vaccine, there are significant delays in getting these vaccines to low- and middle-income countries. This disparity has left countries in Africa with limited vaccine access, where the need is most urgent.

“Addressing the current Mpox vaccine shortage and delivering vaccines to communities that need them now is paramount. There is also a pressing need for a universal and transparent allocation mechanism to ensure equitable access to Mpox vaccines,” said Director of UNICEF Supply Division Leila Pakkala.

More than 18,000 suspected cases of Mpox, including 629 deaths, have been reported this year in the Democratic Republic of the Congo, which is at the epicenter of the crisis. Four out of five deaths have been in children.

2.2) Transmission

Mpox spreads from person to person, mainly through close contact with someone with Mpox, including household members. Close contact includes skin-to-skin (such as touching or sex) and mouth-to-mouth or mouth-to-skin contact (such as kissing), and it can also involve being face-to-face with someone who has Mpox, such as talking or breathing close to one another, which can generate infectious respiratory particles.

WHO response

WHO works with Member States and partners to prevent and respond to outbreaks of Mpox. This includes coordinating research on vaccines and treatments, strengthening country health systems, and facilitating equitable access to vaccines, therapeutics, diagnostics, and other tools.

WHO Director-General Dr Tedros Adhanom Ghebreyesus has declared pox a public health emergency of international concern (PHEIC) twice, once in May 2022 and again in August 2024.

3) Discussion points

3.1) Vaccines in Africa

The outbreak of Mpox is hitting central Africa in ways unmatched by anywhere else in the world. Almost 4000 cases of Mpox were reported in one week in central Africa alone; this has once again brought up the plea from the health officials in the area for long-awaited vaccines to combat the virus, which affects thousands and has killed 600 since the start of 2024 with 4 out of 5 these deaths being children.

As of Tuesday, August 27th, 10,000 doses of Mpox vaccines have been donated to Nigeria from the United States. This is the first and only donation of the vaccine to any African state so far. Many other countries have pledged to send vaccines to many affected nations, but none have done so yet.

The biggest issue facing the African continent is that there are no vaccines available in the Democratic Republic of Congo, the country with the most patients infected since the initial outbreak last January. This new strain of Mpox is extra contagious to people in Less Economically Developed Countries (LEDCs).

Africa's biggest obstacle is the red tape in distributing urgently needed vaccines to nations with weak health care systems. Low-income countries have a much bigger struggle obtaining and distributing drugs in these scenarios and, therefore, rely on

organizations such as the WHO rather than their infrastructure for judging whether a drug is classified as safe.

Doing this leaves nations such as the Democratic Republic of Congo in a vulnerable position. They need to wait for the WHO to decide, which doesn't allow these nations to have swift responses and allows situations to escalate.

Two years after the 2022 outbreak of Mpox, the WHO still has not officially approved the MVA-BN and LC16 vaccines, which are in dire need. According to bodies such as the WHO, there is no sufficient data to review them correctly.

As of August 2024, the WHO has allowed "emergency-use listings" for nations in need. Fast-track approvals will enable GAVI and UNICEF to procure Mpox vaccines and should solve many issues.

3.2) Pledges from Wealthy Countries

Many wealthy nations provide for those in need. One of these is Spain; the country has pledged to donate 20 percent of its stockpiles, which are approximately 500,000 doses, to multiple African nations battling Mpox today.

"We consider it senseless to accumulate vaccines where they are not needed," Spain's health ministry said. This shows the hesitance of many wealthy states to give up a significant part of their stockpiles. As of now, Spain is one of the few EU countries that has pledged its donations to countries in need.

Japan is a nation known for its donations in these scenarios and is currently in negotiations with the DRC to supply vaccines, but Japan's hesitancy really highlights the international community's fear of the virus contaminating the country.

3.3) Economic impacts of the Mpox public health emergency in Africa

The economic consequences of the continued spread of Mpox have caught the attention of many experts in the field and have also sent shivers through the international community. According to the experts, supply chain disruptions are almost inevitable and could lead to a severe slowdown in economic growth for developing nations. When natural resources do not get to the factories to become goods, this will send shockwaves through the world economy since Africa is still the biggest supplier of natural resources. The aftermath of this disruption would be spikes in unemployment rate, compounding debt on domestic and national levels, and many more all over the African continent.

3.4) Economic impacts of the Mpox public health emergency in the World Economy

Before the COVID-19 pandemic, the World Bank had predicted a 2.5 percent growth from \$85 trillion in 2019, but in reality, GDP had taken a huge hit and fell by 3.1 percent, leaving the world economy with lots of gaps and issues. In 2023, 95 percent of the countries in the

world are still below the predicted GDP from before the pandemic, with a global shortcoming of close to \$4.7 trillion to the initial forecast. The World Bank does not expect the global economy to catch up to the predicted numbers in the upcoming years.

The Mpox pandemic is now hitting the world at a time when the world was already on the verge of inflationary risk, which keeps interest rates high and causes fear with many nations of sliding into recessions while even giants such as the US and China are fearing for their future as they are also not able to uphold pre Covid numbers, the geopolitical aspect has truly become a part of Mpox.

3.5) Travel restrictions

One of the most common policies proposed by many nations that are not directly affected by Mpox is to impose travel restrictions on countries with the most infected patients. The African continent has really called for all nations to not punish Africa but help them deal with the outbreak by supplying vaccinations.

“Don’t punish Africa,” said Africa CDC’s head Jean Kaseya at a media briefing on Tuesday. “We hear from here and there that you want to apply travel bans ... we need solidarity, we need you to provide appropriate support, this vaccine is expensive.”

“I clearly request our partners to stop thinking about travel bans against Africa, that will bring us back to the unfair treatment from the Covid period and not help the world to move forward.”

3.6) Mpox as a public health concern in Africa

African nations depend heavily on international aid for vaccines, medical supplies, and technical assistance. However, this dependency has highlighted the inequities in global health, as Africa often receives these resources only after the needs of wealthier nations have been met. The delays in vaccine distribution and the ongoing struggle to secure enough doses underscore the continent's vulnerability to global market dynamics and the need for more self-sufficiency in public health.

The outbreak has made it clear that African healthcare systems need to strengthen their capability in response to infectious disease outbreaks. This includes investing in healthcare infrastructure, training healthcare professionals, and improving disease surveillance and reporting systems. Strengthening these areas will help control Mpox and manage other public health threats.

There is a growing recognition that the Mpox crisis in Africa requires a coordinated global response. African leaders and public health experts call for greater global solidarity to ensure that vaccines and other resources are distributed equitably. The current situation has renewed calls for reforms in global health governance to ensure that Africa is not left behind in allocating critical health resources.

Source material

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