Mpox and HIV: A Shared Struggle for Recognition and Resources within the LGBTQ+ Community

Christopher Jaice Corley

BIOL 101: General Biology

Dr. Leah Allen

November 13th, 2023

In the years following the initial outbreak of SARS-COV2, also known as COVID-19, various other illnesses such as Respiratory Syncytial Virus (RSV) have become more common among the population. One outbreak of concern has been Mpox, formerly known as Monkeypox, which had spread quickly within the United States during the summer of 2022 (ChatGPT, 2023).

Mpox, was not widely known in the global west prior to 2022, though it was discovered in Denmark in 1958. Mpox made contact with human populations in 1970, when it had infected a 9-month-old child in the Democratic Republic of the Congo and continued to spread amongst humans in central, west, and east Africa (WHO, 2023). Mpox was known for causing painful skin lesions and spread through skin-to-skin contact as well as exposure to linens from infected individuals (WHO, 2023). Initial western media coverage surrounding the spread of Mpox was directed at those in the LGBTQ+ community, specifically men who had sex with men. As Mpox's existence had been known for around 64 years at this point, a vaccine had been developed to stop the spread of the disease and it was recommended for men who had sex with men, amongst other vulnerable groups, to protect themselves from contracting the virus. Though media coverage was more vocal, many members of the LGBTQ+ community had noticed parallels between the coverage about Mpox and the coverage about HIV/AIDS in the 1980s (ChatGPT, 2023).

HIV (human immunodeficiency virus) and AIDS (acquired immunodeficiency syndrome) are diseases that attack a person's immune system and leaves them susceptible to contracting other viruses. According to HIV.gov, HIV is a virus that attacks CD4 cells, which are crucial for the body's defense against infections. Since HIV attacks CD4 cells, it weakens the infected person's immune system, making them less effective at fighting other infections (HIV.gov, 2023). AIDS is the result of HIV being left untreated in the body and is the late stage of the virus and

without treatment, it can reduce an individual's life expectancy to approximately 3 years (HIV.gov, 2023). Deaths from AIDS tend to be from secondary illnesses, the most common being pneumonia as mentioned by Dr. Rapkiewicz (Nyulangone, 2019). However, medical intervention can be lifesaving for those at this stage of the disease. Although anyone can contract HIV, specific groups are at a higher risk, such as men who have sex with men and transgender women who engage in sexual activity with men (HIV.gov, 2023). As HIV and AIDS are such damaging diseases, there are mitigating strategies used to prevent infection and spread of the virus. One of the most well-known prevention medicines is called PrEP (pre-exposure prophylaxis). According to the CDC, PrEP lowers the risk of contracting HIV through sex by at least 74% when people take the pills as prescribed t (CDC.gov, 2022). PrEP can be used by anyone, who weighs at least 77 pounds, who is at risk for contracting HIV through sex (CDC.gov, 2022).

HIV is a very unique disease through the way that it spreads from person to person. HIV spreads through bodily fluids such as blood, breast milk and semen, entering the body of an uninfected person (HIV.gov, 2023). At the molecular level, HIV is spread throughout the body by going through the cell's plasma membrane. Though the plasma membrane exhibits high selectivity, typically permitting specific glycoproteins to enter the cell, HIV can mimic the glycoproteins present on non-infectious cells and enter the cell (Fowler et al., 2017). HIV having the ability to take on the glycoproteins of non-infectious cells hinders the development of an effective vaccine. Since there is no effective vaccine that can be made to combat HIV, there is heightened importance put onto testing, safe sex practices and PrEP medication to attempt to curb spread of the disease.

In the article titled "Case Studies Expose Deadly Risk of Mpox to People With Untreated HIV" by Kai Kupferschmidt, the risks of having a combination infection of HIV and Mpox and the common ground both diseases share within the LGBTQ+ community are discussed.

HIV and AIDS are known for severely compromising the immune system, leaving people helpless against even the most minor infections (ChatGPT, 2023). Although the strain of Mpox in the West is less fatal than other strains, people with a preexisting infection of HIV are likely to develop a severe form of the disease. Oriol Mitjà describes how Mpox is more severe in immunocompromised patients by highlighting the fact that the small lesions, that would usually appear on someone with Mpox, would turn into large necrotizing patches and the infection itself had the potential to spread to the lungs (Kupferschmidt, 2023). Although Mpox is more severe in people with preexisting conditions, such as an infection of HIV, there is a lack in efforts to mitigate Mpox's spread. Brenda Crabtree Ramirez notes how many Mexicans rely on work to survive from day to day and a diagnosis of Mpox requires isolation that would prevent Mexicans from being able to maintain themselves (Kupferschmidt, 2023). Additionally, Crabtree Ramirez mentions that there is a notable absence of treatments or preventative measures for HIV and Mpox in Mexico, though they are extremely needed (Kupferschmidt, 2023).

As a member of the LGBTQ+ community, this article is particularly significant to me, as it highlights the indifference that many people held towards diseases that affected marginalized groups (ChatGPT, 2023). During the 1980 HIV/AIDS epidemic, apathy, and discrimination against the LGBTQ+ community was widespread and was even supported by former President Ronald Reagan and his administration. During a White House press briefing a journalist named Lester Kinsolving mentioned that HIV was known as the "gay plague" causing the entire press pool to break out into laughter (Bennington-Castro, 2020). Though HIV had been killing people

and spreading amongst the LGBTQ+ community, it was extremely obvious that no one, not even the White House, was taking the deaths of these people seriously simply because they were gay. The White House had continued to prove that they did not care about the HIV/AIDS epidemic when it had taken former President Reagan until 1985, 4 years after HIV had started spreading in the U.S., to openly address HIV but it had been too late as the virus had become a full blown epidemic at that point (Bennington-Castro, 2020).

Initial media coverage on Mpox in the West was directed towards men who have sex with men to ensure their safety from the disease. Even with these concerned being voiced towards gay and bisexual men, there was still a struggle to obtain the vaccine, especially since the Biden administration let 2 million Mpox vaccines expire in May 2022 (Engelson, 2022). Lack of action from the Biden administration reflected the response that the Reagan administration had toward the HIV/AIDS epidemic in the 1980s. As both diseases primarily affected the LGBTQ+ community, inaction was very noticed and Jonny Cruz had expressed his frustration in an article from Crosscut Cascade by saying that Mpox vaccine distribution would move a lot faster if straight people were mainly affected (Engelson, 2022). Governmental and public responses to Mpox showed that there is a habit of prioritizing issues that affect the general population which leaves marginalized populations such as the LGBTQ+ community extremely vulnerable.

Overlooking the suffering of marginalized groups simply because it does not affect the broader population, reveals the apathy that people hold and shows that marginalized communities are not as important as majority communities in people's minds (ChatGPT, 2023).. It raises the question, will the government and society as a whole be able to alter their approach in addressing issues that impact marginalized communities, such as the spread of Mpox and HIV/AIDS, in a way that offers more support and care?

References

- Bennington-Castro, J. (2020, June 1). *How AIDS remained an unspoken-but deadly-epidemic for years*. History.com. https://www.history.com/news/aids-epidemic-ronald-reagan
- Centers for Disease Control and Prevention. (2022, June 30). *About PrEP*. Centers for Disease Control and Prevention. https://www.cdc.gov/hiv/basics/prep/about-prep.html
- ChatGPT, personal communication, (2023, November 1), Prompts used: Rewrite this content to identify and fix grammatical and punctuation errors, Rewrite this content to enhance sentence structure, Rewrite this content to avoid passive voice, Rewrite this content to improve readability, Rewrite this content to correct any instances of redundant phrases, Write a title for this essay
- Engelson, A. (2022, August 30). "a lack of care": Monkeypox Response Echoes Homophobia of past crises. Crosscut.

https://crosscut.com/news/2022/08/lack-care-monkeypox-response-echoes-homophobia-past-crises

Fowler, Samantha, et al. Concepts of Biology. OpenStax College, Rice University, 2017.

HIV-positive New Yorkers are living longer but still dying of underlying infection. NYU Langone News. (2019, August 28).

https://nyulangone.org/news/hiv-positive-new-yorkers-are-living-longer-still-dying-under lying-infection#:~:text=According%20to%20the%20researchers%2C%20infections.perc ent%20from%202012%20to%202016.

Kupferschmidt, K. (2023, February 21). Case studies expose deadly risk of mpox to people with untreated HIV. Science.org.

https://www.science.org/content/article/case-studies-expose-deadly-risk-mpox-people-unt
reated-hiv

What are HIV and AIDS?. HIV.gov. (2023, January 13).

https://www.hiv.gov/hiv-basics/overview/about-hiv-and-aids/what-are-hiv-and-aids/

World Health Organization. (2023, April 18). *Mpox (monkeypox)*. World Health Organization. https://www.who.int/news-room/fact-sheets/detail/monkeypox#:~:text=The%20monkeypox%20virus%20was%20discovered,occasionally%20from%20animals%20to%20people