

## Déjà vu All Over Again? Emergent Monkeypox, Delayed Responses, and Stigmatized Populations

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Over 40 years ago, in the summer of 1981, a new illness appeared in the American gay community, with cases quickly mounting in major cities. For the first few years, the etiologic agent of what was initially called gay-related immunodeficiency syndrome was unknown, its natural history obscure, its modes of transmission uncertain, though certainly including sexual contact. What quickly became known as acquired immunodeficiency syndrome (AIDS) caused by the human immunodeficiency virus (HIV), was spreading more widely among what was known as the "4H Club" Haitians, hemophiliacs, homosexuals,

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C. Beyrer Duke Global Health Institute, Duke University, Durham, NC, USA and heroin users[1]. However, along with the virus itself, blame for this new outbreak was spreading as well. Haitians were castigated for bringing the virus into the country, while homosexuals and heroin users were the focus of stigma and discrimination, with some going as far to suggest that both should be tattooed to warn partners about their infection, while a quarantine initiative appeared on the California ballot [2, 3]. The "innocent victims" of AIDS were hemophiliacs, infants infected perinatally, and those infected through exposure in healthcare settings [4].

Unlike the emergence of the atypical pneumonia among men and women attending an American Legion convention in Philadelphia in 1976, which showed up on the cover of Time magazine that year and sent the federal government into overdrive to ascertain its cause, the federal response to AIDS was lackluster at best, with the President of the USA, not even mentioning the disease until 1985 and with members of his inner circle joking about the disease [5–7]. It was largely up to the LGBTQ+ community to build its own response to the epidemic, with AIDS service organizations providing care and support to those living with the disease and policy and activist organizations arising to combat the indifference and neglect of local, state, and federal leadership [8, 9]. Furthermore, though AIDS cases among heterosexuals were documented early in Africa and elsewhere outside of the global North in the early 1980s, it took almost two decades for any international mobilization at a scale to confront the enormity of the

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pandemic, and marginalized populations still struggle to get adequate resources [10–13]. The early delays in the AIDS response allowed the virus to establish very high burdens globally, which have proven enormously difficult to address. As COVID-19 has taught us, the early period of epidemic spread is critical for pandemic control—and early weeks and months (or years) of inaction are terribly costly.

Almost a half century later, another summer and another virus has emerged in the USA and around the globe. However, the monkeypox outbreak of 2022, now documented among close to 6000 people-the majority men who have sex with men-in over 50 countries has striking similarities and stark differences with the HIV epidemic. Both monkeypox and HIV are zoonotic infections, jumping from animal hosts into human populations, which, after two and a half years with another zoonotic pandemic of SARS-CoV2, should demonstrate to us that rather than rare occurrences, these events are likely to be more and more common in this Anthropocene epoch, when any pandemic is less than a day's plane ride away, so that our role in planetary health drives our own risks [14]. However, unlike HIV in 1980s, monkeypox is not an unknown pathogen and has been well-described since the 1970s in Central and West Africa [15, 16]. In fact, the current global outbreak likely originated in viral strains associated with an outbreak that started in Nigeria in 2017 [17]. Furthermore, the unusual clinical and epidemiological features of this current 2022 outbreak have been seen in the Nigerian context, described by clinicians and researchers there since 2018 [18, 19]. Monkeypox also differs starkly from HIV in its early days in that we have diagnostics, vaccines, and treatments for the disease [20].

HIV and monkeypox share similarities in the global and domestic response to these diseases. The Nigerian outbreak garnered little global attention and no urgency, no mobilization by the World Health Organization to use vaccines to control the outbreak there [21]. While there have been other sporadic outbreaks of monkeypox in the global North, there has been little interest in more than local containment, and new generations of vaccines and treatments, now being scaled up for the USA and other rich countries are unavailable in Africa, and test kits are in short supply [22, 23]. Even now with worldwide dissemination of the virus, the WHO, as of June 2022, had decided that monkeypox is not a Public Health

Emergency of International Concern (PHEIC), which is yet another example of the WHO failing to lead, and is hard not to interpret as indifference to the well-being of Africans, as well as gay men and our communities [24, 25]. In outbreaks, time is of the essence and are early responses to monkeypox suggest another failure of containment looms.

At home in the USA, while many local, state, and federal leaders thankfully have been vocal about the need not to stigmatize monkeypox as a "gay disease," they have been criticized for the bureaucratic delays and inaction [26–28]. In particular, the reliance on the CDC's own laboratory response network for testing rather than scaling up to allow commercial laboratories to diagnose the disease has been challenged as a barrier to case detection by researchers, public health experts, and advocates [28, 29]. Meanwhile, the lack of global attention to monkeypox has left public health officials scrambling for doses of a key vaccine, even in the USA, while policy options to address this shortage exist [30]. Finally, LGBTQ+ and AIDS organizations-well acquainted with dealing with infectious diseases among men who have sex with men-could and must do more as well, partnering with public health officials on active surveillance, vaccination campaigns in venues frequented by gay men [31].

The real risk now is that as monkeypox continues to spread in Africa, here in the USA and the rest of the world, it becomes an endemic infection among gay and bisexual men, spreading through their dense social and sexual networks, and through multiple forms of intimate and skin to skin exposures, adding to the burdens these communities are facing already from HIV and other infectious diseases. People can spread the virus to animals as well, including wild populations (mainly rodents), so there is the possibility of establishing endemic reservoirs outside Africa, arguably for the first time. And there is a risk that without containment among gay and bisexual men, the infection can spread in other settings in which the close physical contact monkeypox requires for transmission is common, from homeless shelters and prisons to gyms and sports clubs. [32, 33], similar to outbreaks of methicillin-resistant Staphylococcus aureus, detected early in this century. However, the risk to the "general" population should not be what spurs us to act: the lives of Africans and gay men around the world should not be the canaries in the coal mine for infectious diseases like HIV or monkeypox, only useful in their function as a sentinel for the rest of us to be on our guard. Prudent and compassionate public health policies require a more rapid, engaged, and coordinated approach.

## References

- How HIV Took the World by Storm. Accessed July 3, 2022. https://www.science.org/content/article/ how-hiv-took-world-storm.
- 2. Farmer P. *AIDS and Accusation: Haiti and the Geography of Blame, Updated with a New Preface.* Berkeley, CA: Univ of California Press; 2006.
- Gonsalves G, Staley P. Panic, Paranoia, and Public Health—The AIDS Epidemic's Lessons for Ebola. N Engl J Med. 2014;371(25):2348–9.
- Schellenberg EG, Keil JM, Bem SL. "Innocent Victims" of AIDS: identifying the Subtext 1. J Appl Soc Psychol. 1995;25(20):1790–800.
- Fraser DW, Tsai TR, Orenstein W, et al. Legionnaires' Disease. N Engl J Med. 1977;297(22):1189–97. https:// doi.org/10.1056/NEJM197712012972201.
- Medicine: Tracking the Philly Killer. *Time*. Published online August 28, 1978. Accessed July 3, 2022. https:// content.time.com/time/subscriber/article/0,33009,91633 9,00.html.
- A disturbing new glimpse at the Reagan administration's indifference to AIDS. Washington Post. https:// www.washingtonpost.com/news/arts-and-entertainment/ wp/2015/12/01/a-disturbing-new-glimpse-at-the-reaganadministrations-indifference-to-aids/. Accessed July 3, 2022.
- Cain R. Community-Based Aids Services: formalization and Depoliticization. *Int J Health Serv.* 1993;23(4):665– 84. https://doi.org/10.2190/3T1R-U4UR-7VMU-UV04.
- Harrington M. AIDS Activists and People with AIDS: A Movement to Revolutionize Research and for Universal Access to Treatment. In: *Tactical Biopolitics: Art, Activism, and Technoscience*. Cambridge, MA: The MIT Press; 2008. https://mitpress.universitypresscholarship.com/ view/10.7551/mitpress/9780262042499.001.0001/upso-9780262042499-chapter-19. Accessed 14 July 2022.
- Clumeck N, Mascart-Lemone F, de Maubeuge J, Brenez D, Marcelis L. Acquired immune deficiency syndrome in Black Africans. *Lancet (London, England)*. 1983;1(8325):642–642.
- 11. Behrman G. *The Invisible People: How the U.S. Has Slept Through the Global Aids Pan.* New York, NY: Simon and Schuster; 2008.
- Beyrer C. Global Prevention of HIV Infection for Neglected Populations: Men Who Have Sex with Men. *Clin Infect Dis.* 2010;50(Supplement\_3):S108–13. https:// doi.org/10.1086/651481.
- Wolfe D, Carrieri MP, Shepard D. Treatment and care for injecting drug users with HIV infection: a review of barriers and ways forward. *The Lancet*. 2010;376(9738):355–66.

- Whitmee S, Haines A, Beyrer C, et al. Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation-Lancet Commission on planetary health. *The lancet*. 2015;386(10007):1973–2028.
- Ladnyj ID, Ziegler P, Kima E. A human infection caused by monkeypox virus in Basankusu Territory, Democratic Republic of the Congo. *Bull World Health Organ*. 1972;46(5):593–7.
- Lourie B, Bingham PG, Evans HH, Foster SO, Nakano JH, Herrmann KL. Human infection with monkeypox virus: laboratory investigation of six cases in West Africa. *Bull World Health Organ.* 1972;46(5):633–9.
- Isidro J, Borges V, Pinto M, et al. Phylogenomic characterization and signs of microevolution in the 2022 multicountry outbreak of monkeypox virus. *Nat Med.* Published online June 24, 2022:1–1. https://doi.org/10.1038/ s41591-022-01907-y.
- Ogoina D, Izibewule JH, Ogunleye A, et al. The 2017 human monkeypox outbreak in Nigeria—Report of outbreak experience and response in the Niger Delta University Teaching Hospital, Bayelsa State, Nigeria. *PLoS ONE*. 2019;14(4):e0214229. https://doi.org/10.1371/journ al.pone.0214229.
- Yinka-Ogunleye A, Aruna O, Ogoina D, et al. Reemergence of Human Monkeypox in Nigeria, 2017. *Emerg Infect Dis.* 2018;24(6):1149–51. https://doi.org/10.3201/ eid2406.180017.
- McCollum AM, Damon IK. Human monkeypox. *Clin Infect Dis.* 2014;58(2):260–7. https://doi.org/10.1093/cid/cit703.
- Warning signs ahead of monkeypox outbreak went unheeded, experts say. STAT. Published May 26, 2022. Accessed July 3, 2022. https://www.statnews.com/2022/ 05/26/warning-signs-ahead-of-monkeypox-outbreakwent-unheeded-experts-say/.
- 22. Monkeypox is a new global threat. African scientists know what the world is up against. Accessed July 3, 2022. https://www.science.org/content/article/monkeypoxis-a-new-global-threat-african-scientists-know-what-theworld-is-up-against.
- Africa in need of test kits, vaccines as monkeypox spreads

   Reuters. Accessed July 3, 2022. https://www.reuters.com/world/africa/africa-need-test-kits-vaccines-monkeypox-cdc-africa-2022-06-30/.
- WHO monkeypox decision renews debate about global alarm system for outbreaks. Accessed July 3, 2022. https://www.science.org/content/article/who-monkeypoxdecision-renews-debate-about-global-alarm-system-outbr eaks.
- Taylor L. Monkeypox: what's behind WHO's decision not to declare a public health emergency? *BMJ*. 2022;377:o1604. https://doi.org/10.1136/bmj.o1604.
- Monkeypox Testing Shows U.S. Learned Little From COVID-19 | Time. Accessed July 3, 2022. https://time. com/6188327/monkeypox-testing-covid-19-pandemic/.
- U.S. monkeypox response mirrors early coronavirus missteps, experts say. Washington Post. https://www.washi ngtonpost.com/health/2022/06/23/monkeypox-responsebiden-administration/. Accessed July 3, 2022.
- Gay Men Need a Specific Warning About Monkeypox -The Atlantic. Accessed July 3, 2022. https://www.theat

lantic.com/ideas/archive/2022/05/monkeypox-outbreak-spread-gay-bisexual-men/643122/.

- Perspective | Testing failures helped covid spread. We must do better with monkeypox. Washington Post. https:// www.washingtonpost.com/outlook/2022/06/21/monke ypox-testing-cdc-need-more/. Accessed July 3, 2022.
- Will There Be Enough Monkeypox Vaccine? The New York Times. Accessed July 3, 2022. https://www.nytimes. com/2022/07/01/health/monkeypox-vaccine-bavarian-nordic.html.
- Is the LGBT Community Doing Enough to Fight Monkeypox? POZ. Published June 22, 2022. Accessed July 3, 2022. https://www.poz.com/article/lgbt-communityenough-fight-monkeypox.
- Congregate Living Settings | Monkeypox | Poxvirus | CDC. Published July 1, 2022. Accessed July 3, 2022. https://www.cdc.gov/poxvirus/monkeypox/specific-setti ngs/congregate.html.
- Davies HD, Jackson MA, Rice SG. Committee on Infectious Diseases, Council on Sports Medicine and Fitness. Infectious Diseases Associated with Organized Sports and Outbreak Control. *Pediatrics*. 2017;140(4):e20172477. https://doi.org/10.1542/peds.2017-2477.

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