A Review Of Monkeypox Infection In Lgbt Community

Nurul Nisa Ulfa
Medisina Clinic

Email corespondensi : Nurulnisaulfa15@gmail.com

Track Record Article

Accepted:

Published:

Abstract

Objective: *This review aims to find a relationship between the increasing number of monkeypox cases, especially in LGBT community, based on the literature study approach and case reports. One of the non-medicamentous ways is to reduce travelling abroad, especially in countries with many monkeypox cases. Preventing direct contact, such as abstaining from sex and using condoms, is also a way to reduce the morbidity of monkeypox infection, especially in LGBT community. The treatment has not proven effective, and the available vaccines, especially in Indonesia, are still limited. Only a few cases in Indonesia have been reported.* ***Method:*** *This research is based on a literature study approach and case reports with article sources obtained from Eurosurveillance and Elsevier. It restricts articles using the keywords "cases that occurred in patients in the LGBT / MSM community" to get relevant data following the current monkeypox outbreak conditions.* ***Result:*** *The appearance of the monkeypox virus in 2022 in 58 countries and Indonesia is no exception, which confirmed 1 case in patients post travelling abroad. The current monkeypox infection is still present, with symptoms that vary from person to person and are typically characterized by reddish rashes. Still, it is primarily confined to the genital, perigenital, and perianal areas. It manifests at various stages of development, in addition to transmission from animals caused by hunting activities or in LGBT (Lesbian, Gay, Bisexual, and Transgender) communities that have unprotected sex and can be infected through semen and saliva.* ***Conclusion:*** *Monkeypox cases that occur globally in 2022 need further research to reduce and prevent, especially in the LGBT community and those at risk of infection, pregnant women and babies, as well as medical personnel in close contact with patients. One of the non-medical procedures is reducing travel abroad, especially in countries with many cases of monkeypox, and reducing direct contact with sufferers, such as abstinence from sex and using condoms in the LGBT community, is also one way to reduce the morbidity of monkeypox infection. The treatment has not been proven effective, and the existing vaccines, especially in Indonesia, are still limited. Only a few cases in Indonesia have been reported.*

Keywords*: Monkeypox virus, Monkeypox in LGBT, sexual contact.*

INTRODUCTION

Aside from previously reported endemic cases, a sudden outbreak of monkeypox cases from 31 countries was reported and has since significantly increased. On June 22, 2022, the World Health Organization (WHN) declared the current monkeypox outbreak a pandemic after confirming 3,417 cases in 58 countries and its rapid spread across several continents. The Ministry of Health in Indonesia has also announced that there are confirmed monkeypox patients who traveled abroad in August (Kesehatan 2022). The monkeypox virus first infected a monkey in Denmark in 1958. In 1970, a 9-month-old baby boy in Zaire, Congo, was diagnosed with an endemic disease that had spread to other African countries,

particularly Central and West Africa. Monkeypox cases that have recently been reported in Europe are not as epidemiologically significant as cases that previously occurred in West or Central Africa and became the first reported cases in the LGBT community.

The monkeypox virus is thought to be relatively capable of infecting other humans. It is spread through saliva or droplets, direct contact with infected lesions, and sexual contact between partners. It is thought to be the source of transmission in the LGBT community. However, the spread rate was lower among those who did not have direct contact (Admin 2020).

Monkeypox infection is still prevalent in 2022, with symptoms varying from person to person and typically characterized by a reddish rash. Nonetheless, it is mostly restricted to the genital, perigenital, and perianal areas and manifests at various stages of development. Furthermore, patients may present with no or only mild prodromal symptoms. As a result, additional observations on monkeypox patients are required (Jahan dan Nabi 2022). There have been reported cases of gay, bisexual, or male individuals having sex with males (MSM). More surveillance is needed to prevent the spread of monkeypox in these communities, as well as the spread of illnesses in women and children who are susceptible to the disease (Jang et al. 2022).

METHODS

This study employs a literature review approach and case studies, with article sources obtained from Eurosurveillance and Elsevier. It restricts articles with the keywords "cases that occurred in patients in the LGBT / MSM community" in order to obtain relevant data in light of the current monkeypox outbreak conditions. The following are the inclusion criteria: 1.) Conduct a literature search using the terms "Monkeypox virus," "Monkeypox in LGBT people," and "Monkeypox transmission through sexual contact." 2). The full manuscript of the article is available (full text).

RESULTS

Currently, men account for the vast majority of monkeypox cases. It could be related to animal hunting, patients who are LGBT, have more than one sexual partner, or have sexual

relations without using condoms (Moore MJ, Rathish B 2022). With the majority of initial lesions appearing in the genital region, the sexual behavior described by Andrea Antinori et al.

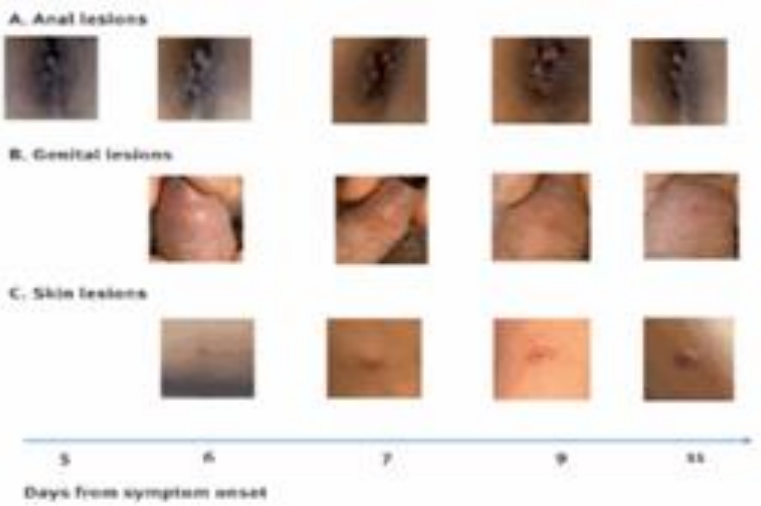

Fig2. Stages of development of lesions in the Anal and Genital[8]

(Antinori et al. 2022)

Table 1. Definition of monkeypox[10]

No	Case Type	Definition
1	Suspected	The symptoms of smallpox include a sudden, high fever followed by vesicular-pustular eruptions that mostly affect the face, palms, and soles of the feet or at least five scabs.
2	Confirmed	Suspected cases with laboratory confirmation (Positive IgM Antibodies, PCR, or virus isolation).
3	Probable	Suspect cases without laboratory results but epidemiologically close association with confirmed cases
4	Possible	Healthcare providers do not diagnose vesicular rashes, pustular or crustaceous, as chickenpox (Mwanbal et al., 1997) History of fever and vesicular rash or crustacea (CDC, 1997) People with undiagnosed fevers and rashes, elevated levels of orthopoxvirus-specific IgM, and more than two signs or symptoms of clinical criteria meet any epidemiological criteria

		or exhibit these symptoms.

(Bunge et al. 2022)

DISCUSSION

The disease of exanthema The variola virus is linked to the monkeypox virus. Clinically, variola (smallpox) and human monkeypox are very similar, making it difficult to distinguish between the two diseases. The Monkeypox virus is a DNA virus that belongs to the Poxviridae (poxviruses) family and the genus Orthopoxvirus. It is the cause of monkeypox (MPX), a zoonotic infectious disease. Human infection can occur through direct or indirect contact with dead or living animals infected with the monkeypox virus. Meanwhile, close contact with symptomatic cases is thought to be the primary mode of human-to-human transmission. (De Baetselier et al. 2022).

Monkeypox cases are thought to be spread through direct contact with animals, but they can also be spread by traveling to countries where there are many cases of monkeypox. During this outbreak, it primarily infects male patients who have sexual relationships with people of the same sex and live in cities. Fortunately, the mortality rate in monkeypox patients is low, but this must still be considered in order to keep monkeypox from spreading. (De Baetselier et al. 2022).

A new confirmed monkeypox virus infection in the UK was reported on May 16, 2022, in two adult men (aged 18 years). This new case differs from the previous issue of patients not traveling abroad, which is a risk factor for the Monkeypox virus, and is thought to be related to their sexual partners' activities. Various reactions to the condition and suspected transmission of monkeypox are directed specifically at the LGBT community. Clinicians should pay closer attention to patients with vesicle rashes and ulcers for monkeypox virus testing and follow-up exams at the nearest sexual health service. Due to international travel, 82 confirmed cases in the UK had no link to monkeypox. Out of all the cases, 79 patients were men. 66 (or 83%) were men who had sex with other men and were gay, bisexual, or other men (GBMSM). Sixteen cases lacked details. The cases ranged in age from 32 to 43 years, with a median of 38 years. In the 21 days preceding the onset of symptoms, eighteen people reported international travel to various non-African countries. Investigations are still ongoing to determine whether these cases were infected outside of the

UK. Sexual Health Stories have been linked to the use of geospatial applications in the UK and abroad, as well as sexual activity at party locations. So far, no one knows what factors or exposures are linked to such cases. (Vivancos et al. 2022).

Close contact during intercourse appears to be critical for virus transmission in Italian patients. At the onset of symptoms, monkeypox virus DNA was found in the sperm of all four monkeypox patients, with Cq (cycles for virus quantification) values ranging from 27 to 30. More research is needed to determine if there is a link between Cq values and viral load in monkeypox virus infection. Human-made materials have been found to spread the monkeypox virus. It is important to note that the value of Cq in the patient's sperm in this case is within the range measured by nasopharyngeal swabs. We must keep in mind that sperm can harbor a variety of other viremia-causing viruses. A testicle is an ideal location for the virus to hide. The virus can survive despite the fact that it cannot replicate within the reproductive tract. (Antinori et al. 2022).

The prodromal phase of monkeypox infection begins with fever, headache, back pain, myalgia, lethargy, and fatigue, just like smallpox. Then, on the face, a rash and mucosal lesions appear (within 1-3 days after the onset of fever). After ten days, the lesions progressed from maculopapular to fluid-filled vesicles to pustules, and the patient lost confidence after three weeks. Meanwhile, immunosuppression may increase the likelihood of more severe symptoms. Lymphadenopathy is the most common clinical feature that distinguishes it from varicella. To confirm the diagnosis of monkeypox, laboratory procedures such as polymerase chain reaction (PCR), antigen detection tests, enzyme-linked immunosorbent assay (ELISA), and viral cell culture can be used. (Petersen et al. 2019).

Non-medicinal therapy can be performed by isolating in a negative pressure room, avoiding travel to infected areas, and avoiding temporary sexual intercourse, using condoms, and avoiding direct contact with patients infected with monkeypox, particularly in the MSM community. (Bunge et al. 2022).

There is currently no effective treatment in human clinical trials for the monkeypox virus other than additional supportive therapy. Tecovirimat and Brincidofovir have been approved in the United States to treat monkeypox and have shown promise in small-scale tests on test animals. Scientists developed two vaccines to combat the spread of the monkeypox virus: the replication-deficient Modified Vaccinia Ankara (MVA) vaccine and the replication-competent vaccinia vaccine derived from the vaccinia virus. In Indonesia, the vaccine is only given to those who are at risk of contracting monkeypox. (Mileto et al. 2022).

CONCLUSIONS

Monkeypox cases in 2022 require additional research to reduce and prevent, particularly in the LGBT community and those at risk of infection, pregnant women and babies, and medical personnel in close contact with patients. Reducing travel abroad, particularly to countries with a high incidence of monkeypox, and reducing direct contact with sufferers, such as abstaining from sex and using condoms in the LGBT community, are two non-medicinal procedures that can help reduce the morbidity of monkeypox infection. The treatment has not been proven effective, and vaccines are still scarce, particularly in Indonesia. Only a few cases have been reported in Indonesia.

REFERENCE

Admin. 2020. "Epidemiological update: monkeypox outbreak." *European Centre for Disease Prevention and Control (ECDC)*.

Antinori, Andrea, Valentina Mazzotta, Serena Vita, Fabrizio Carletti, Danilo Tacconi, Laura Emma Lapini, Alessandra D'Abramo, Stefania Cicalini, Daniele Lapa, Silvia Pittalis, Vincenzo Puro, Marco Rivano Capparuccia, Emanuela Giombini, Cesare Ernesto Maria Gruber, Anna Rosa Garbuglia, Alessandra Marani, Francesco Vairo, Enrico Girardi, Francesco Vaia, Emanuele Nicastri, Alessandro Agresta, Francesco Baldini, Tommaso Ascoli Bartoli, Alessia Beccacece, Rita Bellagamba, Aurora Bettini, Nazario Bevilacqua, Marta Camici, Francesca Colavita, Angela Corpolongo, Gabriella De Carli, Federico De Zottis, Francesca Faraglia, Massimo Francalancia, Concetta Maria Fusco, Roberta Gagliardini, Saba Gebremeskel, Maria Letizia Giancola, Giulia Gramigna, Elisabetta Grilli, Susanna Grisetti, Simone Lanini, Gaetano Maffongelli, Andrea Mariano, Ilaria Mastrorosa, Giulia Matusali, Silvia Meschi, Claudia Minosse, Martina Moccione, Annalisa Mondi, Vanessa Mondillo, Nicoletta Orchi, Sandrine Ottou, Carmela Pinnetti, Silvia Rosati, Martina Rueca, Laura Scorzolini, Eliana Specchiarello, dan Alessandra Vergori. 2022. "Epidemiological, clinical and virological characteristics of four cases of monkeypox support transmission through sexual contact, Italy, May 2022." *Eurosurveillance* 27(2). doi: 10.2807/1560-7917.ES.2022.27.22.2200421.

De Baetselier, Irith, Christophe Van Dijck, Chris Kenyon, Jasmine Coppens, Johan Michiels, Tessa de Block, Hilde Smet, Sandra Coppens, Fien Vanroye, Joachim Jakob Bugert, Philipp Girl, Sabine Zange, Laurens Liesenborghs, Isabel Brosius, Johan van Griensven, Philippe Selhorst, Eric Florence, Dorien Van den Bossche, Kevin K. Ariën, Antonio Mauro Rezende, Koen Vercauteren, Marjan Van Esbroeck, Kadrie Ramadan, Tom Platteau, Karin Van Looveren, Jolien Baeyens, Cindy Van Hoyweghen, Marianne Mangelschots, Leo Heyndrickx, Anne Hauner, Betty Willems, Emmanuel Bottieau, Patrick Soentjens, Nicole Berens, Saskia Van Henten, Stefanie Bracke, Thibaut Vanbaelen, Leen Vandenhove, Jacob Verschueren, Kevin K. Ariën, Marie Laga, Jef Vanhamel, dan Bea Vuylsteke. 2022. "Retrospective detection of asymptomatic

monkeypox virus infections among male sexual health clinic attendees in Belgium." *Nature Medicine* 28(11):2288–92. doi: 10.1038/s41591-022-02004-w.

Bunge, Eveline M., Bernard Hoet, Liddy Chen, Florian Lienert, Heinz Weidenthaler, Lorraine R. Baer, dan Robert Steffen. 2022. "The changing epidemiology of human monkeypox—A potential threat? A systematic review." *PLoS Neglected Tropical Diseases* 16(2). doi: 10.1371/journal.pntd.0010141.

Jahan, Shah Md Sarwer, dan SM Nurun Nabi. 2022. "Monkeypox: A Contemporary Review for Healthcare Professionals." *Journal of Rangpur Medical College* 7(2):1–3. doi: 10.3329/jrpmc.v7i2.62637.

Jang, Young Rock, Minji Lee, Hwachul Shin, Jin Won Kim, Myung min Choi, Young Mi Kim, Min Ji Lee, Jinsil Kim, Hye Kyoung Na, dan Jin Yong Kim. 2022. "The First Case of Monkeypox in the Republic of Korea." *Journal of Korean Medical Science* 37(27). doi: 10.3346/jkms.2022.37.e224.

Kesehatan, A. 2022. "MonkeyPox Terdeteksi di Jakarta."

Mileto, Davide, Agostino Riva, Miriam Cutrera, Davide Moschese, Alessandro Mancon, Luca Meroni, Andrea Giacomelli, Giovanna Bestetti, Giuliano Rizzardini, Maria Rita Gismondo, dan Spinello Antinori. 2022. "New challenges in human monkeypox outside Africa: A review and case report from Italy." *Travel Medicine and Infectious Disease* 49. doi: 10.1016/j.tmaid.2022.102386.

Moore MJ, Rathish B, Zahra F. 2022. "Monkeypox." *StatPearls Publishing*.

Petersen, Eskild, Ibrahim Abubakar, Chikwe Ihekweazu, David Heymann, Francine Ntoumi, Lucille Blumberg, Danny Asogun, Victor Mukonka, Swaib Abubaker Lule, Matthew Bates, Isobella Honeyborne, Sayoki Mfinanga, Peter Mwaba, Osman Dar, Francesco Vairo, Maowia Mukhtar, Richard Kock, Tim McHugh, Giuseppe Ippolito, dan Alimuddin Zumla. 2019. "Monkeypox — Enhancing public health preparedness for an emerging lethal human zoonotic epidemic threat in the wake of the smallpox post-eradication era." *International Journal of Infectious Diseases* 78:78–84. doi: 10.1016/j.ijid.2018.11.008.

Vivancos, Roberto, Charlotte Anderson, Paula Blomquist, Sooria Balasegaram, Anita Bell, Louise Bishop, Colin S. Brown, Yimmy Chow, Obaghe Edeghere, Isaac Florence, Sarah Logan, Petra Manley, William Crowe, Andrew McAuley, Ananda Giri Shankar, Borja Mora-Peris, Karthik Paranthaman, Mateo Prochazka, Cian Ryan, David Simons, Richard Vipond, Chloe Byers, Nicholas A. Watkins, Will Welfare, Elizabeth Whittaker, Claire Dewsnap, Allegra Wilson, Yvonne Young, Meera Chand, Steven Riley, Susan Hopkins, Andre Charlett, Thomas Finnie, Helen McAuslane, Browne Weeple, Helen Fifer, Katy Sinka, David Edwards, Jamie Lopez-Bernal, Tommy Rampling, Andrew Lee, Dominic Mellon, Merav Kliner, Nick Young, Sophia Makki, Suzanne Coles, Wendi Shepherd, Victoria Latham, Ruby Tabor, Alice Graham, Jin Min Yuan, Neil MacDonald, Amoolya Vusirikala, Thomas Ma, Kristine Cooper, dan Maria Saavedra-Campos. 2022. "Community transmission of monkeypox in the United Kingdom, April to May 2022." *Eurosurveillance* 27(2). doi: 10.2807/1560-7917.ES.2022.27.22.2200422.