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Analysis of Condom Use Behavior and Number of Sex Partners as Risk Factors for HIV/AIDS in the Group of Men Having Sex with Men in Kendari City Hospital

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ABSTRACT

Introduction: Based on the results of observations, it shows that the majority of respondents engage in more unprotected anal sex and ejaculatory oral sex. This activity is mostly carried out by different sexual partners with a very regular frequency, which results in the transmission of HIV/AIDS. This is what is interesting for researchers to conduct research on Behavioral Analysis of Condom Use and Number of Sex Partners as Risk Factors for HIV/AIDS in the Group of Men Who Have Sex with Men at the Kendari City Regional Hospital.

Method: This type of research is quantitative research with a case control research design. The case population in this study was 349 men with male sex with positive (+) HIV test results and 423 men with male sex with negative (-) HIV test results. The sample in this study was taken using a random sampling method, totaling 75 respondents using the Lemeshow formula.

Result: Confidence Interval (CI) at the 95% confidence level with a lower limit value of 3.361 and an upper limit of 15.229. The OR value obtained shows that condom use is a risk factor with LL and UL values and Confidence Interval (CI) at the 95% confidence level with a lower limit value of 9.090 and an upper limit of 48.517.

Conclusion: Condom use and number of sexual partners are behavioral risk factors for HIV/AIDS in the group of men having sex with men at the Kendari City Regional Hospital.

Introduction

HIV (Human Immunodeficiency Virus) is a global problem that is a health problem for Indonesian society. HIV is a virus that can disrupt the immune system that has been built up in the

human body by infecting and destroying CD4 cells. The spread of HIV tends to be rapid and widespread. HIV transmission can occur through direct contact with bodily fluids from an infected

person, such as blood, breast milk, semen and vaginal fluids.^[1]

The increase in cases of people testing positive for HIV every year has become a health problem that has yet to be resolved. This has links with broad socio-economic sectors. Moreover, this suffering will not only be experienced by people living with HIV/AIDS (PLHIV), but the impact will be felt by the sufferer's family and the community. The impact of the HIV/AIDS epidemic is not only a health problem, but also political, economic, social, ethical, religious and legal implications, and moreover, sooner or later, this will affect almost every aspect of human life. This threatens efforts to improve the quality of life of the people of the country. Apart from that, it is also an obstacle to development so the government must immediately take policy steps to prevent and overcome it.^[2]

The prevalence of HIV in the world based on Global Health Observatory data shows that around 0.8% of adults aged 15 – 49 years worldwide are living with HIV. The African continent is the continent that has the highest HIV prevalence in the world, namely around 4.5% and the lowest HIV prevalence in the West Pacific, namely around 0.1%. Meanwhile, the prevalence of MSM globally in 2018 was 17% and increased in 2019 to 23%.^[3] Indonesia is part of the Southeast Asia region and the prevalence of HIV in Southeast Asia is around 0.3 - 0.4%. The highest prevalence of HIV in Southeast Asia among adults aged 15 - 49 years is Thailand with a prevalence of around 1.1%, Myanmar at 0.6% , Indonesia is ranked third, namely at 0.5%, Vietnam at 0.3%, and the Philippines at 0.2%.^[4]

The estimated number of HIV-AIDS cases in Indonesia until 2022 will reach 519,158 cases spread across all provinces. Based on the distribution of HIV-AIDS cases, it is reported that in 5 (five) provinces, the highest prevalence of cases is Papua (1.03%), DKI Jakarta (0.85%), East Java (0.13%), West Java (0.13 %), and Central Java (0.11%). Estimated people who suffer from AIDS and die, Indonesia is in second place after India with 32,000 people. HIV infection in Indonesia is predominantly found in key populations with a prevalence of 18.9% among MSM, 12.7% among injecting drug users, 11.9% among transvestite, 2.1% among sex workers, and 0.7% among prisoner.^[5]

In Indonesia, the prevalence of HIV/AIDS cases according to risk groups in 2019, MSM is in third place for the percentage of HIV positive people carrying out an HIV test, namely 8.75%, second place is PS customers (Sex Workers) at 10.75% and those who occupy The first rank is Sero Discordant (one partner has HIV, while the other does not) amounting to 92.19%.^[6]

Southeast Sulawesi Province ranks 29th out of 34 provinces in Indonesia with a cumulative number of HIV/AIDS cases until 2022 of 2,346 cases (prevalence 0.01%). The discovery of new HIV/AIDS cases in the last 3 years has increased, namely in 2020 there were 319 cases (IR = 0.012%), in 2021 there were 445 cases (IR = 0.016%), and in 2022 there were 536 cases (IR = 0.0198%). The highest distribution of HIV/AIDS cases in Southeast Sulawesi was found in Kendari City with 155 cases (IR = 0.044%) in 2021, 224 cases (IR = 0.063%) in 2022, and 321 cases (IR = 0.088%) in 2023. Even though Southeast Sulawesi Province ranks 29th in HIV/AIDS cases nationally, new cases have increased in the last 5 (five) years. Meanwhile, for Kendari City, the proportion of new cases found was 76.5%.^[7]

Men Sex Men are one of the key and high-risk groups which is still a problem in the world, including in Indonesia. Some key populations (IDUs, sex workers and transvestite) show that new HIV infections in the population aged 15 years and over have consistently decreased over time, but this is not the case in the low-risk male and female sex population (partners of the key population). In these two groups, the rate of new HIV infections actually increased.^[8]

Kendari City Regional General Hospital is one of the hospitals that has been providing treatment, support and care in Kendari City since 2016. There has been a significant increase in new HIV/AIDS cases every year, especially in the MSM group. The average proportion of HIV/AIDS cases among MSM in 2021 is 65.4%; in 2022 it will be 74.3%, and in 2023 it will be 77.1%. Meanwhile, the total number of MSM cases was 448 cases (63.31%). Of these cases, 349 people were still undergoing ARV therapy, while 99 people had died and were referred to other services.^[9]

The results of the researcher's initial study through in-depth interviews with 10 MSM respondents showed that as many as 8 people

(80%) had anal sex with different sexual partners (more than 1 person) without protection (condoms) accompanied by oral sex and rimming. Meanwhile, the other two people (20%) enjoy having sex more by rubbing their penis against their groin or between their thighs, which is a pleasure in itself for them and their partners (Interview, 28 November 2023). Based on the results of observations, it shows that some Most respondents engaged in unprotected anal sex and ejaculatory oral sex. This activity is carried out more often by different sexual partners with a very regular frequency, which results in the transmission of HIV/AIDS.

The number of sexual partners can also influence the risk of HIV transmission, especially if engaging in unprotected sexual relations with at-risk partners or if there is a high change of partners. The chance of HIV being transmitted through sexual intercourse is quite large, so having multiple partners is a special factor that needs to be watched out for. Unprotected sexual contact with multiple clients or partners increases susceptibility to HIV infection.

Inconsistent use of condoms during sexual intercourse and changing sexual partners can increase the risk of HIV transmission. Sexual practices such as anal sex without a condom, oral ejaculation, rimming, fingering and rubbing the penis against a partner's thigh or groin are considered high risks for HIV transmission because the anal membrane can be more susceptible to small wounds that can allow the virus to enter. In addition, having many sexual partners or changing partners frequently can increase the risk of exposure to HIV, especially if there is no use of condoms. High-risk sexual behavior by MSM couples is indicated, among other things, by several things, namely a history of having had sex with previous partners, never using condoms, having high frequency of intercourse with a partner, feeling that he and his partner are healthy, even though their health is actually not completely guaranteed.

Method

This type of research is quantitative research with a case control research design. The population in this study consists of cases and a control population. The population of cases in this

study is all groups of Men Sex Men who have had an HIV test with positive (+) HIV test results and have received treatment ARVs at the Kendari City Hospital since the last 6 (six) months and 349 people domiciled in Kendari City. Meanwhile, the control group study population was all groups of Men Having Sex with Men (MSM) who had undergone HIV testing with negative (-) HIV test results at the Kendari City Regional Hospital during the last 6 (six) months and were 423 people domiciled in Kendari City.

The sample in this study consisted of a case group sample and a control group sample. The group of Men Having Sex with Men (MSM) who had undergone an HIV examination at the Kendari City Regional Hospital, with positive rapid test results, and met the inclusion and exclusion criteria were included as a case group sample. taken using a random sampling method, totaling 75 respondents using the Lemeshow formula.

Result

Table 1 showed that of the 58 respondents with high-risk condom use criteria, there were 45 respondents (77.6%) who were HIV positive (cases) and 13 respondents (22.4%) who were HIV negative (controls). Meanwhile, of the 92 respondents with low-risk condom use criteria, there were 62 respondents (67.4%) who were HIV negative (controls) and 30 respondents (32.6%) who were HIV positive (cases). The results of the risk factor analysis showed an Odds Ratio (OR) value of 7.154 ($OR > 1$), meaning that respondents who never or sometimes used condoms during sexual intercourse were 7.154 times more at risk of suffering from HIV/AIDS compared to respondents who always used condoms during sexual intercourse. sexual. Confidence Interval (CI) at the 95% confidence level with a lower limit value of 3.361 and an upper limit of 15.229. The OR value obtained shows that condom use is a risk factor with the LL and UL values not including the number 1 which means it is statistically significant. Based on the results of this analysis, condom use is a risk behavior factor for

HIV/AIDS in the group of men having sex with men at the Kendari City Regional Hospital.

Table 2 showed that of the 72 respondents with the criteria for the number of high-risk sexual partners, there were 60 respondents (83.3%) who were HIV positive (cases) and 12 respondents (16.7%) who were HIV negative (controls). Meanwhile, of the 78 respondents with the criteria for the number of low-risk sexual partners, there were 63 respondents (80.8%) who were HIV negative (controls) and 15 respondents (19.2%) who were HIV positive (cases). The results of the risk factor analysis showed an Odds Ratio (OR) value of 21,000 (OR > 1), meaning that respondents who had more than 1 sexual partner in sexual intercourse were 21 times more at risk of suffering from HIV/AIDS compared to

respondents who had one sexual partner in sexual intercourse. sexual. Confidence Interval (CI) at the 95% confidence level with a lower limit value of 9,090 and an upper limit of 48,517. The OR value obtained shows that the number of sexual partners is a risk factor with the LL and UL values not including the number 1 which means it is statistically significant. Based on the results of this analysis, the number of sexual partners is a behavioral risk factor for the occurrence of HIV/AIDS in the group of men having sex with men at the Kendari City Regional Hospital.

Table 1
Analysis of Risk Factors for Condom Use on the Incident of HIV/AIDS in the Group of Men Having Sex at the Kendari City Regional Hospital Unit in 2024

Sex at the Khandari City Regional Hospital Unit in 2024							
Condom Use	HIV/AIDS incidence				Total		Statistical analysis
	Case		Control				
	n	%	n	%	n	%	
High Risk	45	77.6	13	22.4	58	100.0	OR=7.154 L= 3.361 U= 15.229
Low Risk	30	32.6	62	67.4	92	100.0	
Total	75	50.0	75	50.0	150	100.0	

Table 2
Analysis of risk factors for the number of sexual partners on the incidence of HIV/AIDS in the group of men having male sex at the Kendari City Regional Hospital Unit in 2024

Number of Sex Partners	HIV/AIDS incidence				Total		Statistical analysis
	Case		Control				
	n	%	n	%	n	%	
High Risk	60	83.3	12	16.7	72	100.0	OR=21,000 L=9,090 U=48,517
Low Risk	15	19.2	63	80.8	78	100.0	
Total	75	50.0	75	50.0	150	100.0	

Discussion

Risk Factors for Using Condoms on the Incident of HIV/AIDS in the Male Sex Group

One way to prevent HIV/AIDS among Male Sex Group is the consistent use of condoms and lubricants every time they have sexual intercourse with a sexual partner. MSM are a high-risk population whose presence can be a time bomb for

HIV/AIDS infection. A condom is a thin rubber sheath made from various materials including latex (rubber), plastic (vinyl), or colored or colorless natural materials (animal products) that is placed on the penis during sexual intercourse. The use of condoms is one of the efforts to prevent HIV/AIDS and sexually transmitted diseases used by men. Proper and correct use of condoms can

reduce the risk of sexual transmission of HIV. As shown by Thailand, which was able to reduce the rate of HIV transmission with the 100 percent success of the condom program, which requires all customers who go to local locations to use condoms.

Gay men generally identify themselves as same-sex oriented people and appear male. In Male Sex Group, people do not want to clearly identify themselves and can be bisexual and usually marry a woman as a wife, making these good women vulnerable to HIV/AIDS, not to mention having children. This group is more difficult to reach because they tend to be closed because they tend to present themselves as good men, do not carry out HIV tests, so the program cannot reach them. In fact, the same as gays and transvestite, unsafe sex by MSM carries a high risk of transmitting HIV. In one community, a Male Sex Group may have sexual relations with transvestite, direct or indirect sex workers, as well as with Male Sex Group in other communities. Male Sex Group can 'appear' in various communities and opportunities. This extensive sexual network increases the risk of transmission to MSM and their sexual partners. If a Male Sex Group is infected with an STI or HIV or both at the same time, the Male Sex Group will also spread HIV in their community.

Based on bivariate analysis, it shows that 77.6% of respondents have a fairly high risk of using condoms and are HIV positive. This can be explained that someone who does not use a condom during sexual intercourse can be infected with HIV because the HIV virus can be transmitted through direct contact with infected body fluids, such as blood, sperm, vaginal fluids and anal fluids. In unprotected sexual intercourse, there is a risk of direct contact between HIV-infected body fluids and the mucous membranes or open wounds of the sexual partner. This allows the HIV virus to enter the bloodstream and cause infection. Some conditions, such as open wounds, other sexually transmitted infections, or inflammation of the genital area, can increase the risk of HIV transmission even without condom use. The risk of HIV transmission is also related to

the level of viral load in infected body fluids. The higher the viral level, the greater the risk of HIV transmission, especially if there is contact with wounds or mucous membranes. Some types of sexual intercourse carry a higher risk of HIV transmission than others. For example, anal intercourse has a higher risk than vaginal intercourse because the anus is more susceptible to tears and wounds.

The results of the analysis showed that 22.4% of respondents had a fairly high risk of using condoms and were HIV negative. This can be explained that even if someone does not use a condom during sexual intercourse, it does not guarantee that they will immediately be infected with HIV. HIV transmission occurs when a person is exposed to HIV-infected body fluids (such as blood, sperm, vaginal fluids, or anal fluids) from someone who is already infected. If a person's sexual partners do not have HIV or their HIV status is known and they are undergoing effective HIV treatment (which reduces the level of the virus in their blood to undetectable), then the risk of HIV transmission can be significantly reduced. Even if a person does not use a condom, HIV transmission still depends on exposure to infected body fluids. For example, the risk of HIV transmission is higher in anal intercourse compared to vaginal intercourse, because the anus is more susceptible to cuts or tears that allow the HIV virus to enter the body.

The results of the analysis showed that 64.7% of respondents had a fairly low risk of using condoms and were HIV negative. This can be explained that someone who uses condoms correctly and at every sexual intercourse has a high level of protection against HIV transmission. This is because condoms can form an effective physical barrier against HIV-infected body fluids. Condoms serve as an effective physical barrier against HIV-infected bodily fluids. Condoms prevent direct contact between HIV-infected body fluids and mucous membranes or open wounds on sexual partners. By using condoms, exposure to HIV-infected body fluids can be significantly reduced. This reduces the chance of the HIV virus entering the bloodstream. Condoms manufactured with good quality have good resistance to tearing or leaking, as long as they are used correctly. Torn or holey condoms can increase the risk of HIV transmission. Some condoms are even equipped

with water-based lubricants that contain chemicals that can kill viruses, increasing protection. Condoms also protect against unexpected contact with bodily fluids, such as contact with invisible blood or vaginal fluids during sexual intercourse.

The results of the analysis showed that 32.6% of respondents had a fairly low risk of using condoms while being HIV positive. This can be explained by the fact that although the use of condoms can significantly reduce the risk of HIV transmission, it does not provide 100% protection. Condoms that are damaged, torn, or deformed can result in direct contact between HIV-infected body fluids and mucous membranes or open wounds on sexual partners. This increases the risk of HIV transmission. If a condom is not put on properly or removed too soon after ejaculation, it can reduce the condom's effectiveness in preventing HIV transmission. Although condoms provide a good physical barrier, there is a possibility of contact between HIV-infected bodily fluids and areas of the body that are not protected by condoms, such as the area around the base of the penis or other genital areas. Condoms that are expired or stored improperly may lose their elasticity or become more susceptible to tearing, increasing the risk of HIV transmission. Therefore, although condoms are a very effective tool in preventing HIV transmission, no method of protection provides a 100% guarantee. It is important for individuals to use condoms correctly every time they have sexual intercourse and pay attention to factors that may affect condom effectiveness. Additionally, regular HIV testing and communicating openly with sexual partners about HIV status are important steps in reducing the risk of HIV transmission.

The results of this analysis show that condom use is a risk behavior factor for HIV/AIDS in the Men Having Sex with Men group at the Kendari City Regional Hospital with an Odds Ratio (OR) value of 7.154 ($OR > 1$), meaning respondents who never or sometimes use condoms. During sexual intercourse, there is a 7.154 times greater risk of suffering from HIV/AIDS compared to respondents who always use condoms during sexual intercourse. Confidence Interval (CI) at the 95% confidence level, with a lower limit value of 3.361 and an upper limit of 15.229.

Based on the research results, it shows that in general, as many as 73.3% of respondents and

their partners always provide condoms, whereas for case respondents only 57.3% always provide condoms. Meanwhile, 89.3% of control respondents always provided condoms. From these results it is known that control respondents provided more condoms than case respondents. This is done by respondents as the main means of protection to prevent transmission of HIV/AIDS and other sexually transmitted infections. Some respondents did not always provide condoms because access to them was difficult and some respondents even said that they were very embarrassed if they had to buy them or ask health workers or NGO officials. Apart from that, sometimes they also forget to provide condoms or even their stock of condoms has run out.

The results of research regarding the use of condoms by respondents show that overall, only 64.7% of respondents used condoms during sexual intercourse. Control respondents used the most condoms, namely 85.3%; while case respondents were only 44.0%. The reason respondents did not want to use condoms during sexual intercourse was due to low perception factors, where some respondents felt that they or their partners were not infected with sexually transmitted diseases, so they considered the risk small and felt there was no need to use condoms. There are also some respondents who feel that using a condom can reduce the sensation or pleasure during sexual intercourse. They may seek more intimate or intense experiences and view condoms as a barrier to this. Apart from that, not all respondents fully understand the benefits of using condoms in preventing the transmission of sexual diseases. Lack of adequate sex education or misinformation may also influence their decisions.

The results of research regarding the existence of support or mutual support between respondents and their sexual partners in using condoms show that overall, 67.3% of respondents support each other in using condoms with their partners when having sexual relations, where in cases only 50.7% of respondents support each other, while the majority of control respondents or around 84.0% supported each other in using condoms during sexual intercourse. Partner support in condom use can have a significant impact in promoting safe and responsible sexual practices. Some respondents first communicate openly with their sexual partners about their

respective preferences and needs and are more likely to reach an agreement about condom use. This communication allows both to plan and decide on the use of condoms as part of their sexual practices. According to them, when both partners agree to use condoms, this can be a sign of mutual respect and prioritizing each other's health and safety. In addition, information was obtained that couples who share knowledge about the importance of using condoms and information about sexual health can support each other in increasing their awareness and knowledge about safe sexual practices.

In the Wald Test, a Wald value was obtained of 7.397 (sig. 0.007). The significance value of 0.007 is smaller than the significance level of 0.05 (5%). So, it can be concluded that the hypothesis is accepted, namely that the use of condoms has a significant effect on the incidence of HIV/AIDS. The increasingly inconsistent use of condoms (high risk) will influence the incidence of HIV/AIDS in the group of men having sex with men at the Kendari City Regional Hospital.

According to the AIDS Commission, of the 266 homosexuals who used condoms consistently, only 97 people or 36%. This is in line with Laksana & Lestari's research in the homosexual group, condom use still tends to be low, namely 50%.^[10] Based on research by Maurice Kwong-Lai et al., in Carolin et al., it shows that 43% of men who often have anal sex do not use condoms at all, this is because they think their sexual partners are healthy and free from disease.^[10] This is like the results of research by Malonzo, which revealed that homosexuals feel happy by expressing their sexual needs and desires so that they show their sexual partners that they are very special so that sexual relations are more enjoyable without a condom.^[11]

The results of this study indicate that the use of condoms in Man Sex Man towards behavior at risk of contracting HIV/AIDS, because Man Sex Man having good knowledge about preventing HIV/AIDS transmission by using condoms during intercourse is one of the first steps in preventing HIV/AIDS. Usually during intercourse Man Sex Man provide your own condoms or bring your own condoms. Besides that, Man Sex Man usually reminds its customers to use condoms.

Based on this research, it is known that not all homosexual groups have used condoms in the

last 1 month when having sex (selected sexual activity). The homosexual community uses condoms only during anal sex activities, while during oral sex activities they do not use condoms because during oral sex it is considered not very as dangerous as anal sex. During anal sex there will most likely be abrasions which will make it easier for infections to spread, whereas this is not the case with oral sex. Respondents often neglected to use condoms or pelicans when they were with a permanent partner who was believed to be free from disease. In fact, most gays have a Multi partnership relationship pattern and this is not accompanied by consistent use of condoms and pelicans.

One of the factors causing respondents' inconsistent use of condoms is that they feel uncomfortable or cannot feel satisfaction in sexual intercourse when using a condom. Apart from that, another reason is because of a request from the sexual partner not to use a condom. One form of safe sex that homosexuals can do is to consistently use a condom every time they have sexual relations with their partner.^[12] In this study, it was proven that homosexuals with HIV (+) were more likely to not use condoms during sexual intercourse compared to homosexuals with HIV (-). Low use of condoms among people Man Sex Man This happens because they want more sexual sensation and are afraid of making their partner feel untrusted.

The results of this research are in line with other research who stated that many respondents in the case group did not consistently use condoms, namely 63%, in the results of his research he stated that there was an influence of anal intercourse without using condoms on the incidence of HIV/AIDS, both as a receptive (below) and insertive (above) partner. The results of statistical tests show that respondents who do not consistently use condoms during anal intercourse have 3.40 times the risk of contracting HIV compared to respondents who consistently use them.^[13]

One of the factors causing respondents' inconsistent use of condoms is that they feel uncomfortable or cannot feel satisfaction in sexual intercourse when using a condom. Apart from that, another reason is because of a request from the sexual partner not to use a condom.

Based on Aryastuti's research, it is known that not all homosexual groups use condoms when

having sex (their chosen sexual activity). In the homosexual community, they only use condoms during anal sex, while they do not use condoms during oral sex because oral sex is considered not as dangerous as anal sex. During anal sex there will most likely be abrasions which will make it easier for infections to spread, whereas this is not the case with oral sex.^[12]

This is in line with research by Limasale et al., where it was found that 70.2% of respondents did not use condoms and lubricants consistently from the first time the respondent had anal sex until the interview was conducted. Respondents often neglected to use condoms or lubricants when they were with a regular partner who was believed to be free from disease. Even though most gays have a multi partnership relationship pattern and this is not accompanied by consistent use of condoms and lubricants.^[12]

Low use of condoms can increase the risk of HIV/AIDS transmission. Based on research conducted by the National Institute of Health in collaboration with the UN agency that deals with AIDS, correct and consistent use of condoms can reduce the risk of contracting HIV/AIDS by up to 85%. The majority of respondents in this study sometimes use condoms when having sexual relations. Meanwhile, the decrease in HIV through the exchange of body fluids which can occur during sexual intercourse can be prevented by using contraceptives such as condoms. However, when used correctly in every sexual encounter, condoms are a proven means of preventing HIV infection. However, despite this, no protector is 100% effective.^[14]

This research is in line with research conducted by Susanto which states that the group of ship crew workers is at risk of being infected with HIV/AIDS because only 13% consistently use condoms with female sex workers.^[15] Backed by Darlis which also states that there is a relationship between the use of condoms and the risk behavior of contracting HIV/AIDS among ship crew at Soekarno-Hatta Port, Makassar.^[16] However, this is contrary to Linda Mayarni Sirait's research which states that the proportion of condom use among ship crew is still very low, namely around 23.2%.^[17]

Risk Factors for the Number of Sex Partners on the Incident of HIV/AIDS in the Male Sex Group

Men who have sex with men are men who admit to being bisexual/homosexual. Men Sex Men tend to have many sex partners, both men and women and many of them also buy and sell sex, they admit to having sex with many partners in the last month, both women and men. The increase in the number of sex partners is positively correlated with an increased risk of contracting HIV.

Based on bivariate analysis, it shows that 83.3% of respondents had more than 1 HIV positive sexual partner. This can be explained by the fact that the more sexual partners a person has, the higher their chances of being exposed to someone who has HIV. A high number of sexual partners increases the risk of exposure to HIV-infected body fluids. A person who has multiple sexual partners may be more likely to engage in unprotected sexual intercourse, especially if they do not use a condom with every partner. This increases the risk of HIV transmission if one partner is infected. A person who has multiple sexual partners may have contact with groups of people who have higher HIV prevalence rates, such as commercial sex workers. Lack of knowledge about how to prevent HIV transmission or access to adequate sexual health services can make someone who has many sexual partners more vulnerable to HIV.

The results of the analysis showed that 16.7% of respondents had more than 1 sexual partner who was HIV negative. This can be explained that even if someone has many sexual partners, it does not automatically mean they will be infected with HIV. People who are sexually active and have multiple sexual partners may be aware of the risk of HIV transmission and actively use protective methods, such as condoms, with every sexual encounter. Consistent and correct use of condoms can significantly reduce the risk of HIV transmission. The person may have received good sexual education about how to prevent transmission of HIV and other sexually transmitted

diseases. They can have good knowledge about safe sexual practices and practice them in their lives. A person who is sexually active and has multiple sexual partners may undergo regular HIV testing to check their HIV status. By knowing their HIV status, they can take the necessary steps to protect themselves and their partners from contracting the virus. The person may choose sexual partners who are also aware of the importance of safe sexual practices and communicate openly about condom use and their HIV status.

Collaboration on safe sexual practices can help reduce the risk of HIV transmission. A person who has access to good health care may have easy access to condoms, HIV testing, counseling about safe sex, and other services that support their sexual health. Sometimes, even though someone engages in high-risk sexual behavior, they may not become infected with HIV due to luck or lack of direct exposure to the virus.

The results of the analysis showed that 80.8% of respondents had only 1 HIV negative sexual partner. This can be explained that the sexual partner may not be infected with HIV or have a negative HIV status. If the sexual partner does not have HIV, the risk of direct HIV transmission is eliminated. Even if a person only has one sexual partner, consistent and correct use of condoms can provide additional protection against HIV transmission. Using condoms in every sexual relationship with a partner whose HIV status is unknown or who has unknown HIV status can reduce the risk of HIV transmission.

A person who is faithful in a monogamous relationship with a partner who is not infected with HIV also has a low risk of contracting HIV, as long as the partner is also faithful. In this situation, exposure to the HIV virus from sexual partners is very low or even non-existent. Even if a person has only one sexual partner, undergoing regular HIV testing is still important. By knowing their and their partners' HIV status, they can take the necessary steps to protect themselves and their partners from contracting HIV. Factors such as

good health, good personal hygiene, and appropriate medical care can help a person maintain a strong immune system against infections, including HIV. It is important to note that there is no 100% guarantee against HIV transmission. Even if a person has only one sexual partner, it is still possible to transmit HIV if certain conditions, such as improper condom use or other exposure to infected body fluids, occur. Therefore, it is important to always practice safe sex, communicate openly with sexual partners, and undergo regular HIV testing to protect our and our partners' sexual health.

The results of the analysis showed that 19.2% of respondents had only 1 HIV positive sexual partner. This can be explained that even if a person has only one sexual partner, if that partner is infected with HIV and does not know or does not disclose their HIV status, the risk of HIV transmission remains. Sometimes, even though a person has only one sexual partner, they may choose not to use a condom or a condom may not be used correctly each time they have sexual intercourse. This increases the risk of exposure to HIV-infected body fluids. Apart from sexual intercourse, a person can become infected with HIV through exposure to contaminated needles or infected blood transfusions. If a person is exposed to these risk factors, the risk of HIV transmission remains, regardless of the number of sexual partners. There are individual factors that can increase the risk of HIV transmission, such as having open wounds or infected sores, using illegal drugs, or having other sexually transmitted diseases. If a person has these risk factors, their risk of transmitting HIV may increase. Sometimes, a person may become infected with HIV by chance or due to lack of protection during sexual intercourse. These can include broken, torn condoms, or improper use of condoms.

The results of this analysis show that the number of sexual partners is a behavioral risk factor for the occurrence of HIV/AIDS in the Men Sex Men group at the Kendari City Regional Hospital with an Odds Ratio (OR) value of 21,000

(OR > 1), meaning that respondents have more than 1 number of sexual partners. During sexual intercourse, there is a 21 times greater risk of suffering from HIV/AIDS compared to respondents who have one sexual partner during sexual intercourse. Confidence Interval (CI) at the 95% confidence level with a lower limit value of 9,090 and an upper limit of 48,517.

The research results showed that the majority of respondents did not have a permanent partner, 55.33%. Based on information obtained from several respondents, based on the experiences they have had or seen, the group of men having sex, men generally do not have partners who continue to have sexual relations. This means that the Men Sex Men group enjoys more casual sexual relations with multiple partners.

Information obtained through research questionnaires shows that control respondents tend to have only one permanent partner compared to case respondents. In the case group, only 26.7% had a permanent partner, while in the control group 86.7% had a permanent partner. Sexual behavior with multiple partners tends to be very risky for HIV infection and other sexually transmitted infections. According to information from several respondents, it can be concluded that for some Men Sex Men communities, especially in urban environments or on LGBT-specific dating applications, there are more possibilities to meet more people and expand social networks. This can increase opportunities to meet and interact with various people, including short relationships.

Furthermore, the research results showed that the majority of case group respondents had a history of more than 1 sexual partner, namely 66.7%, while only around 12.0% of control group respondents had a history of more than 1 sexual partner. Having a history of more than one previous sexual partner makes the respondent more susceptible to contracting HIV/AIDS. Some respondents felt safer or more comfortable in a relationship that was not too tied down, so they

had the freedom to have sexual relations with others.

In the Wald Test, a Wald value of 17.711 (sig. 0.000) was obtained. The significance value of 0.000 is smaller than the significance level of 0.05 (5%). So, it can be concluded that the hypothesis is accepted, namely the number of sexual partners has a significant effect on the incidence of HIV/AIDS. The greater number of sexual partners (high risk) influences the incidence of HIV/AIDS in the group of men having sex with men in the Kendari City Regional Hospital.

Certain lifestyles for homosexuals can pose a bad risk to physical, mental and emotional health, such as: changing partners in sexual relations (intimate relationships), having unsafe sexual relations (not using condoms), having anal sex, drinking alcohol. and drugs.^[18] The greater the number of sexual partners, the possibility of random sexual acts will increase and result in infection with diseases such as HIV and STIs. Having a permanent partner does not rule out the possibility for men having sex with other sexual partners. The average male sex partner has several sexual partners and the relationship period is relatively less than 1 year, however, because the relationship contains intimacy, his partner is referred to as a boyfriend.^[19] This was proven in this study that the case group, namely homosexuals with HIV (+), changed partners more often than homosexuals with HIV (-).

The results of this research are in line with other research, which shows that respondents with sexual habits of more than one partner have a 2.886 times greater risk of HIV and AIDS.^[13] Sumini in his research also stated that respondents who had ≥ 2 sexual partners were 2.36 times more likely to contract HIV AIDS compared to respondents who only had 1 partner. Likewise with research conducted by Rohmatullailah which stated that respondents with >1 sexual partner had 2.6 times the risk of suffering from HIV compared to respondents who had only one sexual partner.^[20]

In this study, the homosexual group with HIV (+) had more than 1 sexual partner. The more

sexual partners a respondent has, the more likely it is that random sexual acts will increase and result in infection with diseases such as HIV. Therefore, efforts to prevent HIV AIDS through being faithful to one's partner need to be further socialized and made more effective, especially in the homosexual community, considering that HIV AIDS transmission is riskier in this group. If they cannot be faithful, they are required to use condoms to avoid the risk of HIV transmission. Better monitoring and evaluation are needed so that this program can run effectively.

Based on partner change behavior, the case group tended to have multiple sex partners. If one of your sexual partners is infected with HIV, the virus will be carried in vaginal fluids or seminal fluid and pre-cum fluid/penile sap. Moreover, if there are wounds on the sexual organs.²¹ The data shows that the risk of contracting HIV from people who are already infected in cases is much higher than in controls. In the opinion of researchers, the number of partners is substantially related to the symptoms of sexually transmitted infections. Men Sex Men who constantly change partners are at risk of increasing the occurrence of sexually transmitted diseases which can increase the incidence of HIV.

Most homosexuals have more than one sexual partner and change partners with an average of 6-7 sexual partners.^[21] This is in line with research that homosexual groups tend to have many sexual partners.^[10] According to research results, many homosexuals engage in sexual behavior by changing partners, so many are found to be infected with HIV.^[22]

This is in accordance with Muryani, where the results of bivariate analysis obtained the number of sex partners in drug addicts. The risk factor that has a significant relationship to HIV infection in drug addicts is the number of sexual partners OR 4.730 (95%, CI = 1.287-17.387).²³ The results of this research are in line with several other studies, which found that an increase in the number of sex partners was positively correlated with an increased risk of HIV infection. Compared

with those who only have one sex partner throughout their life, those with 2 partners have a risk of 3.29 times, 3 partners 4.08 times, and ≥ 4 .^[23]

Research by Butt, Numbery, and Morin showed that 65 percent of respondents in the study had more than one sexual partner in the past year. Of these, most of whom were men, more than a quarter said they had had sex with more than 50 women. In Arnold Tiniap's research, he stated that the number of sexual partners was categorized into only 1 pair and ≥ 2 pairs. Statistical test results show that those who have ≥ 2 sexual partners have a 1.56 times risk (95%, CI = 0.83-2.94) of being infected with HIV compared to those who only have 1 sexual partner.^[23]

This is in line with research, which shows that there is a relationship ($p = 0.000$) between the number of sexual partners in the last 6 months and HIV status. This can happen because HIV infection at a young age is related to their number of sexual partners.^[24] However, according to Ethier & Orr, having many sexual partners or having new partners puts teenagers at risk of being infected with STDs. This can happen not only because of the higher chance of exposure to infected individuals, but also because prevention behavior sometimes changes when carried out with a different partner or new partner.^[25]

The description of sexual behavior shows that male sex men tend to have many sex partners, change partners when having sex and many of the male sex men also buy and sell sex. If conditions like this are not treated immediately, it is feared that HIV transmission will not only be concentrated in key populations, but will quickly spread widely to the general public.

Men Sex Men are known to have many partners but some Men Sex Men are also married to women. Men Sex Married men tend to avoid risky sexual behavior, are more responsible by always using condoms to protect their families. Men Sex Men who are not married or do not have a legal/official partner tend to be more at risk of contracting HIV because they are less careful in having sex because they do not have

responsibilities and have more time to look for a new partner (change partners), as in the Chinese study, in multivariable analysis, unmarried, homosexually identified men who did not have a female sex partner had six times greater odds of contracting HIV compared with married, non-homosexual men who identified as having female partner.^[26]

It is feared that Men Sex Men will be one of the potential links in the chain of HIV transmission, considering that they are heterosexual men who have a sexual orientation towards the opposite and same sex (bisexual). Heterosexual men are the ones who bridge the spread of HIV through sexual relations. If there are men having sex with men who are infected with HIV, then MSM will spread HIV in their community, men having sex with men who have wives will infect their wives, other women or prostitutes. If his wife is infected with HIV, there is also a risk of transmitting HIV to the baby the wife is carrying during pregnancy, childbirth or breastfeeding.^[27]

Risky sexual behavior is a major risk factor for HIV transmission. Risky sexual behavior is of course related to the lack of knowledge possessed by the Male Sex Male community regarding the dangers it can cause. It is feared that the existence of stigma will make people living with HIV/AIDS more secretive, making it difficult to provide health care. Apart from that, it is feared that feelings of revenge will arise among people with DHA who will try to transmit HIV to the general public.^[28]

Conclusion

Condom use and number of sexual partners are behavioral risk factors for HIV/AIDS in the group of men having sex with men at the Kendari City Regional Hospital. Therefore, it is necessary to provide education for MSM to have safe and healthy sexual relations so that they can minimize the impact of contracting the HIV/AIDS virus among men who have sex with men, help facilitate the provision of condoms and lubricants for men

who have sex with men, provide assistance for men who have sex with men so that can reduce their activity in engaging in risky sexual relations.

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