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## Risk of HIV Transmission through Sexual Activities: A Survey among HIV-Positive Gay Men in Jember, Indonesia

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### ABSTRACT

Prevention of HIV transmission can be done through safe sexual activities. It can occur if HIV-positive gay men or men who sex men (MSM) did not have sex with men or use a condom. This study aimed to identify the preventive behavior of HIV transmission through sexual activities among HIV-positive gay men. This study used a quantitative design with a descriptive exploratory approach. One hundred and one HIV-positive gay men were collected by using purposive sampling following this study. Data were collected by a questionnaire of preventive behavior of HIV transmission through sexual behavior and analyzed with an exploratory, descriptive approach. Almost all MSM still have sex (96%) after they have been diagnosed HIV-positive, and most do not always use a condom (74.3%). Sexual prevention behavior in MSM is still low and it can increase new HIV cases. Efforts are needed against HIV transmission among the gay men population by adequate information to enhance condom use awareness and commitment when they have the same sexual activities.

**Keyword:** preventive behavior, HIV transmission, sexual activities, gay men

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## INTRODUCTION

The number of HIV / AIDS case reports in Indonesia continues to increase every year (Ministry of Health, 2018). Although the incidence in Indonesia is quite large, the problem is still believed to be an iceberg phenomenon, where the number of reports does not reflect the real problem (Hardisman et al., 2018). The second-rank of the percentage of HIV infections is MSM groups (Ministry of Health, 2018). People with HIV / AIDS (PLWHA) newly found in the MSM group tend to increase. There was about a 16% increase from 2010 to 2018. This shows the problem of a significant increase in HIV / AIDS transmission among MSM.

The high increase in the number of new HIV / AIDS infections in Indonesia can be caused by risky behavior of transmitting HIV to others. In addition, the previous study suggests some MSM might be better off discussing HIV prevention with their male sexual partners than using condoms. Even in another study, PLWHA only tries without being based on actions that guarantee MSM's efforts to use condoms as a precaution for HIV transmission, because there is a large proportion of MSM who are found to still have sex by not using condoms (Fauziah et al., 2018). Negotiations on condom use, condom unavailability, discomfort, and uncertainty about the effectiveness of condoms may lead behavior to prevent HIV transmission. This phenomenon can also increase, rather than reduce HIV transmission (O'Byrne et al., 2014), especially among the MSM group.

Prevention of HIV transmission can be done through the efforts of "ABCDE" (Abstinence, Be Faithful, Condom, No Drug, and Education) (Ministry of Health, 2016). This study aims to identify the preventive behavior of HIV transmission through sexual activities among MSM, especially abstinence, faithful, and condom use.

## METHOD

A descriptive explorative method were used in this study. One hundred and one HIV-positive MSM who joined LASKAR Foundation (a non-governmental organization) were collected by using purposive sampling following this study in October 2019.

Data were collected by preventive behavior of HIV transmission through sexual behavior questionnaire (modified from Konam (2015) and Kemenkes (2016)). Questionnaire were validated by using Content Validity Index (CVI) with score of mean i-CVI=1.00. Data were analyzed with exploratory descriptive approach.

Ethical approval was declared by the Health Research Ethics Committee of the Faculty of Nursing, Universitas Jember with registration number 4878/UN25.1.14/SP/2019.

## RESULT

### Respondents' Characteristics

According to Table 1, average of respondents' age in this study was 28 years old (the youngest is 18 and the oldest is 45). Almost all HIV-positive MSM still unmarriage (89.1). More than half of MSM lives in their/familys' house (64.4%), following by in the kost (19.8%) and rented house (15.8%). Almost half of MSM lives alone (45.5%). The role of respondents in sexual activity is almost equally distributed as top, bottom, and versatile. Almost of them didn't know about HIV status of their male sexual partner (77.2%). According to table 2. almost all respondents still have sex with men (96%) with a consistent intensity of using condoms only 25.7%; in fact, nearly all respondents still have sex through anal (98%).

Table 1. Respondents' Characteristics (n=101)

Variable	n (%)
Age (years old)	
Mean (min-max) = 28.02 (18-45)	
Marrital Status	
Marriage	5 (5.0)
Unmarriage	90 (89.1)
Divorced	6 (5.9)
Living place	
In the kost	20 (19.8)
Rented house	16 (15.8)
Private/Familys' house	65 (64.4)
Living partner	
Alone	46 (45.5)
Family	52 (51.5)
Male sexual partner	3 (3.0)
Role in sexual activities with men	
Top	32 (31.7)
Bottom	31 (30.7)
Versatile	38 (37.6)
HIV positive of men sexual partner	
Yes	9 (8.9)
No	14 (13.9)
Don't know	78 (77.2)

Table2. Preventive Behavior of HIV Transmission through Sexual Activities among MSM (n=101)

Variable	n (%)
Still having sex between men	
Yes	97 (96.0)
No	4 (4.0)
Many sexual partners nowadays	
One	57 (56.4)
Two	17 (16.8)
Three	3 (3.0)
More than three	13 (12.9)
None	11 (10.9)
Many sexual partners last 6 months	
One	43 (42.6)
Two	28 (27.7)
Three	6 (5.9)
More than three	14 (13.9)
None	10 (9.9)
Faithful with a male partner	
Yes	44 (43.6)
No	31 (30.7)
Not sure	26 (25.7)
Intensity of using condoms during sex with men	
Never	1 (1.0)
Rarely	22 (21.8)
Often	52 (51.5)
Always	26 (25.7)
Refuse to have unprotected sex	
Never	7 (6.9)
Rarely	29 (28.7)
Often	22 (21.8)
Always	43 (42.6)
Reasons for not refusing to have sex without a condom (answer may be more than one)	
Afraid to be asked why	40 (39.6)
Uncomfortable	41 (40.6)
Feels sick or hot	20 (19.8)
Haven't anal sex	6 (5.9)
Male partners are also HIV positive	4 (4.0)
Others	13 (12.9)
Reasons for refusing to have sex without a condom (answer may be more than one)	
Don't want to have sexual transmitted diseases other than HIV	66 (65.3)
So other people are not infected HIV	44 (43.6)
Having oral sex with men	
Never	2 (2.0)
Rarely	20 (19.8)
Often	72 (71.3)
Always	7 (6.9)
Having anal sex with men	
Never	2 (2.0)
Rarely	16 (15.8)
Often	58 (57.4)
Always	25 (24.8)

## DISCUSSION

In the sexual behavior of PLWHA-MSM, almost all of them still have sex with other men, although some don't have sex with men anymore. It was higher than previous studies showed that about 60% of MSM report unprotected anal sex with HIV-negative or unknown HIV status (Cloete & Simbayi, 2008). When having sex with men, most do not always use condoms and do not always refuse to have sex without a condom. The less-used condoms, the higher the risk of HIV infection (Torres et al., 2017). It has become one of the factors increasing the number of HIV cases in MSM.

The reason they feel sick or hot, uncomfortable, and afraid of being asked the reason or accused of being HIV positive. Their disclosure may influence it; a previous study also mentioned that almost all positive MSM did not tell their status to their sexual partners (Kurniawan & Sulistyorini, 2019). Respondents who always refused to use condoms mostly reasoned that others would not be infected and not be infected with other sexual diseases.

That phenomenon was a particular concern because most respondents still have sexual intercourse through oral and anal. The risk that can occur is the increasing number of MSM HIV-positive or other sexually transmitted disease problems. Many studies showed that having anal sex has a more significant risk of HIV transmission. The majority of MSM do not always use condoms when having sex. A previous study mentioned that unprotective anal sex has a high risk of HIV transmission. Low use of condoms in MSM has a direct relationship with the occurrence of HIV transmission. In addition, it means their sexual activities has high risk for transmission of HIV among MSM.

## CONCLUSION

Almost all MSM who are HIV positive still have sex with men; almost all of them have anal sex, and not all MSM always use condoms. Efforts are needed to handle HIV transmission in gay men population by adequate information on MSM to increase awareness of condom use, including the program for easy access to condom for MSM.

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