

**BEHAVIORAL RELATIONSHIPS MAINTENANCE OF
REPRODUCTIVE HEALTH AGAINST THE INCIDENCE
OF SEXUALLY TRANSMITTED INFECTIONS**

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Abstract

Background: Sexually Transmitted Infections (STIs) are infections that are transmitted through sexual intercourse both vaginally, anally, and orally. The formulation of the problem in this study is what factors are related to the behavior of the Male Sex Group (LSL) to the transmission of sexually transmitted infections. **Research methods:** This study aims to analyze the relationship of reproductive health maintenance behavior to the incidence of Sexually Transmitted Infections, this type of study is analytical and observational with a Cross-Sectional design. The population consisted of the entire LSL group of 148 people; the study sample numbered 30. The data analysis technique uses the Fisher Exact and Kolmogorov Smirnov tests. **Research results;** showed that there was a relationship between reproductive health knowledge to the transmission of sexually transmitted infections ($P=0.007$), no relationship between reproductive organ maintenance behavior to early detection of cervical cancer ($P=0.586$), there was a relationship between risky sexual behavior to the transmission of sexually transmitted infections ($p=0.005$). **Conclusion;** Reproductive health maintenance behavior affects the risk of STI transmission in the LSL group.

Keywords: Risky Sexual Behavior; LSL; LMS.

1. INTRODUCTION

Sexually Transmitted Infections (STIs) are infections transmitted through sexual intercourse both vaginally, anally, and orally (1)(2). STIs are caused by more than 30 different bacteria, viruses, parasites, and fungi, which can be spread through sexual contact. Most of these infections are asymptomatic or show no symptoms at all (3) (4). STIs can be grouped into two based on their cures, namely those that can be cured, such as syphilis, gonorrhea, chlamydia, and trichomoniasis, and those that cannot be cured but can be alleviated through treatment, such as hepatitis B, herpes, Human immunodeficiency Virus / HIV and Human Papilloma Virus / HPV (5). Analysis of HIV Survey and Research Results by age among the population at risk of contracting HIV conducted by the Gorontalo Provincial KPA in 2015 concluded that almost all respondents started risky behaviors under the age of 25 years (93% LSL - Men Sex with Men, 83% Penasun, 83% Waria, and 53% WPS - Women Sex Workers)(6). The results of the study also found that the rate of condom use was consistent in the most at-risk population, whose young age (<25 years) was

lower than its older counterparts (>25 years) (7)(8).

2. RESEARCH METHODS

This research is a Quantitative research design with an observational analytical research design and a cross-sectional approach, which is an approach to studying the dynamics between risk factors and effects using observation, interviews, and data collection simultaneously (8). The independent variables in this study are knowledge of reproductive health, the behavior of maintaining reproductive organs, and sexual behavior at risk. The dependent variable in this study is STI transmission. The population in this study was all LSL with a risky orientation in one LSL group located in Gorontalo City, which amounted to 148 people. A sample of 30 people The sampling technique in this study was purposive sampling. Data analysis using the Fisher Exact and Kolmogorov Smirnov tests.

3. RESEARCH RESULT

The general description of respondents who are respondents to the study based on the length of time being gay is presented in the following table.

Table 1. Distribution Based On Length Of Being Gay

No	Long Time To Be	n	%
1	0 - 5 years	8	26,70
2	6 - 10 years	17	56,70
3	11 - 15 years	4	13,30
4	16 - 20 years	1	3,30
Total		30	100

Source: Primary data,

From the table above, it can be seen that based on the length of time being gay, the number of respondents who have long been gay 0 - 5 years, as many as 8 people (26.70%), respondents who have long been gay 6 - 10 years as many as 17 people (56.70%), respondents who have long been gay 11 - 15 years as many as 4 people (13.30%), respondents who have long been

gay 16 - 20 years as many as 1 people (3.30%). Based on this explanation, the old character became a gay respondent who dominated, namely 6 - 10 years.

Overview of respondents by occupation

The general description of respondents who are respondents to research based on work along with univariate tests is presented in the following table.

Table 2. Distribution by Occupation

No	Type of Work	n	%
1	Doesn't work	4	13,30
2	Student	4	13,30
3	Sex workers	1	3,30
4	Private Workers	17	56,70
5	Other	4	13,30
Total		30	100

Source: Primary data,

From the table above, it can be seen that based on education, the number of respondents who are not working is 4 people (13.30%), respondents who are students as many as 4 people (13.30%), respondents who are sex workers as many as 1 person (3.30%), respondents who are private as many as 17 people (56.70%), then for other respondents as

many as 4 people (13.30%). Based on this explanation, the characteristics of the respondents' work dominated, namely the private ones.

Reproductive Health Knowledge Variables

The analysis of the variables of reproductive health knowledge using a questionnaire can be seen in the table below.

Table 3. Distribution of Reproductive Health Knowledge

No	Reproductive Health Knowledge	n	%
1	Less	13	43,30
2	Good	17	56,70
Total		30	100

Source: Primary data,

From the table above, it can be seen that reproductive health knowledge is as many as 13 respondents, or 43.30% are in the category of reproductive health knowledge is lacking. In comparison, those with good reproductive

health knowledge are 17 respondents, or the percentage is 56.70%.

Behavioral Variables of Maintenance of Reproductive Organs

As for the univariate analysis of the variables, Work productivity is presented in the following table.

Table 4. Distribution of Reproductive Organ Maintenance Behavior

No	Reproductive Organ Maintenance Behavior	n	%
1	Less	2	6,70
2	Enough	7	23,30
3	Good	21	70,00
Total		30	100

Source: Primary data,

From the table above, it can be seen that respondents who behaved for the maintenance of reproductive organs in the category were less than 2 people or 6.70%. Respondents whose level of behavior of maintaining reproductive organs in the category was sufficient as many as 7 people or 23.30%. As

well as respondents whose level of behavior for the maintenance of reproductive organs in the good category was 21 people or 70.00%.

Sexual Behavior Variables at Risk

The univariate analysis of the variables of Sexual behavior at risk of respondents is presented in the following table.

Table 5. Distribution of Risky Sexual Behaviors

No	Risky Sexual Behaviors	n	%
1	No risk	11	36,70
2	Risky	19	63,30
Total		30	100

Source: Primary data,

From the table above, it can be seen that respondents whose sexual behavior is at risk in the category of not at risk, as many as 11 people or 36.70%, as well as respondents whose sexual behavior is in the risk category, were 19 people or 63.30%.

The relationship between reproductive health knowledge in male sex groups and

the transmission of sexually transmitted infections

Fisher Exact testing the relationship between reproductive health knowledge and the transmission of sexually transmitted infections in male sex groups using the help of the SPSS 21 program in the following table :

Table 6. The Relationship Between Reproductive Health Knowledge In Male Sex Groups And The Transmission Of Sexually Transmitted Infections

Reproductive Health Knowledge	Sexually Transmitted Infections				Total	(p-value)
	Yes		No			
	n	%	n	%		
Good	2	38,5	15	61,5	17	0,007
Less	8	88,2	5	11,8	13	
Total	10		20		30	

Source: Primary data,

In the table above, it can be seen that respondents who know good reproductive health and conduct STI examinations as many as 2 people or 38.5%, respondents who know good reproductive health and do not do STI examinations as many as 15 people or 61.5%, respondents who have less reproductive health knowledge and who do STI examinations as many as 8 people or 88.2%, and reproductive health knowledge is lacking and respondents who do not do examinations STI as many as 5 people or 11.8%.

Based on the results of the analysis, a probability value of 0.007 was obtained. The significance value (p-value) of 0.007 is still smaller than the alpha value used (0.05), so that H_0 is rejected. It can be concluded that at a confidence level of 95% there is a significant relationship between reproductive health knowledge to the transmission of sexually transmitted infections.

Based on the results of statistical analysis, there is a relationship between reproductive health knowledge and STI transmission in LSL ($p=0.007$).

Experience can be used as a way to increase one's knowledge of something. In

addition, age also affects a person's catching power and thinking patterns. As you get older, the more your capture and thinking patterns will develop so that the knowledge gained is better. Based on the results of the study, most of the respondents were aged 20-24 years, namely 10 people (33.3%).

Knowledge has a great contribution in changing a person's behavior to do something both positive and negative (9)(10). Good knowledge of sexually transmitted infections encourages a person to be more aware of diseases that can be transmitted through such sexual activity(11). The results of this study show that knowledge affects the transmission of sexually transmitted infections (12). The results of this study are in line with the results of Fatimah's research, which shows that there is a meaningful relationship between knowledge and the incidence of STIs. This study assumes that a good knowledge or level of knowledge of respondents who know about sexually transmitted infections does not necessarily make them aware of the dangers and seriousness of the disease and is positive to preventing the transmission of sexually transmitted infections (13). This can happen

because there are many factors that can affect a person's knowledge, including internal factors and external factors (14). Internal factors, namely education and age, while external factors, namely environmental and socio-cultural factors. In addition, an individual's knowledge of something can change and develop according to abilities, needs, experiences, and the high low mobility of information about something in his environment (15).

The level of education is in line with knowledge. The knowledge covered in the cognitive domain has four levels, namely knowing, understanding, application, analysis, synthesis, and evaluation. (Notoatmodjo, 2003). Based on the theory, it is clear that although LSLs tend to be highly educated, it does not mean that LSLs understand and applies what is known. If the level of knowledge is only limited to knowing, then it is possible that LSLs will carry out risky behaviors even though they already know what the impact will be.

The application of good reproductive health knowledge will be the basis for the formation of healthy sexual behavior at a later stage so that it will be able to reduce the prevalence of STI events and provide information about reproductive health to the LSL group who are not only intensively talking about overcoming HIV / AIDS. Knowledge of reproductive and sexual health that is half-faceted not only makes the LSL group curious and eager to try but instead makes a wrong perception. For example, having sexual intercourse orally sex cannot result in an STD (16).

The relationship between the behavior of the maintenance of reproductive organs in the group of male sex men to the transmission of sexually transmitted infections

Kolmogorov Smirnov tested the relationship between reproductive organ maintenance behavior in male sex groups and the transmission of sexually transmitted infections using the help of the SPSS 21 program in the following table:

Table 7. The Relationship Between The Behavior Of The Maintenance Of Reproductive Organs In The Group Of Male Sex Men To The Transmission Of Sexually Transmitted Infections

Reproductive Organ Maintenance Behavior	Sexually Transmitted Infections				Total	(p-value)
	Yes		No			
	n	%	n	%		
Good	9	42.9%	12	57.1%	21	(0,586)
Enough	1	12,5	7	87,5%	8	
Less	0	0	1	100	1	
Total	10		20		30	

Source: SPSS Data Processing 21, 2018

In the table above, it can be seen that respondents whose reproductive maintenance behavior was good and carried out STI examinations were 9 people or 42.9%, respondents who had good reproductive organ maintenance behavior were 12 people and did not carry out STI examinations or 57.1%, respondents whose reproductive organ maintenance behavior was sufficient and carried out STI examinations as many as 1 person or 12.5%, respondents whose reproductive organ maintenance behavior was sufficient and did not carry out STI examinations as many as 7 people or 87.5%, respondents whose reproductive organ maintenance behavior was less and carried out STI examinations as many as 0 people or by 0%, and respondents whose reproductive organ maintenance behavior was less did not do STI examinations as many as 1 person or 100%.

Based on the results of the analysis, a probability value of 0.586 was obtained. The significance value (p-value) of 0.586 is still greater than the alpha value used (0.05), so H_0 is accepted. It can be concluded that at a confidence level of 95%, there is no significant relationship between the behavior of the maintenance of reproductive organs to the transmission of sexually transmitted infections.

Based on the statistical analysis results, there was no relationship between the behavior of the maintenance of reproductive

organs and the incidence of STDs in gays ($p=0.586$). Poor reproductive organ maintenance behavior has a 2.5-fold risk of developing STIs compared to good reproductive organ maintenance behavior.

Based on Lestari's research (2006), improper behavior of maintaining reproductive organs in street children has a risk of developing STDs because the knowledge about reproductive health obtained by street adolescents is very lacking. The behavior of maintaining reproductive organs has a vital role in the transmission of STDs because if a person is not used to keeping their reproductive health, they will be easily exposed to STDs. For example, after urinating, you should wash your reproductive organs to avoid itching, which can even cause symptoms of STIs.

The relationship between sexual behaviors risks in groups of male sex men to the transmission of sexually transmitted infections

Fisher Exact testing the relationship between risky sexual behavior and transmission of sexually transmitted infections in groups of male sex men using the help of the SPSS 21 program in the following table:

Table 8. The Relationship Between Sexual Behaviors Risks In Groups Of Male Sex Men To The Transmission Of Sexually Transmitted Infections

Risky Sexual Behaviors	Sexually Transmitted Infections				Total	(p-value)
	Yes		No			
	n	%	n	%		
Risky	3	15.0%	17	85.0%	20	0,005
No risk	7	70.0%	3	30.0%	10	
Total	10		20		30	

Source: Primary data,

In the table above, it can be seen that respondents whose sexual behavior is at risk and conducted STI examinations as many as 3 people or 15.0%, and respondents whose sexual behavior was at stake and did not have an STI examination as many as 17 people or 85%, respondents who did STI examinations and sexual behaviors were not at risk as many as 7 people or 70.0% and respondents whose sexual behavior was not at risk and did not do STI examinations as many as 3 people or 30%.

Based on the results of the analysis, a probability value of 0.005 was obtained. The significance value (p-value), which is 0.005, is still smaller than the alpha value used (0.05), so H_0 is accepted. It can be concluded that at a confidence level of 95%, there is a significant relationship between sexual behavior at risk to the transmission of sexually transmitted infections.

Based on the results of statistical analysis that there is a relationship between risky sexual behavior and STI transmission in LSL ($p= 0.05$). The sexual behavior of the LSL group can result in many sexually

transmitted diseases. Among the harmful diseases are HIV, AIDS, SYPHILIS, and other infectious diseases. This disease can affect anyone, especially LSL.

In this study, LSLs had behaviors that were very risky to developing STIs, but the number of LSLs who performed STI tests was small, only 33.3%. This is likely because data collection is carried out using only questionnaires, so there could be LSL that is not honest when filling out the questionnaire, so there are many false negatives in the research results. For this reason, in order to get a valid number and prevent false negatives, it is better to have an STI test on LSL stated by conducting a laboratory examination.

According to the results of Research by Ratnawati (2002) in Hartono (2009), oral and anal behaviors in sexual intercourse are behaviors that are very risky for the occurrence of STIs. For this reason, the use of condoms by gays, which is already quite high, must also be supported by the consistent use of condoms. Consistent use of condoms in gays is very little. Based on the results of research

by Maurice Kwong-Lai et al. (2011) shows that 43% of men who often have sexualized anally have never used a condom at all. This is because they think their sexual partner is healthy and free from disease (17).

According to Daili et al. (2003) in Hernawati (2005), it is stated that high-risk behaviors in the spread of STIs are behaviors that cause a person to have a high risk of developing the disease because a person can be exposed to STIs on average more than 5 sexual partners and sexual behaviors without using safeguards.

The difficulty of diagnosing STIs is one of the important barriers to eradicating this disease (18) (19). In addition, there are often no symptoms even though there is already an infection. About 80-90% of STI sufferers are asymptomatic (Irianto, 2007).

4. CONCLUSION

Knowledge and behavior affect the incidence of Sexually Transmitted Infections (STIs) in the LSL group, while the behavior of maintaining reproductive organs has no effect on the risk of transmitting STIs.

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