# The Effect of Media Exposure, Family Closeness, and Knowledge about Sexually Transmitted Disease on Sexually Transmitted Disease Risk Behaviors in Senior High School Students

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Keyword: Sexual Behaviour, Media Exposure, Family Closeness, Knowledge.

Abstract:

Sexually Transmitted Diseases (STDs) is one of the reproductive health problems that caused by unsafe sexual behavior. STDscan be caused by multiplefactors, such as influenced by media exposure, family closeness, and the knowledge about STDs. The aim of this research is to know the correlationbetween media exposure, family closeness, and knowledge about STDs on STDs risk behaviors in senior high school students. This study used cross sectional method, with 95 subjects of senior high school students, using family closeness questionnaire, media exposure questionnaire, and sexual knowledge and behavior questionnaire, the data were analyzed by wilcoxon test and logistic regression test. Based on the wilcoxon test, the relation of media exposure, family closeness, and the knowledge about STDs with STDs risk behaviors obtained z scores 3.316 (p = 0.001), -8.352 (p = 0.000), -5.000 (p = 0.000), respectively. The regression test showed a correlation value between media exposure, closeness, and the knowledge about STDs with STDs risk behavior of each 3.561 (p=0.040), 1.417 (p=0.011), 5.553 (p=0.037). There is a relationship between media exposure, family closeness, and the knowledge of STDs on STDs risk behaviors in senior high school students. Knowledge about STDs is the most influential factor in STDs-risk behavior compared to media exposure and family closeness.

### 1 INTRODUCTION

Sexually transmitted diseases (STDs) is the pandemics that caused health, social, and economic problems. STDs is one of the reproductive health problems that caused by unsafe sexual behavior. Based on data from the World Health Organization (WHO) there are more than one million people affected by STDs every day and 357 million cases occur each year (WHO, 2016). In Indonesia, the incidence of STDs in 2016 is about 41.259 cases (Indonesian Ministry of Health, 2016).

Smith (2015) stated that the transmission of STDs can be prevented with a safe sex (Smith, 2015). But the result of Crosby's (2012) research showed that the safe sex is less effective than avoid the high risk of behaviour in preventing STDs (Crosby, 2012). According to the data of Indonesian

population and family information network (BKKBN) 62,7% students in Indonesia had a high risk of sexual behaviour (BKKBN, 2015).

The high risk of sexual behaviour can be trigerred by several things, such as social environment, media exposure of pornography, family bonding, and the knowledge of STDs (Departemen Kesehatan Republik Indonesia, 2016). In order to prevent the high risk of sexual behaviour and STDs we need to know which factors that have a greater influence of sexual behaviour.

### 2 METHODS

This study used cross sectional method. The number of subject calculated with slovin formula :

$$n = \frac{N}{1 + N(d)^2} \tag{1}$$

and obtain the minimum number of subject is 92 students (n = minimum sample, N = population, d = maximum tolerantion). To be included, subject of this study had to meet three criteria. First, the subject must be aged 14 - 19 years old. Second, the subject had the score of L-MMPI less than 10. Third, the subject is not a boarding student.

The data was colected using family questionnaire, media exposure questionnaire, and sexual knowledge and behavior questionnaire. The data were analyzed by wilcoxon test and regression logistic test. The wilcoxon test used to knowing the correlation between the variables. The regression logistic test used to look for which variable that has the highest influence of STDs and to predict the amount of influence from each variable.

# 3 RESULTS

The number of subject with a high risk of STDs from this study is 7.4% and the low risk of STDs is

amount 92,6%. The distribution of media exposure showed that 7,4% subjects never had a exposure of pornography, 69,5% subjects had a moderate exposure of pornography, and 23,1% subjects had a high exposure of pornography. About the family closeness, there are 11,6% of subjects which had a bad relation with teir family. The distribution of knowledge about STDs on subject showed that 6,3% subjects had a bad knowledge, 38,9% subjects had an intermediate knowledge, and 54,7% subjects had a good knowledge.

All the variables of this study had a significance correlation to STDs risk behaviour with the *p value* less than 0,005. The subject with a high exposure of pornography had a higher responsibility to do a sexual risk behaviour 3,561 point (*p value: 0,04*) than the others. The less closeness with family improved the responsibility to do a sexual risk behaviour at the point 1,417 (*p value: 0,011*). The less knowledge about STDs also improved the responsibility to do a sexual risk behaviour at the point5,553 (*p value:0,037*).

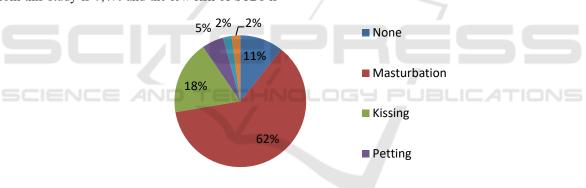


Figure 1: Distribution of sexual activity in senior high school students.

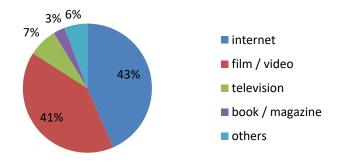


Figure 2: Distribution of pornoghraphy exposure in senior high school students.

Table 1: Univariate test of variable.

#### Test Statistics<sup>a</sup>

	STDs Risk Behaviour – Family Closeness	STDs Risk Behaviour – Media Exposure	STDs Risk Behaviour – Knowledge of STDs
Z-score	-8,352 <sup>b</sup>	3,316°	-5,000°
Asymp. Sig. (2-tailed)	,000	,001	,000

- a. Wilcoxon Signed Ranks Test
- b. Based on negative ranks.
- c. Based on positive ranks.

Table 2: Correlation between media exposure, family closeness, and knowledge about STDs on STDs risk behaviour.

Variables in the Equation									
		В	S.E.	Wald	Sig.	Exp(B)	Nagelkerke R Square		
Step 1 <sup>a</sup>	Family closeness	-4,06	1,598	6,452	0,011	1,417			
	Media exposure	0,579	1,276	0,206	0,04	3,561	0,692		
	Knowledge about STDs	-1,875	0,899	4,354	0,037	5,553	11017=		
	Constant	5,491	4,408	1,552	0,213	242,59			
a. Variable(s) entered on step 1: Family closeness, Media exposure, Knowledge about STDs.									

### 4 DISCUSSION

The number of subjects with a high risk of STDs from this study is 7,4%. The family closeness from this group categorized as a low family closeness with a score of family closeness questionaire less than 50%. Less score on family closeness can increased the risk of STDs from the subjects 1,417 point. It can be occured because the low of family closeness will make the adolescent have a low function of environmental control (Mahmudah, 2016). The recent study showed that the low of family closeness can increase the risk of STDs 4,65 point (Yusuf, 2017). Based on Abraham Harold Maslow's theory about human behaviour, behaviour can be

occured from the natural needs from the human. In this case, if the natural needs from the adolescents about bonding with family can not fulfilled, the adolescents will vent their needs on the other behaviour such as sexual behaviour (Sarwono, 2012). Family closeness had a significant effect ti reduce the STDs risk behaviour. Previous study showed that family intervention can reduce the risk of STDs on adolescents up to 20% (Prado, 2012).

Media exposure from the subjects with high risk of STDs is categorized as a massive exposure. The subject with a high risk STDs had a 15,7% higher exposure than the subject with low risk of STDs. From this study, media exposure couldincrease the risk of STDs from the subjects 3,561 point. Based on

Green Behaviour theory, media exposure include in enabling factor of human behaviour. Massive exposure from the enabling factor will lead the human to had a behaviour which accordance with the exposure. The other theory said that the human behaviours are based on human experience and insight. In other word, if adolescents get a massive exposure about pornography, it can lead them to had a high risk sexual behaviour than the others (Burke, 2001; Sarwono, 2012)

The knowledge of STDs from the subjects with high risk of STDs is categorized as low knowledge with the score less than 50%. The low of knowledge about STDs could increase the risk of STDs 5,553 point. The recent study showed that subjects with high knowledge about STDs will decrease the risk of STDs 8,3% compared with subjects with low knowledge about STDs. Based on cognitive theory, knowledge will make someone knowthe positive and negative effect from their deeds. The higher knowledge about STDs will make someone understand the negative effects from unsafe sexual behaviour. If someone know the negative effect from unsafe sexual behaviour, it can lead them to avoid the sexual risk behaviour (Burke, 2001; Mahmudah, 2016). Previous research showed that intense intervention about knowledge of STDs can decrease the incidence of STDs up to 19% (Kusnan, 2016).

The knowledge of STDs is the most influence factors on STDs risk behaviour between media exposure and family closeness. This happens because the knowledge is the major pradisposing factor in behavioral theory. As a major predisposing factor, knowledge will affect attitudes, individual values / individual norms, and sociodemographic factors. Accordingly, the low level of knowledge will lead someone to get an inappropriate behaviours (Burke, 2001; Sarwono, 2012).

# 5 CONCLUSION

There is a relationship between media exposure, family closeness, and the knowledge of STDs on STDs risk behaviors in senior high school students. The knowledge about STDs is a more influential factor in STDs-risk behavior (odd ratio: 5,553) compared to media exposure (odd ratio: 3,561) and family closeness (odd ratio:1,417).

Family closeness and knowledge about STDs had a negative effect on STDs risk behaviour. The lower family closeness and knowledge about STDs will increase the risk of STDs. While media

exposure had a positive effect on STDs risk behaviour. The more often subjects exposed with pornography media then the risk of STDs will also increase. To get a better result, author advises the next researchers to find out the effect of intensive intervention of family closeness, media exposure, and knowledge of STDs on sexual risk behaviour in students.

## **ACKNOWLEDGEMENT**

The researcher presents his sincere appretiation to Muhammadiyah University of Surakarta which has been facillitated this study and to Capital investment and service agency integrated one door province of central java (DPMPTSP) for allowing us to condust this study in Surakarta Regency.

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