

## Original Research Article

# Role of peers and family with the occurrence of human immunodeficiency virus in the working area of Seberang Padang health center, Padang city

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### ABSTRACT

**Background:** The occurrence of human immunodeficiency virus (HIV) in the Seberang Padang health center has increased every year. The role of coeval friends and family is one of the factors that influence HIV prevalence. This study aims to discover the role of peers and family with HIV occurrence in the area of the Seberang Padang health center.

**Methods:** This type of research is observational analytic with case control study design. Time of study in October 2017. The population were all of HIV cases at Seberang Padang Health Center, 41 cases with a sample of 16 cases and 16 controls. Data collection uses a questionnaire. Univariate analysis using descriptive statistical method in the form of frequency distribution and percentage while bivariate with  $\alpha$  0.05 chi square test.

**Results:** More than half (78.6%) of respondents have a poor peer role, more than half (71.4%) respondents have a poor family role. There was a relationship between the role of peers and the role of the family with HIV. People with poor family roles are 15 times at risk for HIV incidence and 9 times at risk if they have a poor peer roles.

**Conclusions:** Peers and family have an important role in shaping a person's behavior, thus increasing the risk of suffering from HIV. Seberang Padang Puskesmas officers are advised to educate families to always act as the most active group to remind respondents to maintain health and keep away from anything that can damage their health and avoid HIV.

**Keywords:** Role of peers, Family, HIV occurrence

### INTRODUCTION

Human immunodeficiency virus (HIV) is a disease that continues to develop and become a global problem that hit the world. According to WHO (World Health Organization) data in 2012, the discovery of HIV cases in the world in 2012 reached 2.3 million cases, of which 1.6 million patients died of AIDS (acquired immunodeficiency syndrome) and 210,000 patients under age of 15 years-old.<sup>1</sup>

Indonesia is the country with the fastest HIV/AIDS transmission in Southeast Asia. HIV/AIDS is an iceberg phenomenon, where only a few are seen, while there are more unknowns. Various efforts have been made by the government and non-governmental organization in HIV/AIDS precaution and prevention, but the HIV/AIDS epidemic continues to continue.<sup>2</sup>

In Padang itself the first HIV-AIDS case was reported in 1992. In 1992 it was detected through the results of a surveillance survey (sero survey) 1 of HIV case and as of

the end of 2015 there were 1,300 cases of HIV-AIDS in AIDS 515 cases, HIV 785 cases and 77 died. In 2016 there were reported HIV/AIDS cases in Padang as many as 300 HIV cases, 53 AIDS cases and 4 people died.<sup>3</sup>

Based on research conducted by Juliastika in Manado in 2011 regarding the correlation of knowledge and role of peers about the risky behavior of HIV/AIDS in Manado city, the results of the study showed that the role of peers was 80% influential with the occurrence of HIV.<sup>4</sup>

Based on research conducted by Nurul, about the factors related to the prevention of HIV/AIDS by students of senior high school 8 Padang, the results of the percentage of HIV/AIDS prevention was deficient which higher in respondents with fewer parents (51.4%).<sup>5</sup>

The purpose of this study is to find the role of parents and peers with HIV occurrence at the Seberang Padang health center.

### METHODS

This study is an observational analytic study with research design using a case control approach where the dependent variable and independent variable on the object of research are measured starting from past explanation to trace the history of their experiences. The study was conducted in the working area of the Seberang Padang health center in Padang city for 3 months (August-October 2017).

The research population is the entire research object or the whole of the object researched. The population in this study were all cases of HIV in Seberang Padang, South Padang city, as many as 41 cases. Based on the

calculation of the number of samples, obtained a minimum sample size taken as many as 14 people, with a comparison of sample size between cases:control=1:1. The inclusion criteria for the sample were: able to read and able to communicate well, while the exclusion criteria was the sample could not be found after two visits. Data collection is done by conducting interviews using questionnaires.<sup>6</sup> Data were analyzed by univariate and bivariate methods to determine correlation between independent variables (peer role and family role) with the dependent variable (HIV occurrence). Data is presented in the tabullar and narrative forms.

### RESULTS

Table 1 shows the comparison of the number of respondents based on the case group and the control group that seen from the role of peers and family roles. More than half of the group of cases had peer roles that were not good (78.6%) and a not good family role (71.4%).

Table 2 shows the relationship between the role of peers and the occurrence of HIV. The results of statistical tests show that there is a significant coorelation between peer roles with the HIV case group (p value=0,023) with a value of OR=9.167; 95% CI=1,634-51,427 which means the role of peers is not good at risk of 9 times suffering from HIV compared with peers who have a good role.

**Table 1: Frequency distribution of HIV occurrence.**

HIV occurrence	f	%
Cases	14	50
Control	14	50
<b>Total</b>	<b>28</b>	<b>100</b>

**Table 2: Correlation of peer's role to HIV occurrence.**

Peers role	HIV occurrence				OR (CI 95%)	P value
	Cases		Control			
	f	%	f	%		
<b>Not good</b>	11	78,6	4	28,6	9.167 (1.634-51.427)	0.023
<b>Good</b>	3	21,4	10	71,4		
<b>Total</b>	14	100	14	100		

**Table 3: Correlation of family role to HIV occurrence.**

Family Role	HIV Occurrence				OR (CI 95%)	P value
	Cases		Control			
	f	%	f	%		
<b>Not Good</b>	10	71,4	2	14,3	15.000 (2.258-99.639)	0.008
<b>Good</b>	4	28,6	12	85,7		
<b>Total</b>	14	100	14	100		

Table 3 shows the correlation between the family role and the occurrence of HIV. The results of statistical tests show that there is a significant correlation between family role and the HIV case group (p=0.008) with an

OR=15,000; 95% CI=2.258-99,639 which means the bad role of family is at risk 15 times suffering from HIV compared to those who have a good family role.

## DISCUSSION

The results of the study showed that in the case group with 14 respondents experienced HIV occurrence in the working area of the Seberang Padang health center in Padang city. Almost the same as the research conducted by Murtono et al about the factors that influence the occurrence of HIV/AIDS in key populations in Pati Semarang Regency got a case group of 17 respondents.<sup>7</sup>

The problem of HIV/AIDS is not enough anymore just to be seen through medical facts but must be seen through comprehensive social social analysis related to social and cultural structures. The problem of handling HIV/AIDS is that coordination is still weak in implementing programs in each sector. The lack of a common perception, about the fundamental problems surrounding HIV/AIDS, and human rights issues related to HIV/AIDS has not been integrated in proportion.<sup>2</sup>

The results showed that the majority of respondents stated that in the case group more than half (78.6%) of respondents had a not good peer roles. The results of this study are almost the same as research conducted by Juliastika in Manado showing that peer role (80%) had an effect on HIV occurrence.<sup>4</sup>

This is in accordance with the theory that if the negative influence of a strong friend and fortress of resistance in theirs are not strong, a person will be affected because someone wants to be accepted by his/her group even though it is contrary to the teachings of his parents. Even the source of information that is considered important is a friend. If you have a friend about sexual health that is not adequate, then he/she can provide wrong information to other friends.<sup>8</sup>

From the results of the questionnaire that have distributed it was found that respondents affected by HIV tended to have peers who were not good because they brought respondents in a negative direction such as inviting them to have free sex, changing partners and using drugs. The high role of peers will bring respondents to a not good life and very easily affected by the HIV virus, if this is allowed then respondents who are exposed to HIV can transmit this disease to others because one of the transmission of the virus is by having sex freely and using syringes alternately and that is why respondents get HIV.

Based on the results of research conducted in the case group more than half (71.4%) of respondents had a family role that was not good and in the control group most (85.7%) respondents had a good family role towards HIV occurrence. The results obtained in line with Nurul's study (2012) about factors that related to HIV/AIDS prevention for students of senior high school 8 Padang. The result is the percentage of not good HIV/AIDS prevention were higher in respondents with fewer role of parents (51.4%).<sup>5</sup>

The family will be a place to shelter, to get care, to get affection for patients and children that left by their parents who have been taken away by the ferocity of AIDS. Family support, especially care for PLHIV at home will usually cost less, be more pleasant, more familiar, and make the PLHIV themselves more able to manage their lives. Actually diseases that related to PLHIV will usually improve quickly, with comfort at home, support from friends especially family.<sup>9</sup>

Most of the case group respondents mostly did not live with their families, while the family control group was very much needed about what the respondents did, with whom the control group made friends and socialized, especially at night. Supposedly in teenagers, they are already at home when at night, because activities outside at night tend not to be good because at that time is very vulnerable to drug use and gathering with friends who are not good then it will be easy to consume alcoholic beverages until drunk and having free sex, here is the role of the family, especially parents, to always control all their children's activities so that they are not infected to HIV.

To see the relationship between the role of peers and the occurrence of HIV, statistical tests (chi square) were conducted and obtained  $p=0.023$  ( $p<0.05$ ), it can be concluded that there is a significant correlation between the role of peers with HIV occurrence in the Seberang Padang health center working area. The high caused peer role, because teenager have a strong need to be liked and accepted by peer and group. As a result, they will feel happy when accepted and otherwise will feel very depressed and anxious when be taken out and underestimated by their peers. For teenagers, the views of friends to them are the most important thing.<sup>10</sup>

To find correlation between the role of family and HIV occurrence, statistical test (chi square) was conducted and obtained  $p=0.008$  ( $p<0.05$ ), it can be concluded that there is a significant correlation between the role of family and HIV occurrence in the working area of Seberang Padang health center. The results of this study are in line with the research conducted by Hassanudin about the correlation between knowledge, attitudes and environment with HIV/AIDS prevention efforts on students of Senior high school 5 in Palu, the results of students who have a good family environment are more likely to make HIV/AIDS prevention efforts than with students who have a poor family environment, which shows a meaningful correlation between family environment and HIV/AIDS prevention efforts.<sup>11</sup>

From the results of the analysis also obtained an OR=15 which means that a not good family role is at risk of 15 times suffering from HIV compared to those who have a good family role. This can be seen from daily behavior, where the case group does not live with the family, does not communicate with parents if they face problems, and there is discomfort with the family. This has resulted in

the case group tend to seek comfort outside the home with things that were not good such as drinking, using drugs and also having free sex, which resulting the case group being infected with HIV.

## CONCLUSION

There was a significant correlation between the role of peers and family and the occurrence of HIV in the Seberang Padang health center. The role of peers who are not good has a risk of 9 times getting HIV compared to the role of peers who are good. And the role of families who are not good has a risk of 15 times getting HIV compared to the good role of families.

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