



Risky Behavior And The Precautions Of HIV / AIDS Transmission On Fisherman Community Of Nine Islands

Sudirman¹, Andi Nurlaela Amin²

Dinas Kesehatan Kabupaten Sinjai, Indonesia¹

Departemen Medical Health Nursing, Stikes Panrita Husada Bulukumba, Indonesia²

Corresponding Autor : Email Adress : sudirmanahdi@gmail.com

ABSTRACT

The development of new cases of HIV in Indonesia increased significantly in 2013 and 2014, respectively by 29,037 and 32,711 cases. The results of the risky behavior survey (1996-2000) showed that truck drivers, sailors and fishermen and other port workers including workers which are often mobile (mobile population), are vulnerable to HIV because of their sexual behavior and the nature of their work. Sinjai District is one of the districts with a considerable population of fishermen (8,544 fishermen) in South Sulawesi. This research aims to analyze the relationship between level of knowledge with risky behavior and the precautions of HIV / AIDS transmission on fishermen in Sinjai District in 2016. Method of this research is an analytical research with cross sectional study approach. Population were the fisherman who registered in zero survey of Public Health Service of Sinjai District with 40 samples taken by simple random sampling. Data analysis uses statistical test of chi square. The research results showed that 72.5% of fishermen did not know about HIV / AIDS transmission, 75% had risky behavior, and 65% did not take the precautions of HIV / AIDS transmission. Chi square test results showed that there is no significant relationship between level of knowledge about HIV / AIDS transmission with risky behavior of fishermen (p count, $0,152 > p$ value $0,05$). While there is a significant relationship between the level of knowledge with the precautions of HIV / AIDS transmission (p count, $0,034 < p$ value, $0,05$).

Keywords : Risk Behavior, Precaution, HIV/AIDS, Fishermen

INTRODUCTION

Human Immunodeficiency Virus or HIV is a virus that spreads through certain body fluids that attack the immune system, especially CD-4 cells or often called T cells. Over time, HIV can destroy so many immune cells that the body cannot fight infections and diseases. HIV cannot be treated and can reduce the number of CD-4 cells in the body.¹ Acquired Immune Deficiency Syndrome or AIDS is a collection of disease symptoms that arise due to decreased immunity caused by HIV infection. As a result of decreased immunity the person is very susceptible to infection (opportunistic infection) which is often fatal.¹

In 2014, 36.9 million people lived with HIV. The number of people living with HIV continues to increase as indicated by the case of the discovery of 2 million people with new infections and 1.2 million people died due to AIDS-related diseases.^{1,2} Based on



South East Asia Regional Office (SEARO) data in 2011, India, Indonesia, Myanmar, Nepal and Thailand are the countries with the largest spread of HIV / AIDS. India is the first country in the spread of HIV / AIDS where 2.4 million people in India suffer from HIV / AIDS. Indonesia ranks 4th with 190,000 people living with HIV / AIDS.³

The development of the number of new cases of HIV in Indonesia increased significantly in 2013 and 2014, when compared to the development of the number of new cases in 2010-2012 which was relatively quite stable. In 2012, the number of new HIV cases was 21,511 cases, while in 2013 and 2014 there were 29,037 and 32,711 cases, respectively. Provinces with the highest number of HIV cases were DKI Jakarta, East Java and West Java.¹

According to data from the 2011 Integrated Behavioral Biological Surveillance (STBP) in 2011 among high-risk groups in Indonesia, it has been illustrated that there has been an increase in the prevalence of High Risk Men (LBT) from 0.1% in 2007 to 0.7% in 2011. Unprotected sex and inconsistency of condom use among LBT are a high mode of HIV transmission in Indonesia. At present there are an estimated 4.2 million high-risk men in Indonesia which will affect the increasing number of HIV and AIDS cases.²

Risk behavior survey results (1996-2000) show that truck drivers, sailors and fishermen and other port workers can be said to include workers who frequently move or move (mobile population) due to the nature of their work and are groups that are prone to contracting HIV because of their sexual behavior. In this group the consistency of condom use during sex with non-permanent partners was still low, averaging less than 11%. It has also been revealed that the use of condoms that is still low risks increasing the spread of HIV and AIDS to the general public, because groups of drivers, fishermen and workers at the seaport are mostly married. This situation is exacerbated by the rampant sex industry along the highways and fishing ports along the North coast of Java, Bali and Sumatra.⁴

Various reports recommend that sex vendor customers including truck drivers, sailors and fishermen need to be the main target of HIV and AIDS prevention programs in several regions in Indonesia including several areas in South Sulawesi which are areas with quite a large fishing community, one of which is Sinjai district (8,544 fishermen). The government and the community as well as various related institutions / organizations, including non-governmental organizations, have reacted in various ways



and contributed to the prevention and control of HIV and AIDS. Efforts to reduce the risk of exposure to HIV can be done through behavioral change interventions.^{4,5,6}

There are 3 types of expected level of change, namely changes in the level of individuals, organizations and society. But in certain situations interventions cannot be done at one level only and must involve all levels of intervention. In the AIDS risk reduction model the first effort that needs to be done is labeling risk behavior. Therefore, this behavior change intervention requires information on what behaviors are at risk for HIV in this group. Specifically for migratory populations, it is necessary to study how their behavior is related to sexual activity and prevention of HIV and AIDS.⁴ Therefore, researchers feel the need to conduct research related to the level of knowledge of fishermen in the Sembilan Islands, Sinjai District, on how HIV / AIDS is transmitted and its relationship with risk behaviors. and prevention measures for HIV / AIDS transmission.

MATERIALS AND METHODS

This research is a quantitative study with the type of research is survey research (survey research method). The design of this research is analytic research with cross sectional study approach which aims to find out the relationship between the level of knowledge about how HIV / AIDS is transmitted with risk behaviors and prevention of HIV / AIDS transmission in the fishing communities of the Sembilan Islands, Sinjai Regency. The total population is 200 fishermen namely all fishermen registered in the zero survey activity of the Sinjai District Health Office and the sample taken is 40 fishermen by simple random sampling. The research sample is qualitative, the research respondents were taken by purposive sampling, which is choosing a sample with the criteria of fishermen resident of Kepulauan Sembilan District with a minimum of 6 months fishing time and outside Quantitative primary data collection using a questionnaire and qualitative data collected by in-depth interviews by researchers.

Secondary data collection is done through documentation and reports from the Health Office and demographic data from the Sembilan District Office, as well as from library study data by searching literature and similar research results. Data processing steps taken are checking the completeness of the data from the questionnaire, giving the code for each variable data that has been collected, entering data into the computer with the Statistical Program Social Science (SPSS) 21.0.0 and re-checking the data that has been entered to ensure that the data has been cleared of errors. Data analysis consisted



of univariate and bivariate. Bivariate analysis is used to analyze between two variables, namely the independent variable includes the level of knowledge with the dependent variable, namely risk behavior and fishermen prevention measures against HIV / AIDS transmission using the Chi Square test with a significance level of $p \leq 0.05$.

RESULTS

Table 1. Characteristics of Respondents

Variable	Frekuensi	Persentase (%)
Age		
< 33	26	65
33 - 48	10	25
> 48	4	10
Level of education		
Basic	20	50
Middle	19	47,5
High	1	2,5
Marital Status		
Mariage	26	65
Unmariage	14	35
Fisherman Knowledge Level		
Know	11	27,5
do not know	29	72,5
Risk Behavior Variable		
Same sex		
Yes	2	5,0
No	38	95,0
Injection Narcotics		
Yes	0	0,0
No	40	100,0
Wear a piercing		
Yes	5	12,5
No	35	87,5
Wearing a tattoo		
Yes	6	15,0
No	34	85,0
Sex before marriage		
Yes	25	62,5
No	15	37,5
Sex is not a permanent partner		
Yes	27	67,5
No	13	32,5
Preventive measure		
Yes	14	35,0
No	26	65,0
Total	40	100,0

Tabel 2. Relationship between Knowledge Level and Fishermen Risk Behavior



Knowledge level	Risky Behavior		F	%	P Value
	Yes	No			
Know	10	1	11	27,5	
Do Not Know	20	9	29	72,5	0,152
Total	30	10	40	100,0	

Based on Table 2, the results of the analysis of the relationship between the level of knowledge about HIV / AIDS transmission with HIV / AIDS risk behavior there was no significant relationship ($p \text{ value} > 0.05$ ie 0.152). This is because even though the respondents knew about how to transmit HIV / AIDS they still carried out risky behaviors (out of 11 respondents in the "know" category, 10 people behaved risky).

Tabel 3. Relationship between Knowledge Level and Fishermen Prevention Measures

Knowledge level	Prevention Measures		F	%	P Value
	Yes	No			
Know	1	10	11	27,5	
Do Not Know	13	16	29	72,5	0,034
Total	30	10	40	100,0	

Based on Table 3, the results of the analysis of the level of knowledge with HIV / AIDS prevention measures, obtained a relationship between the two ($p \text{ value} < 0.05$, ie 0.034). This means that if the respondent has knowledge about how to transmit HIV / AIDS, they will take preventative measures, and vice versa.

DISCUSSION

Based on the results of the study, it showed that 65% of respondents (fishermen) had age < 33 years which was 26 people. This means that most of them are still in their productive age. This age group is generally still sexually active and with sufficient financial capacity per month, free time on the sidelines of sufficient fishing activities, conditions far from family, especially for couples who are married, the availability of facilities that allow them to conduct sex transactions that are not safe.

Describe the significance of your findings. Consider the most important part of your paper. Do not be verbose or repetitive, be concise and make your points clearly. Follow a logical stream of thought; in general, interpret and discuss the significance of your findings in the same sequence you described them in your results section. Use the present verb tense, especially for established facts; however, refer to specific works or prior studies in the past tense. If needed, use subheadings to help organize your discussion or to categorize your interpretations into themes. The content of the discussion section includes: the explanation of results, references to previous research,

deduction, and hypothesis.²

Based on the table shows that of the 40 respondents half of them have basic education that is 20 respondents (50%), while the least is higher education which is only 1 respondent (2.5%). The results of this study are the same as the results of Ary Mardalina's study in the city of Semarang about the factors associated with HIV / AIDS risk sexual behavior in loading and unloading labor (TKBM) in the port of Tanjung Emas, finding that most respondents were educated in the low category (SD and SMP) which is 78.6%.²

This condition shows that most fishermen have not passed 9-year compulsory education. The low level of education of fishermen is caused by the condition of the residence of the fishermen in the form of small islands which are far from educational facilities. In addition it is also caused by the economic demands of the family which requires their children to make a living as early as possible. The low level of education of fishermen can affect the level of their knowledge, especially about HIV / AIDS, ways of transmission and how to prevent it.

Marital status shows whether someone is married or not married. Most of the respondents were married, namely 26 respondents (65%), this means that fishermen already have permanent sex partners. The results of this study are similar to the results of Ary Mardalina's research in the city of Semarang in 2015, found that the majority of respondents (port loading and unloading labor) were married with 82 respondents (97.6%).²

Marriage is basically the principle of increasing one's relationship to be more attached. One of these attachments in sexual relations associated with reproductive function is to produce offspring. Someone's marital status can be a capital for fishermen to avoid risky behavior because of the intention to be loyal to a partner which is one of the efforts to prevent the transmission of HIV / AIDS namely Be Faithful. In addition, it can also risk their partners if they engage in risky behavior, especially noisy sex.^{2,7}

Based on the results of the study showed that only about a quarter of the respondents ie 27.5% had knowledge about how to transmit HIV / AIDS with 11 fishermen respondents, while the remaining 29 people (72.5%) did not know about how to transmit HIV / AIDS . The results of this study are the same as the results of a study conducted by Ary Mardalina in the city of Semarang in 2015 about factors related to HIV / AIDS risk sexual behavior in unloading labor (TKBM) in the port of Tanjung Emas, the

results found that only 41, 7% of respondents who have good knowledge about HIV / AIDS transmission while respondents who lack knowledge there are 58.3%.²

The low level of knowledge of fishermen proves that these fishermen are very at risk of contracting HIV / AIDS. One of the factors causing the lack of knowledge of fishermen is because the average level of education of fishermen only reaches basic education. This is in accordance with Notoatmodjo (2005) that a person's level of education can improve knowledge, especially knowledge in the health field. The higher a person's level of education, the easier it is to absorb information including health information so they know how to prevent and transmit HIV / AIDS.⁸

Risk behavior is the behavior of fishermen who have the potential to contract HIV / AIDS. In this study the risk behaviors examined were same-sex sex, injecting narcotics use, using piercings, wearing tattoos, sex before marriage, sex not in permanent partners. Risk factors for HIV / AIDS transmission are numerous, but the main factor is sexual behavior. Other factors are parenteral transmission and a history of sexually transmitted infections. Risk sexual behavior is a major factor related to HIV / AIDS transmission. Many sex partners who do not use condoms in risky sexual activity are the main risk factors for HIV / AIDS transmission. Anal sex is also a factor in sexual behavior that facilitates transmission of HIV / AIDS. Use of narcotics and illegal drugs by injection / injection is also a major factor in the transmission of HIV / AIDS.⁷

The results showed that 30 respondents (75%) had risk behaviors while only 10 respondents (25%) did not have risk behaviors. The most risky behavior carried out by fishermen is sex not on permanent partners (67.5%) and the lowest is the use of injecting narcotics (0%). The results of this study are the same as those of Dadun, et.al on the unsafe sex behavior of migrant workers on the north coast of Java and North Sumatra in 2007, finding that 49% of the 107 fishermen studied had had sex at risk, 16% of them had sex transactions with sex workers (PS). Access to PS in ports is considered easier because it can be obtained directly or indirectly through intermediaries. This offer came by itself without being sought because it was customary for ABK and fishermen to use the services of PS, so that intermediaries without hesitation offered services to find it. The mode of selling sex also varies in explaining itself from selling snacks, herbal medicine to openly offering services so that health insurance to the PS is not difficult.⁴

Preventive action is an effort made by fishermen not to contract HIV / AIDS in this case not doing risky behavior, especially risky sex and always using condoms for risky

sex. The results showed that 26 respondents (65%) did not make prevention efforts. There were 21 respondents (52.5%) who said they never used condoms in risky sex, only 4 respondents (10%) said they always used condoms.

Research conducted by Dadun, et.al also shows the same results, that of the 825 migrant workers, including ABK and fishermen, only 16% of respondents use condoms in sex in addition to permanent partners. The low use of condoms is related to their perception of condoms and the habit of consuming alcohol before sex. According to respondents, the decision to have sexual relations is usually under the influence of alcohol so that most sex does not use a condom. Most respondents said it was difficult to get condoms at stops, bases, terminals and ports. ^{4,5}

From the results of the study it was found that more than half of the respondents indicated no prevention measures for HIV / AIDS transmission. This means that the respondent does not yet have a good action towards the prevention of HIV / AIDS transmission and shows that most fishermen have a risk of contracting HIV / AIDS. This condition is also risky for fishermen's spouses (wives) because most of the fishermen who were respondents were married. The low prevention measures taken by fishermen can be caused by their low level of knowledge about HIV / AIDS, access to difficult condoms and the fishermen's perceptions about using condoms in sex. Therefore, collaboration between related parties is needed to provide a deeper understanding of the risk groups infected with HIV / AIDS, especially fishermen who are included in high risk men (LBT) to take action to prevent transmission of HIV / AIDS so as not to become infected with HIV / AIDS. ^{4,5}

Based on the results of the analysis with cross tabulation shows that of the 11 respondents who had knowledge about HIV / AIDS, 10 respondents (91%) had risk behaviors and only 1 respondent did not have risk behaviors. Of the respondents who stated they did not know about HIV / AIDS transmission, 20 respondents (69%) had risk behaviors and only 9 respondents (31%) did not have risk behaviors. Statistical test results using the chi square test between the level of knowledge about HIV / AIDS transmission with risk behaviors found no significant relationship ($p\text{-count}, 0.152 > p\text{-table value}, 0.05$).

This means that risky behavior carried out by fishermen is not influenced by the level of knowledge they have. This is seen by the high number of fishermen who behave at risk even though they have good knowledge about HIV / AIDS transmission. The

results of this study are the same as the results of a study conducted by Ary Mardalina in the city of Semarang in 2015 about the factors associated with HIV / AIDS risk sexual behavior in unloading labor (TKBM) in the port of Tanjung Emas, showing that there is no relationship between respondents knowledge about HIV / AIDS risky sexual behavior with risky sexual behavior of loading and unloading workers at the port. ²

The results of this study differ from research conducted by Siti Mas'udah, Sri Setyowati about the relationship of the level of knowledge about HIV / AIDS with premarital sexual behavior of fishermen in tpi unit II Juwana Pati Central Java, finding that there is a relationship between the level of knowledge of HIV / AIDS with premarital sexual behavior in fishermen.⁹ Knowledge is one of the factors that influence a person's attitude and behavior. According to Lawrence Green in Notoatmodjo (2014) that a person's knowledge is one of the predisposing factors that can influence behavior change.⁹ According to Bloom, in Notoatmodjo (2008) states that the level of knowledge has six levels. Respondents who have sufficient knowledge but whose behavior is actually at risk may be due to the level of knowledge they have just reached the stage of know (know) which is the lowest level of knowledge so that it has not been able to encourage respondents not to carry out risk behaviors of HIV / AIDS.⁹

Factors that influence premarital sexual behavior according to Santrock in Widowati (2009) states that personal / cognitive, behavioral and environmental factors can interact reciprocally. Thus the environment can affect one's behavior, but someone can act to change the environment. According to Suryoputro in Widowati (2009), factors influencing behavior include personal factors including variables such as knowledge, sexual and gender attitudes, vulnerability to reproductive health risks, lifestyle, self-esteem, locus control, social activities, self efficacy and variables demographics (such as puberty, age, sex, religiosity, ethnicity and marriage). Environmental factors include variables such as access and contact with sources, support and information, social culture, values and norms as social support.⁹

The results of cross tabulation analysis of the level of knowledge with fishermen's preventive measures showed that of the 11 respondents who said they knew the process of HIV / AIDS transmission, only 1 respondent (9%) took precautionary measures, while 10 respondents (91%) did not take any precautionary measures. Of the 29 respondents who said they did not know, 13 respondents (44.8%) took preventative measures and 16 respondents (55.2%) did not take preventative measures. The results

of statistical tests using the chi square test, found the results of a significant relationship between the level of knowledge and preventive measures taken by fishermen (p count value, $0.034 < p \text{ value}, 0.05$). This means that the high number of risk behaviors carried out by fishermen is influenced by their level of knowledge about how HIV / AIDS is transmitted. The low level of knowledge of fishermen can be caused by their education level, which mostly only reaches basic education. In addition, the lack of information obtained related to HIV / AIDS is caused by their work, which is mostly spent on ships. Another factor is the limited access of fishermen in health services.

The results of this study are in line with the results of research conducted by Vicca Rahmayani, et.al about the relationship of knowledge and attitudes with HIV / AIDS transmission prevention measures for transvestites in the city of Padang. AIDS. A fairly good level of knowledge plays an important role in preventing HIV / AIDS. A good level of knowledge about HIV / AIDS does not automatically lead to positive prevention of transmission of the disease. Conversely low or lack of knowledge about HIV / AIDS will not necessarily do negative things¹⁰.

CONCLUSIONS

There is no meaningful relationship between the level of knowledge about how HIV / AIDS is transmitted and the risky behavior of fishermen. Whereas there is a significant relationship between the level of knowledge and prevention measures against HIV / AIDS transmission. The need to increase cooperation between the Health Office with NGOs and professional organizations to carry out more HIV / AIDS counseling programs with the main target of the fishing community. There needs to be an awareness in every fisherman to find out information and follow HIV / AIDS counseling.

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