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Factors Associated With Hiv Preventive Behavior In Loading–Unloading Workers At Tenau Port Kupang

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Abstract. Human Immuno Deficiency Virus (HIV) is a virus that attacks the immune system and further weakens the body to fight disease. The port is a strategic area with the potential for the spread of HIV cases. The aim of this study is to determine the factors associated with behavior to prevent HIV incidence in TKBM in the port of Tenau Kupang. This study used an analytical survey method with a cross-sectional study approach. The sample in this study consisted of 68 TKBM workers. The data analysis used was a bivariate analysis with a chi-square statistical test. The results of this study showed that behavior to prevent HIV incidence was related to knowledge (ϱ = 0.016) and social environment (ϱ = 0.008), while attitudes (ϱ = 0.718) and distance from service (ϱ = 0.181) are not related to behavior to prevent HIV incidence. HIV education and health promotion are appropriate preventive measures to reduce the incidence of HIV transmission.

Keywords: *HIV, Attitudes, Prevention*

Abstract. *Human Immuno deficiency Virus* (HIV) adalah virus yang menyerang sistem kekebalan tubuh yang selanjutnya melemahkan tubuh dalam melawan penyakit. Pelabuhan merupakan kawasan strategis yang berpotensi dalam penyebaran kasus HIV. Penelitian ini bertujuan untuk mengetahui faktor-faktor yang berhubungan dengan perilaku pencegahan kejadian HIV pada TKBM di Pelabuhan Tenau Kupang. Penelitian ini menggunakan metode survei analitik dengan pendekatan *crosssectional study.* Sampel dalam penelitian ini sebanyak 68 orang pekerja TKBM. Analisis data yang digunakan adalah analisis bivariat dengan uji statistik *Chi-square.* Hasil penelitian ini menyatakan bahwa perilaku pencegahan kejadian HIV berhubungan dengan pengetahuan (ρ= 0,016) dan lingkungan pergaulan (ρ= 0,008), sedangkan sikap (ρ= 0,718) dan jarak pelayanan (ρ= 0,181), ditemukan tidak berhubungan dengan perilaku pencegahan kejadian HIV. Penyuluhan tentang HIV dan upaya promosi kesehatan merupakan upaya pencegahan yang tepat untuk mengurangi kejadian penularan HIV.

***Kata kunci*:** *HIV, Pencegahan, Pencegahan*

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Introduction

Human Immuno Deficiency Virus or Acquired Immune Deficiency Syndrome (HIV / AIDS) is a global health problem, the number of which is increasing every year. In addition, the HIV or AIDS epidemic is a global crisis and a formidable challenge to social development and progress, as well as one of the highest rated infectious diseases that can lead to death (WHO, 2016). The UNAIDS Global HIV Epidemic Report (2018) states that by the end of 2017, 36.9 million people worldwide were living with HIV, of whom 5,000 were new in 2017. In Asia and the Pacific, there are known to be 5.2 million people living with HIV by the end of 2017, 280,000 of them being new cases.

Based on the number of HIV / AIDS cases in Indonesia, of the first cases recorded in 1987 through June 2018, 433 (84.2%) were reported from 514 districts/cities in 34 provinces in Indonesia. The cumulative number of HIV infections reported through June 2018 was 301,959 people (47% of the estimated number of people living with HIV / AIDS in 2018 was 640,443 people) and most HIV cases were in the 25 to 49 age group and 20- to 24-year-olds, all in the productive category (Department of Health RI, 2018).

Based on the latest data published by Directorate-General PPM and PL, MOHRI, the prevalence of new HIV cases, namely 657 cases and AIDS, totaled 354 cases in 2017, while the number of those affected was from 2015 to March 2017 1,959 cases. NTT ranks 19th among 34 provinces in Indonesia with 1,934 live cases, 531 deaths and a case rate of 29.16%.

Kupang is the city with the highest number of HIV/AIDS cases in NTT

Province. The HIV / AIDS cases in Kupang City from January to June 2017 totaled 1,091 cases, with details of 756 HIV cases and 335 AIDS cases. Based on data from the NTT Provincial Health Department, the cumulative cases of HIV-AIDS from 1997 to June 2017 for all workers, including anchor workers, were 368 cases (NTT Provincial Health Department, 2017).

Ports are areas of great potential for the spread of HIV / AIDS cases, considering that ports are strategic locations or areas. The largest port serves as a gate for entry and exit of people, animals, plants, and goods that have the potential for entry and exit of various diseases. One of the most important ports in NTT is the port of Tenau. The port of Tenau Kupang is a large port in NTT Province, so many male workers of productive age are hired as loaders and unloaders (Kemenhub, 2014).

Human behavior is essentially an activity that relates to what the organism is doing, whether it can be observed directly or indirectly. This means that behavior occurs when something is needed to produce a response called stimulation. Certain stimuli can trigger certain behavioral reactions (Notoatmodjo, 2007).

The results of the April 2014 Knowledge, Attitude and Behavior Survey in five ports (Semarang, Surabaya, Cirebon, Makassar, and Batam) showed that the behavior of male-dock workers (including ship crew, loading, and unloading workers, truckers) very risk of contracting HIV / AIDS. In the port of Tanjung Emas in Semarang, 60% of the respondents said they had had sex with an FSW and did not use condoms. Respondents at Tanjung Perak Port said that 88% admitted having sex with sex workers (FSW), girlfriends still 26% and other

women 43% even though they already have a wife. The results of the Tanjung Perak survey found that 68% of those surveyed had never used condoms, while in Soekarno Hatta Port, Makassar, 79.2% of those who had sex with sex workers admitted to using condoms but not consistently. Similar results were found in Muaro Jati Port Cirebon and Batu Ampar Batam Harbor (National KPA, 2014).

Another research conducted by Gerhana (2015) on TKBM workers in Tanjung Emas, stated that port workers who have free time are more at risk for the tendency to have risky sexual behavior by 25.8%. This study also explained that 6.1% of workers who had risky sex with sexually transmitted infections were around the Port of Tanjung Emas.

Interventions in HIV / AIDS prevention and control at ports are oriented towards changing behavior, especially for men, because men as the key population group have an influence and risk on other populations, including wives, children, and the general public.

Method

The study used an analytical survey method with a cross-sectional study approach, where this study analyzes the relationship between independent and dependent variables by taking a measurement at a certain time. (Susila, 2014).

This research was conducted in the working area of the port of Tenau at TKBM located in the city of Kupang. Research time was in March-September 2019. The population of this study was all TKBM totaling 211 people at the Port of Tenau Kupang.
This type of research is an analytical survey with a cross-sectional approach, which aims to analyze the relationship between risk factors by collecting data at once. Each research subject was observed only once with measurements made of the research subject variables observed at the same time.

Types of data used are primary data and secondary data. The data collection

technique used in this study was a questionnaire in which data collection was carried out by giving a number of questions or written statements on the questionnaire sheets to be answered by respondents. The instrument used in this study was a structured questionnaire containing questions and statements that must be filled in by selected respondents. The format used in the questionnaire is the Guttman scale format (Setiawan, 2013), The scale answers all independent and dependent variables, the value referred to in the Guttman scale value the respondent's answer uses is not the value of 1 (one) and yes the value is 2 (two).

The analysis technique in this study shows a bivariate analysis carried out on two variables (independent variables with the dependent variable) which are suspected to be related (Notoatmojo, 2012). In this study, a bivariate analysis was conducted to determine how respondents' perceptions were related to HIV / AIDS prevention behavior. The null hypothesis (Ho) will be tested with a significance level of $\alpha = 0.05$. Ho is accepted if the p value is $\geq \alpha$ ($p \geq 0.05$) and the value of Ho is rejected if $p < \alpha$ ($p < 0.05$). The data obtained, processed, and then presented in tabular and narrative form.

Result

1. Characteristics of Respondents

Characteristics of respondents based on age

Table 1
Characteristics of Respondents by Age

Age (Years)	Amount	
	N	%
21-30	15	22.1
31-40	19	27.9
41-50	17	25.0
51-60	17	25.0
Total	68	100

Table 1 shows that the highest number of workers is in the 31-40 year age group, namely 19 people, while the least number of workers is in the 21-30 year age group, which

is 15 people.

Characteristics of Respondents Based on Marital Status

Table 2
Characteristics of Respondents Based on Marital Status

Marital status	Amount	
	N	%
Single	16	23.5
Marry	52	76.5
Total	68	100

Table 2 shows that the number of workers 'marital status is mostly in the married group, namely 52 people, while the number of workers' marital status is at least in the unmarried group, namely 16 people.

Characteristics of Respondents Based on Education

Table 3
Characteristics of Respondents Based on Education Level

Level of education	Amount	
	N	%
SD	47	69.1
Junior High	11	16.2
High school	10	14.7
Total	68	100

Table 3 shows that the number of workers 'education is mostly found in the SD group, namely 47 people, while the lowest number of workers' education is in the SMA group, namely 10 people.

2. Bivariate Analysis

1. Relationship of Knowledge to HIV Incident Prevention Behavior

The results of research conducted regarding the relationship between knowledge and HIV prevention behavior of TKBM at Tenau Kupang Port can be seen in table 4.

Table 4.
Relationship between Respondents' Knowledge of HIV Incidence Prevention Behavior in Tenau Kupang Port

Knowledge	Behavior				Total		OR (95% CI)
	Bad		Well				
	n	%	n	%	N	%	
Less	8	11.8	18	26.5	26	38.2	5,778
Well	3	4,4	39	57.4	42	61.8	1,369-24,378
Amount	11	16.2	57	83.8	68	100	

The results showed that 26.5% of respondents with poor knowledge had good preventive behavior and 11.8% of respondents with poor knowledge had bad preventive behavior, while 57.4% of respondents with good knowledge had good preventive behavior and 4.4% knowledgeable respondents who have poor preventive behavior.

The results of the analysis using the chi-square test between knowledge and HIV incidence prevention behavior obtained p value = 0.016 (p <0.05), which means that there is a significant relationship between knowledge and HIV incident prevention behavior in TKBM at Tenau Kupang Port.

2. The Relationship of Attitudes to Behavior to Prevent HIV Incidents

The results of research conducted regarding the relationship between attitudes and HIV prevention behavior of TKBM at Tenau Kupang Port can be seen in table 5.

Table 5
Relationship between Respondents' Attitudes on HIV Incidence Prevention Behavior at Tenau Kupang Port

Attitude	Behavior				Total		OR (95% CI)
	Bad		Well				
	n	%	n	%	N	%	
Negative	2	2.9	15	22.1	17	25.0	0.622
Positive	9	13.2	42	61.8	51	75.0	0.120-3,213
Amount	11	16.2	57	83.8	68	100	

The results showed that 22.1% of respondents with negative attitudes had good preventive behavior and 2.9% of respondents with negative attitudes had bad preventive

behavior, while as many as 61.8% of respondents with positive attitudes had good preventive behavior. and 13.2% of respondents with positive attitudes who have bad preventive behavior.

The results of the analysis using the chi-square test between attitudes and HIV incidence prevention behavior obtained p value = 0.718 (p <0.05) which means that there is no significant relationship between attitudes and HIV incidence prevention behavior at TKBM at Tenau Kupang Port.

3. Relationship of Health Service Distance to HIV Incident Prevention Behavior

The results of research conducted on the relationship between health care distance and the HIV prevention behavior of TKBM at Tenau Kupang Port can be seen in the table

Table 6
Relationship between Respondents' Health Service Distance to HIV Incidence Prevention Behavior in Tenau Kupang Port

Distance	Behavior				Total		OR (95% CI)
	Bad		Well				
	n	%	n	%	N	%	
Unreachable	2	2.9	3	4,4	5	7.4	4,000
Affordable	9	13.2	54	79.4	63	92.6	0.584-27,375
Amount	11	16.2	57	83.8	68	100	

The results showed that as many as 4.4% of respondents with an unreachable distance had good preventive behavior and 2.9% of respondents with an unreachable distance had bad preventive behavior, while as many as 79.4% of respondents with a reachable distance had preventive behavior and 13.2% of respondents within reach who have poor prevention behavior.

The results of the analysis using the chi-square test between service distance and HIV incidence prevention behavior obtained p value = 0.181 (p <0.05), which means that there is no significant relationship between service distance and HIV incidence prevention behavior at TKBM at Tenau Kupang Port.

4. Relationship of Social Environment to Behavior to Prevent HIV Incidents

The results of research conducted regarding the relationship between the social environment and the HIV prevention behavior of TKBM at Tenau Kupang Port can be seen in the following table 7.

Table 7
Relationship between Social Environment and HIV Incidence Prevention Behavior Respondents in Tenau Kupang Port

Social environment	Behavior				Total		OR (95% CI)
	Bad		Well				
	n	%	N	%	N	%	
Not good	9	13.2	21	30.9	30	44.1	7,714
Well	2	2.9	36	52.9	38	55.9	1,521-39,135
Amount	11	16.2	57	83.8	68	100	

The results showed as many as 30.9% of respondents with a bad social environment who had good preventive behavior and 13.2% of respondents with a social environment that had bad preventive behavior, while 52.9% of respondents with a social environment who had preventive behavior good and 2.9% of respondents with positive attitudes who have bad preventive behavior.

The results of the analysis using the chi-square test between the social environment and the behavior to prevent HIV incidents, obtained p value = 0.008 (p <0.05), which means that there is a significant relationship between the social environment and the behavior of preventing HIV incidents at TKBM at Tenau Kupang Port.

Discussion

1. Relationship of Knowledge to HIV Inc ident Prevention Behavior

Knowledge is the result of the human sense of an object from its senses. Objects are influenced by the intensity of attention and perception. Knowledge is divided into six levels, including knowledge, understanding, application, analysis, synthesis and evaluation. Behaviors based on knowledge will be longer or inherent for individuals than non-knowledge-based behaviors (Notoatmodjo, 2014). Knowledge of AIDS is

important in order to have individuals as a guide for the formation of safe sexual behavior and also as a basis for providing appropriate information to other individuals.

Good knowledge of HIV can have a positive effect on safe sexual behavior, while less knowledge of HIV can have negative effects in the form of risky sexual behavior, risky sexual behaviors are likely to be infected with HIV, as well as other sexually transmitted diseases that are still a mystery about cure.

The results showed that of the 68 respondents, 61.7% of respondents were exposed to HIV prevention behavior due to a lack of knowledge and 38.2% did not have a risk of HIV event prevention due to good knowledge. Based on the results of surveys conducted by researchers, it is known that the majority of TKBM have less knowledge, so it has an impact on risky sexual behavior. In addition, they also reduce fatigue after work. by talking in localized premises and using the services of commercial sex workers, regardless of the effects of their risky behavior.

The chi-square test results also found a significant correlation between knowledge and HIV event prevention behavior, with a ratio (OR) of 5,778, meaning that people with less knowledge had greater risk factors for the behavior of HIV event prevention with a 5,778 fold risk of contracting HIV compared to people with good knowledge.

The results also found a knowledge relationship with HIV event prevention behavior, this is due to responses from the majority of respondents who know less, not about unsafe sexual behavior, the causes of HIV, the way HIV is transmitted, typical symptoms of HIV, and such as Hiv prevention. Another influential thing is the lack of information they receive, as well as a low understanding of HIV, will lead to a misperception of HIV, as well as one of the diseases that has so far been lacking in cure. The results of this study are reinforced by research by Yulianingsih (2015) that there is a link between knowledge and Hiv transmission risk behavior and a tendency to knowledge that has a lower risk than those with good knowledge. Research was also kurnia and Arief (2015) that there is a link between the knowledge of respondents

and preventive behavior. Well-informed respondents had a lower risk of exposure to HIV/AIDS than those with less knowledge. Knowledge will shape a person's actions in such a way that when their level of knowledge is low, it affects that individual's behavior. Poor knowledge of HIV/AIDS will influence individuals' behavior to perform risky sexual behaviors because of a lack of knowledge about the effects of such behavior.

2. The Relationship of Attitudes to Behavior to Prevent HIV Incidents

According to Azwar (2013), posture is a pattern of forward-looking behavior, tendency or willingness, predisposition to adapt in social situations, or simply, attitudes are a response to conditioned social stimuli. The results showed that of the 68 respondents in the group who were at risk of HIV event prevention, 25% and 75% less were at risk of attitudes to HIV event prevention behavior.

Chi-square test results showed no significant association between posture and HIV incidence prevention behavior with a ratio (OR) of 0.622, which means that there was no link between attitudes and HIV prevention behavior. Hiv respondents can also be caused by other factors, such as low understanding and influence of exposure to the environment, who do not know about the knowledge of HIV-infected people.

The results showed that the attitude of most respondents had a positive attitude as the negative attitude of TKBM towards HIV prevention behavior. The positive attitude at issue here is the attitude of respondents who want to receive all the information relating to HIV. There are respondents who are open-minded about all forms of information about HIV, but some of them still considered HIV a cursed disease due to violations of norms such as sex, not because partner-changing sexual behavior is a risk factor for HIV.

Previous research (Erniwati, 2016) found that there was no significant link between attitudes and HIV prevention behavior. An attitude in action is influenced by the situation in the place at the time and the experience of the individual, and research

by Siwy (2013), which analyzed attitudes with HIV/AIDS prevention medical behavior, found that there was no association between attitude and behavior.

3. Relationship of Service Distance to HIV Incidence Prevention Behavior

According to Kholifah (2017), distance is a space between one place and another to meet basic human needs, including health services that affect user behavior or healthcare services. This is consistent with Green's theory that distance to health facilities is a factor in health changes. The results showed that of the 68 respondents, up to 7.3% with the group at risk of remote services with Hiv incidence behavior and 92.6% with the non-vulnerable group, distance service with HIV event prevention behaved.

The chi-square test results showed no significant association between service distance and HIV incidence prevention behavior, which with a 4,000 ratio (OR) meant that service distance did not affect HIV prevention behavior. This is because some TKBM has vehicles, making it easy to access the gas station. HIV prevention behavior can be caused by other factors such as poor understanding and the impact of exposure to the environment that do not know about knowledge of HIV infection.

The results showed that the removal of services with some health facilities such as Kupang Port Health Office and Alak Navy Hospital Kupang City is very affordable. Distance does not limit the ability and willingness to use health services, especially in places with sufficient means of transport.

The results of this study are consistent with a study conducted by Winahyu (2016), which states that if the removal of health facilities has nothing to do with the behavior of HIV prevention. Another study, also conducted by Agusningtyas (2017), said there is no link between service distance and HIV/AIDS prevention behavior, as most respondents have a private vehicle and most live close to health care, so they can easily and quickly receive health care.

4. Relationship of Social Environment to Behavior to Prevent HIV Incidents

According to Rosita (2017), the social environment is an existing environment around people that can influence the development and behavior of good and bad people, so that the environment influences behaviors that have a relationship between individuals and between groups. The results showed that of the 68 respondents, up to 44.1% in the group at risk of an environmental association with HIV incidence and 55.8% with the non-endangered group, environmental association with HIV event prevention behavior.

The chi-square test results showed that there was a significant correlation between the social environment and the behavior of HIV event prevention, with the social environment variable being a risk factor for HIV event prevention behavior, where the odds ratio (OR) calculation value is 7,714, meaning that people with poor relationships are a greater risk factor for HIV event prevention behavior and have a 7 fold risk of HIV event prevention to get HIV compared to people with a good social environment.

The results found a link between the social environment and the behavior of HIV transmission. This shows the response of the respondent, who provided information and invited their employees to go to the entertainment and localization location, which is not far from the workplace. Moreover, if someone does not come with their staff to relax with the entertainment and localization, then will be ridiculed by colleagues if they have never or never gone to a place of localization.

The results of this study were reinforced by Mardalina (2015), which found a link between colleagues' environment and behavior for HIV incidence prevention. Liawati (2017) explained that the environment has a direct and positive impact so that a person will be easily affected by bad habits, so that the social environment has a connection to HIV/AIDS prevention behaviors.

Conclusion

Based on the results of this study, that the knowledge variables and the social environment of the discharging workforce have a connection to HIV event prevention behavior because one forms one's actions from knowledge, so that when the level of knowledge is low, it has an impact on the behavior of individuals and the environment has a great influence on a person's psychology, while variables that have no relationship between posture and distance health care.

Suggestion

For the community about the benefits of HIV incidence prevention behavior, especially TKBM must improve behavior appropriately in an effort to resolve the HIV problem, which is increasing rapidly every year so that it can avoid the risk of HIV

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