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The Influence of Education, Marital Status, Knowledge, and Income on the Incidence of Sexually Transmitted Diseases

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Abstract: Sexually Transmitted Diseases (STDs) may affect anyone. The growing tendency of this disease's dissemination is related to partner changes in sexual behaviour and the prevalence of premarital and extramarital sexual interactions. The majority of persons with STDs are between the ages of 11 and 29, however some newborns are afflicted after contracting it from their moms. Understanding the relationship between education, marital status, and income and the prevalence of STDs among pt HIS Ship personnel. With a cross-sectional design, this study employed an observational analytical technique. The research participants were 46 personnel from the barge Pt HIS. The chi-square test and the multiple logistic regression test were used to analyse the data descriptively and statistically. The Chi-square analysis revealed a variable p -value of 0.000 and PR value of 7.58 ($p = 0.000$), married status p -value of 0.031 and PR value of 1.38, knowledge p -value of 0.001 and PR value of 2.26, and income p -value of 0.003 and PR value of 1.53. There is a link between marital status, income, and knowledge, and there is also a strong association between the occurrence of sexually transmitted illnesses among PT HIS ship personnel. Only the education level factors show a statistically insignificant link with the occurrence of infectious illnesses among PT HIS ship personnel.

Keywords: Sexually transmitted diseases, knowledge, income, marital status, education level, PT HIS

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I. INTRODUCTION

STDs are one of the first ten causes of disease in young male adults and the second largest cause in young female adults in developing countries. In 2016 the World Health Organization (WHO) estimated that 376 million new infections occurred in the types of STI categories, namely chlamydia, gonorrhoea, syphilis, and trichomonas. The most significant number of STI cases is in the vagi-

nal body (clinical), 20,962 and Servictis/procitis (lab), 33,205 (Ministry of Health, 2017). STDs are disorders or diseases that are transmitted from one person to another through contact or sexual intercourse. For the first time, this disease was often called 'venereal disease' or venereal disease, but now the most appropriate designation is sexually transmitted disease, generally called sexually transmitted disease. The germs that cause such infections

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include fungi, viruses, and parasites [1].

Data in Indonesia, STDs that are widely found are syphilis and gonorrhea. A very high prevalence was found in Bandung, namely gonorrhea infection at as much as 37.4%, chlamydia at 34,5%, and syphilis at 25,2%. Data from the South Kalimantan Provincial Health Office as of January 07, 2022, the number of cases of STDs in South Kalimantan is 14097, and the number of STDs in Banjarmasin is 3507. Everyone can contract STDs. The increasing trend of the spread of this disease is brought on by sexual activity that will change partners, and the existence of premarital and extramarital sexual relations is relatively high. Most people with STDs are aged 11-29 years, but some babies are infected because they are infected by their mothers [2, 3].

According to [4], knowledge is essential in how a person develops their behaviour. The better to know about sexual diseases, the more adolescents learn how to avoid premature sexual intercourse and form adolescents who have healthy and responsible sexual attitudes and behaviours [5]. Research conducted by [6] shows a positive relationship between sexual knowledge and sexual behaviour.

Data from the NGO Kalandara in January – February 2009 showed that the behaviour of vessel crew at risk of transmitting to wives was 34 percent. The crew workers are one of the potential high-risk male groups infected with HIV/AIDS, in addition to loading and unloading/TKBM workers, truck drivers, and motorcycle taxi drivers. The group of potential high-risk men is a group of workers who are suspected of being customers of female sex peddlers (WPS) (Ministry of Health RI, 2011). Women peddlers of sex and their customers are one of the groups at high risk of HIV transmission because WPS is a group whose HIV/AIDS epidemic rate is concentrated in Indonesia. The group of men can act as the main bridge of transmission between WPS and the public [7]. In 2015, 1 crew member tested positive for Sexually Transmitted Infection (STI) among 234 crew members. In 2016, 8 crew members tested positive for STIs from 3,405 crew members. In 2017, there were 8 STIs-positive crew members from 2,454 crew members [8, 9].

Two factors influence a person to behave sexually: internal and external. Internal factors are hormonal changes that increase sexual desire. External factors include the delay in the age of marriage, religious norms that prohibit having sexual relations before marriage, and knowledge of sexuality [10, 11]. Significant risk factors for the incidence of sexually transmitted infections, namely sex behaviour, the roles of health professionals and the me-

dia information, while insignificant risk factors for the incidence of STDs are knowledge, economic status, and access to health services [12, 13, 14].

[12] showed that of the six variables that are suspected to be at risk for the incidence of sexually transmitted infections, three variables are significantly at risk of the incidence of sexually transmitted infections, namely risky sex activity (OR = 2.625; $p = 0.022$; CI95% = 1,211-5,691), health worker's role (OR = 2,591; $p = 0.017$; CI95% = 1,240-5,412) Information media's role (OR = 3.059; $p = 0.010$; CI95% = 1,357-6,896). The role of information media is the most dominant variable at risk for the incidence of STDs from multivariate analysis.

[15] revealed a significant relationship between age ($p = 0.012$; OR = 3.6), marital status ($p = 0.035$; OR = 3.1), and condom use ($p = 0.001$; OR = 5.5) with the incidence of sexually transmitted infections in women of sexual labour. From a p -value ($p = 0.002$ and OR = 7.7), multivariate analysis revealed that condom use was the most commonly associated with STIs on WPS at the Sukaraja Health Center's VCT mobile clinic. In addition, the results of a study conducted by [16] stated that the marital status of respondents who were divorced or separated from their families was higher (56.7%) than those who were married (43.3%) to sexual relations behaviour. The results of her study also reported that married respondents had a 10.83 times chance of being optimistic about STDs compared to those who were divorced or separated from their families because their sexual needs had not been met. Highly knowledgeable respondents had an 11.00 times chance of being positive compared to those with low knowledge.

[17] stated that there was no relationship between income and STD incidence in Makasar ($p = 0.076$). The results of research by [18] show that the income variable significantly influences STIs in the transgender community in Kupang City because it has a p -value = of 0.036, which means that the income variable is a risk factor for the incidence of STI disease. Income is the total of all benefits obtained from work that is realised in the form of money or products. [19] it is stated that the income received by the population will be influenced by the level of education taken. With higher education, a person will be able to get a wider opportunity to get a better job accompanied by a greater opinion. poorly educated residents will get jobs with smaller incomes.

PT HIS Tbk is engaged in the business of commodity transportation services through rivers and seas, both for the domestic market and the Asian region. The services provided are carried out effectively and efficiently, starting from loading ports and loading and unloading ports

at home and abroad. Based on the results of a preliminary study of PT HIS data in 2020, there were still many employees who lacked attention and awareness of the problem of STDs. Employees of PT HIS 14 employees, or 35%, did not know knowledge of STDs. Among those who did not know knowledge of STDs, as many as 26 employees or about 65% and had the incidence of mild STDs with a diagnosis of condyloma, as many as 16 employees or skit 40%, for complaints of moderate STDs with a diagnosis of gonorrhea and syphilis as many as 6 employees or about 15%, complaints of severe STDs with a diagnosis of syphilis as many as 6 employees or about 15%, employees who did not experience complaints of STDs 12 or about 30% (report incident, 2020). Employees who have a junior high school education of 8 people or about 20%, high school 20 people or 50% and S1 education of 12 people or about 30%, employees who have marital status are married, 20 employees or 50%, and for high income, there are 36 employees or 60% and low income there are 24 employees or 40% (report incident, 2021).

Given the importance of studying the incidence of infectious diseases, based on these problems, it is necessary to research "the relationship between education level, marital status, knowledge, and income with the prevalence of STDs in PT HIS ship employees." With the description of risk factors for STDs in crews, it is hoped that it can increase public knowledge, especially crews of STDs, so that they can consciously carry out individual prevention and reduce the number of cases of STDs in crews.

II. RESEARCH METHODS

The research that will be carried out is observational analytic with cross-sectional, linking the level of education, marital status, knowledge, and income with the

incidence of STDs in PT HIS employees in 2021. This research was conducted at PT HIS from May 2022 to June 2022.

The population in this study was all employees at PT HIS, with as many as 60 people in the barge transport division. Inclusion sample criteria:

1. Employees of the barge transport division that was then on the spot.
2. All employees of the barge division who are willing to be respondents and willing to fill out the questionnaire.

The determination of the sample size in this study using the two-proportion hypothesis test sample formula using the Lemeshow formula obtained the number of samples needed, as many as 46. The method of sampling in this study was the Accidental sampling method. The independent variables were Education, Marital status, knowledge, and income. The dependent variable to be studied in this study is the Prevalence of STDs.

Bivariate analysis used the chi-square test, and multivariate analysis used a multiple logistic regression test with 95% confidence. A relative risk number calculation is carried out to see the possibility of arising and developing a behavior linked to risk factors. The relative risk calculation for the cross-sectional research design is reflected by the prevalence ratio (Prevalence Ratio = PR).

III. RESEARCH RESULTS

A. Statistical Data Analysis

1) Relationship between education level and incidence of STDs: In this study, the level of education obtained with STDs of barge employees of PT HIS Tbk is presented in Table 1.

TABLE 1
EDUCATION LEVEL WITH INCIDENCE OF STDS

Education Level	Incidence of STDs				Sum	p-value	PR	
	STD Diagnosis		No STD Diagnosis					
	N	%	n	%				
Low	7	87.5	1	12.5	8	100	0.000	7.58
High	2	5.26	36	94.74	38	100		
Sum	17	29						

The PR value was 7.58, so it can be said that low education is a risk factor for the incidence of STDs, 7.58 higher than high education. Meanwhile, the Fisher's Ex-

act Test test shows a p-value of 0.000 ($p < 0.05$), meaning that there is a significant relationship between the level of education and the incidence of STDs of Barge Employees

of PT HIS Tbk.

tal status and the incidence of STDs of Barge Employees of PT HIS Tbk were obtained, presented in Table 2.

2) *Relationship of marital status with STDs:* In this study, the results of a bivariate analysis between mari-

TABLE 2
MARITAL STATUS WITH INCIDENCE OF STDs

Marital Status	Incidence of STDs				Sum	p-value	PR	
	STD Diagnosis		No STD Diagnosis					
	N	%	n	%				
Not Married	7	33.33	14	66.67	21	100	0.031	1.38
Married	2	8	23	92	25	100		
Sum	9	37	46					

The Prevalent Ratio (PR) value = 1.38, it can be said that marital status is a risk factor for the incidence of STDs; not married is 1.38 higher than married. Meanwhile, the results of the analysis using the Fisher's Exact Test test showed a p-value of 0.031 ($p < 0.05$), meaning that It can be concluded that there is a significant relationship between marital status and the incidence of STDs of

Barge Employees of PT HIS Tbk.

3) *Relationship of knowledge with the incidence of STDs:* The results of a bivariate analysis between knowledge and the incidence of STDs of Barge Employees of PT HIS Tbk obtained in this study as presented in Table 3.

TABLE 3
RELATIONSHIP OF KNOWLEDGE WITH INCIDENCE OF STDs

Knowledge	Incidence of STDs				Sum	p-value	PR	
	STD Diagnosis		No STD Diagnosis					
	N	%	n	%				
Not Good Enough	8	57.14	6	12.86	14	100	0.000	2.26
Good	1	3.12	31	96.88	32	100		
Sum	9	37	46					

The Prevalent Ratio (PR) value = 2.26 indicates that the variable level of knowledge is a risk factor for the incidence of STDs; not good knowledge is higher than 2.26 than good knowledge. Meanwhile, the analysis using the Fisher's Exact Test test showed a p-value of 0.000 ($p < 0.05$), meaning that there is a significant relationship be-

tween the level of knowledge and the incidence of STDs of Barge Employees of PT HIS Tbk.

4) *The Relationship of Income with STDs:* In this study, the relationship between income and the incidence of STDs of Barge Employees of PT HIS Tbk was obtained, presented in Table 4.

TABLE 4
RELATIONSHIP OF INCOME WITH INCIDENCE OF STDs

Income	Incidence of STDs				Sum	p-value	PR	
	STD Diagnosis		No STD Diagnosis					
	N	%	n	%				
Low	9	34.62	17	65.38	26	100	0.003	1.53
High	0	0	20	100	20	100		
Sum	9	37	46					

The Prevalent Ratio (PR) value = 1.53, it can be said that low income is a risk factor for the incidence of STDs, 1.53 higher than high income. Meanwhile, the analysis using the Fisher's Exact Test test showed a p -value of 0.003 ($p < 0.05$); it can be concluded that there is a significant relationship between income and the incidence of STDs of Barge Employees of PT HIS Tbk.

5) *Relationship between Education Level, Marital Status, Knowledge, and Income with the Incidence of STDs:* The statistical analysis used is multiple logistic regression analysis. The variables that are candidates for the multivariate model are free variables with the result of the p -value in the bivariate analysis < 0.25 . The variables will go directly to the multivariate stage; the variables that enter the multivariate model are presented in Table 5.

TABLE 5
SELECTION OF FREE VARIABLES THAT MEET MULTIVARIATE MODELS

No.	Variable	p -value	Information
1	Education Level	0.000	Included
2	Marital status	0.031	Included
3	Knowledge	0.001	Included
4	Income	0.003	Included

Based on the Table 5, all of the independent variables included in the multivariate model and analysis can be performed after meeting The goodness of Fit Test,

Multicollinearity Test, Classification Plot, Nagelkerke R -Square value, and Hypothesis Test. The result is in the following table.

TABLE 6
MULTIVARIATE TEST RESULTS

	B	SE.	Wald	Df	Sig.	Exp(B)	95% C.I.for EXP(B)	
							Lower	Upper
Step 1a								
Marital Status	4.205	1.907	4.861	1	.027	67.030	1.595	2816.410
Income	-2.303	.964	5.703	1	.017	.100	.015	.662
Education	.770	1.406	.300	1	.584	2.159	.137	33.941
Knowledge	-3.226	1.399	5.317	1	.021	.040	.003	.616
Constant	-.871	1.908	.208	1	.648	.419		

Information: Sig = Significance value, Exp(B) = Exponent Value B, 95% CI Lower = Lower Data Interval, 95% CI Upper = Upper Data Interval

After being selected, the education level variable will be excluded from the model because it has the most significant p -value of other variables and > 0.05 , which is 0.584; the analysis results presented in Table 7 are obtained as

follows. The largest risk factor is marital status, with unmarried men having 48,159 more sexually transmitted infections than married men.

TABLE 7
RESULTS OF MULTIVARIATE MODELING WITHOUT EDUCATION LEVEL VARIABLES

	B	SE.	Wald	Df	Sig.	Exp(B)	95% C.I.for EXP(B)	
							Lower	Upper
Step 1a								
Marital Status	3.874	1.710	5.135	1	.023	48.159	1.688	1374.036
Income	-2.369	.959	6.107	1	.013	.094	.014	.613
Knowledge	-2.913	1.196	5.937	1	.015	.054	.005	.566
Constant	-.135	1.341	.010	1	.920	.874		

Information: Sig = Significance value, Exp(B) = Exponent Value B, 95% CI Lower = Lower Data Interval, 95% CI Upper = Upper Data Interval

IV. DISCUSSION

A. Relationship between Education Level and Incidence of STDs

The education in this study is the highest formal education ever held in WPS; education is divided into two, namely lower education, less than high school, and higher education, namely high school and college. Based on research, it was obtained that there were 8 people in low education (17.39%) and higher education at 37 people (80.43%). This means that the most educational status is higher education.

Based on the Fisher's Exact Test results with a confidence level of 95%, the connection between the level of education and the incidence of STDs obtained a value of $p = 0.000$ (Table 7). The H_0 decision was rejected ($p < 0.05$) based on the p -value in the statistical test results, indicating a link between education level and the incidence of STDs of barge employees of PT HIS Tbk. This means that the higher the level of education a person takes, the more knowledge in terms of understanding something will be more accessible; it can be said that the higher the level of education a person has, the lower the risk of STDs.

In this study, the percentage of those diagnosed with STDs that had low education (87.5%) was more when compared to the prevalence of STDs with higher education diagnosed with sexually transmitted infections (5.26%). From the two percentages, there is a difference of 82.24%, and it can be interpreted that low education is related to the prevalence of STDs; it can be concluded that low education in barge employees of PT HIS Tbk is a risk of occurrence of sex infectious diseases. Based on the PR, the connection between the level of education and the incidence of STDs (PR = 7.58) shows that high education has a risk of 7.58 times increasing the absence of sexually transmitted disease incidence in barge employees of PT HIS Tbk.

According to Lawrence Green, health education is a dynamic process of behaviour change, in which the change is not a process of transferring material from one person to another, nor is it a set of procedures. This means that the change occurs in the existence of awareness from within the individual or society itself. Based on the research results above, the level of education can affect a person's insight and knowledge. In general, a person who is highly educated will have a broader knowledge compared to someone with lower education. Individuals with much knowledge tend to behave and behave according to their knowledge [20]. Due to a lack of information regarding STDs at each level of education, people with low

education levels engage in dangerous sexual behaviours. Information on sexually transmitted illnesses and their prevention is critical for increasing knowledge and awareness to carry out sexually transmitted disease prevention and treatment. The findings of this study support the research hypothesis, which states that the greater the degree of education, the lower the frequency of sexually transmitted illnesses in PT HIS Tbk ship personnel.

In the study, 2 respondents were highly educated but diagnosed with STDs. This can be caused by other factors such as marital status and income level. The 2 respondents had low-income levels and unmarried marital status.

B. The Relationship between Marital Status and the Incidence of STDs

In the relationship between marital status and the incidence of STDs, a p -value = 0.031 was obtained. Based on the results obtained show that the incidence of STDs occurs in someone unmarried, divorced, or a person who separated from his family when compared to people who are married because of the fulfilment of needs his sexuality fulfilled. An unmarried person has a higher sexual need than someone already married, so unsafe sex behaviour with a partner at risk of transmitting STDs can be the source of infection with STDs in a person who is not married. This is supported by research by [] which shows that the incidence of STIs is higher in married groups who are sexually active because this group has a greater factor for transmitting or contracting STIs. Also, the results of this study follow the research hypothesis that the higher the marital status, the lower the prevalence of STDs in ship workers of PT HIS.

In this study, the percentage of diagnoses of STDs with unmarried status (33.33%) was more compared to the incidence of STDs with married status diagnosed STDs (8%). The Prevalent Ratio (PR) value of the relationship between marital status and the prevalence of STDs (PR = 1.38) shows that unmarried status has a risk of 1.38 times increasing the incidence of STDs in barge employees of PT HIS Tbk. The results of this study follow research conducted by [15] which shows that there is a meaningful relationship between ages ($p = 0.012$; OR = 3.6) and marital status ($p = 0.035$; OR = 3.1) to the incidence of STDs. In the study, 2 respondents were married but diagnosed with STDs. This can be caused by other factors such as income level. The 2 respondents had a low-income level. From the results of this study, it can be concluded that marital status positively influences reducing the incidence of STDs in PT HIS.

C. *The Relationship between Knowledge and the Incidence of STDs*

Because the majority of respondents in this survey had a high level of awareness, it is reasonable to assume that the majority of respondents are not exposed to sexually transmitted illnesses. According to the findings of this study, the majority of the incidence of sexually transmitted illnesses was experienced by PT HIS Tbk barge personnel who had a low level of understanding and were diagnosed with STDs, as much as 57.14% or 8 respondents. As many as 14 persons with limited awareness are undiagnosed with STDs, while the remaining 8 are uninformed of an STD diagnosis. According to the PR value of the association of knowledge with the prevalence of STDs (PR = 2.26), low knowledge has a risk of 4.11 times increasing the incidence of sexually transmitted illnesses in PT HIS Tbk barge personnel.

The Fisher's Exact Test yielded a p value of 0.031 for the link between the incidence of STDs and educational attainment, with a 95% confidence level. The statistical test findings' p -value indicated that the H_0 choice was not accepted ($p < 0.05$), indicating that information of the STD prevalence among PT HIS Tbk's barge personnel exists. The findings indicate that understanding has an impact on the prevalence of STDs. All facets of human existence, including sexual health, are greatly influenced by knowledge. Knowledge can profoundly impact a person's conduct, both favourably and adversely. The likelihood that someone will be aware of diseases that can be spread via such sexual activity increases if they are knowledgeable about STDs. The results of this study suggest that a person's level of awareness about them increases their chance of contracting a sexually transmitted infection, whether that information is enough or inadequate. This study's results align with those of [21] research, which show that knowledge and the prevalence of STIs are significantly correlated.

4. The findings of this study are corroborated by research by [22], which found a moderate density of r of 0.450 and a p -value of 0.001 between the amount of knowledge and the prevalence of STIs in WUS at the Sleman Health Center in 2016. The findings of this study support the researcher's hypothesis, which states that the prevalence of STDs among ship employees of PT HIS Tbk decreases with increasing knowledge.

D. *The Relationship between Income and the Incidence of STDs*

Risky sexual behaviours are those that result from the decision for sex, whether they are with the same partner or someone of the opposite sex, and which, if engaged

in, might be harmful. Economic status is a term used to describe a person's place in society based on resources such as wealth or property that may be utilized to satisfy basic necessities. Everyone's activities are largely influenced by their socioeconomic level. The findings of this study demonstrate that sexually transmitted infection incidence is not influenced by economic status, i.e., sexually transmitted infection incidence is unaffected by lack of economic position.

The probability of sexually transmitted illnesses is 34.62% for those employees with low incomes and low levels of education, compared to 0% for those with high incomes and no employees with such diagnoses. Fisher's Exact Test findings with a 95% level of confidence revealed a p -value of 0.003 for the correlation between income level and the prevalence of STDs. It was determined from the p -value in the statistical test findings that the H_0 choice was rejected ($p < 0.05$), which indicates that there is a correlation between income and the prevalence of STDs among PT HIS Tbk barge personnel. One is more likely to catch or spread sexually transmitted illnesses if they have a high socioeconomic standing since they feel able to purchase sex and enjoy switching partners. Research by [23], which claims that age factors, age of first risky behaviour, sources of money, condom usage, and number of sexual partners are statistically connected variables, supports the findings of this study.

E. *The Relationship between Education Level, Marital Status, and Knowledge Simultaneously with the Incidence of STDs*

The marital status is the main factor influencing the prevalence of STDs. Due to the satisfaction of their sexual requirements, married persons have a higher prevalence of marital status. Marital status is the biggest or most dominant factor influencing STDs because a person who is not married has a higher need for sex than a person who is already married. As a result, unsafe sex behaviour with a partner who is at risk of transmitting STDs can be a source of infection with STDs in a person who is not married.

Although it has a connection to the prevalence of STDs, the knowledge variable has a stronger influence on the marital status variable. Based on the analysis's findings, it was established that knowledge and STD testing, in both bivariate and multivariate testing, had a significant link. Education, employment, society, environment, beliefs, age, society, culture, and economy are all factors that influence one's degree of knowledge. A person's capacity to evaluate a substance or thing is directly related to their level of knowledge. This evaluation will serve

as the foundation for how a person will act. In light of these findings, it may be concluded that PT HIS barge personnel' awareness of STDs and greater education can help to lower the prevalence of STDs. because having access to knowledge and a better education makes it more likely that a person may engage in sexual activity outside of marriage because they are aware of the hazards involved. Higher education makes it simpler to learn new things, and having a job makes it simpler to get experience. The more information someone learns, the more knowledgeable they become.

The high prevalence and spread of sexually transmitted infectious diseases in the community might be caused by a lack of understanding about STIs. According to reports, rigorous counselling programmes are implemented in several nations to minimise the prevalence of STIs, or at the very least to keep it stable [24]. Employee education, namely teachings in schools and electronic media, is the main source of information for barge division of PT HIS employees regarding STDs, therefore employees with higher education are extremely likely to have strong understanding. In the meanwhile, if you get STD education, you are interested in learning about the methods used for prevention. The PT HIS barge personnel' choice to act will be influenced by their understanding of reproductive health. The findings of research demonstrating a connection between knowledge and the prevalence of sexually transmitted infectious illnesses provide an explanation for this.

Based on the analysis's findings, it can be concluded that the BARGE DIVISION of PT HIS employees have a need for knowledge about STD prevention, which is followed by information about STI symptoms, the impact of disease, how to treat, modes of transmission, people at risk of contracting STIs, types of STIs long-term effects, safe sex, and the impact of sex. Employees of the PT HIS barge must have knowledge of sexually transmitted illnesses in order to stop the spread of these diseases. An individual's conduct or behaviours are greatly influenced by their knowledge.

V. CONCLUSION

The conclusions obtained from the research are as follows:

- 1.The prevalence of sexually transmitted illnesses among PT HIS Tbk's barge personnel is correlated with education level.
- 2.The prevalence of sexually transmitted illnesses among PT HIS Tbk's barge personnel is correlated with marital status.

- 3.Information on the prevalence of STDs among PT HIS Tbk ship employees is known.
- 4.Among PT HIS Tbk shipworkers, there is a correlation between wealth and the prevalence of sexually transmitted illnesses.
- 5.Among PT HIS ship employees, marital status is the main risk factor for the occurrence of sexually transmitted illnesses.

REFERENCES

- [1] K. K. Hsu, L. E. Molotnikov, K. A. Roosevelt, H. R. Elder, R. M. Klevens, A. DeMaria Jr, and S. O. Aral, "Characteristics of cases with repeated sexually transmitted infections, Massachusetts, 2014–2016," *Clinical Infectious Diseases*, vol. 67, no. 1, pp. 99–104, 2018. doi: <https://doi.org/10.1093/cid/ciy029>
- [2] D. G. Tsevat, H. C. Wiesenfeld, C. Parks, and J. F. Peipert, "Sexually transmitted diseases and infertility," *American Journal of Obstetrics and Gynecology*, vol. 216, no. 1, pp. 1–9, 2017. doi: <https://doi.org/10.1016/j.ajog.2016.08.008>
- [3] O. T. Van Gerwen, A. Jani, D. M. Long, E. L. Austin, K. Musgrove, and C. A. Muzny, "Prevalence of sexually transmitted infections and human immunodeficiency virus in transgender persons: A systematic review," *Transgender Health*, vol. 5, no. 2, pp. 90–103, 2020. doi: <https://doi.org/10.1089/trgh.2019.0053>
- [4] S. Notoatmodjo, "Health promotion and health behavior," *Jakarta, Indonesia: Rineka Cipta*, vol. 193, 2012.
- [5] S. Singh, A. Bankole, and V. Woog, "Evaluating the need for sex education in developing countries: Sexual behaviour, knowledge of preventing sexually transmitted infections/HIV and unplanned pregnancy," *Sex Education*, vol. 5, no. 4, pp. 307–331, 2005. doi: <https://doi.org/10.1080/14681810500278089>
- [6] M. Unemo et al., "Sexually transmitted infections: Challenges ahead," *The Lancet Infectious Diseases*, vol. 17, no. 8, pp. e235–e279, 2017. doi: [https://doi.org/10.1016/S1473-3099\(17\)30310-9](https://doi.org/10.1016/S1473-3099(17)30310-9)
- [7] A. Reichheld, P. K. Mukherjee, S. M. Rahman, K. V. David, and R. A. Pricilla, "Prevalence of cervical cancer screening and awareness among women in an urban community in South India—a cross sectional study," *Annals of Global Health*, vol. 86, no. 1, pp. 1–7, 2020. doi: <https://doi.org/10.5334/aogh.2735>
- [8] I. A. Siregar, M. Siagian, and H. Wau, "The relationship between knowledge and attitudes with

- prevention of sexually transmitted diseases in ship crews at Belawan port 2019,” *Jurnal Kebidanan Kestra (JKK)*, vol. 2, no. 1, pp. 1–8, 2019. doi: <https://doi.org/10.35451/jkk.v2i1.231>
- [9] R. Silpsrikul, E. Thounghirunchote, and P. Chao-rattana, “Sexual behavior, risk perception and motivations for sexual risk taking among foreign gay tourists in Thailand,” *International Journal of Health and Medical Sciences*, vol. 4, no. 1, pp. 9–17, 2018. doi: <https://dx.doi.org/10.20469/ijhms.40002-1>
- [10] S. Prawirohardjo, *Obstetrics*. Jakarta, Indonesia: Yayasan Bina Pustaka Sarwono Prawirohardjo, 2005.
- [11] J. V. Ford, M. B. Ivankovich, J. M. Douglas, E. W. Hook, L. Barclay, J. Elders, D. Satcher, and E. Coleman, “The need to promote sexual health in America,” *Sexually Transmitted Diseases*, vol. 44, no. 10, pp. 579–585, 2017.
- [12] M. Mappajanci, N. Lante, and A. Arsin, “Risk factors for sexually transmitted infections at the Kalumata health center in Ternate city,” *Media Kesehatan Masyarakat Indonesia*, vol. 12, no. 4, pp. 224–231, 2016. doi: <https://doi.org/10.30597/mkmi.v12i4.1542>
- [13] B. A. Kassie, H. Yenus, R. Berhe, and E. A. Kassahun, “Prevalence of sexually transmitted infections and associated factors among the University of Gondar students, Northwest Ethiopia: A cross-sectional study,” *Reproductive Health*, vol. 16, pp. 1–8, 2019. doi: <https://doi.org/10.1186/s12978-019-0815-5>
- [14] Kharismadhany, U. E. Sari, and Q. A. Rakhmah, “Increasing women’s awareness on the importance of early detection of cervical cancer through socialization method and focus group discussion in Sabdodadi village Bantul Yogyakarta,” *Journal of Advances in Health and Medical Sciences*, vol. 3, no. 1, pp. 9–16, 2017. doi: <https://doi.org/10.20474/jahms3.1.2>
- [15] L. Puspita, “Analysis of factors associated with the incidence of sexually transmitted infections in female sexual workers,” *Jurnal Aisyah: Jurnal Ilmu Kesehatan*, vol. 2, no. 1, pp. 31–44, 2017. doi: <https://doi.org/10.30604/jika.v2i1.30>
- [16] N. Nurbaiti et al., “Characteristics, knowledge and attitudes of couples of reproductive age about sexually transmitted diseases at the “Y” clinic, Indragiri Hulu Regency,” *Indonesian Journal of Reproductive Health*, vol. 7, no. 3, pp. 199–209.
- [17] K. R. McBride and S. Singh, “Predictors of adults’ knowledge and awareness of HPV, HPV-associated cancers, and the HPV vaccine: Implications for health education,” *Health Education & Behavior*, vol. 45, no. 1, pp. 68–76, 2018. doi: <https://doi.org/10.1177/1090198117709318>
- [18] I. G. Thobias, R. Paun, and I. Picauly, “Effect of socio-economic factors, prevention behavior & social support on Sexually Transmitted Infections (STI) in male women communities (Waria) in Kupang city,” *Jurnal Pangan Gizi dan Kesehatan*, vol. 9, no. 1, pp. 1002–1013, 2020.
- [19] G. R. O. N. Ferreira, I. S. de Oliveira, W. L. S. Freitas, A. L. B. de Carvalho Lira, R. K. Reis, E. Gir, A. M. P. C. Ramos, L. H. T. Gonçalves, and E. P. Botelho, “Factors associated with low knowledge about sexually transmitted infections in subnormal agglomerate, in the Brazilian Amazon,” *Primary Health Care Research & Development*, vol. 22, p. e70, 2021. doi: <https://doi.org/10.1017/s1463423621000700>
- [20] S. Notoatmodjo, *Health Behavioral Science*. Jakarta, Indonesia: Rineka Cipta, 2014.
- [21] S. Fatimah, “Relationship between knowledge and attitudes of Sexually Transmitted Infection (STI) patients with STI transmission prevention behavior in the working area of Kom Yos Sudarso health center, Pontianak,” Tanjungpura University, Pontianak, Indonesia, Tech. Rep., 2013.
- [22] D. Y. Astuti, S. Santoso, D. Estiwidani et al., “The correlation between knowledge level and the incidence of sexually transmitted infections in women of reproductive age at the Sleman health center,” phd thesis, Poltekkes Kemenkes Yogyakarta, Yogyakarta, Indonesia, 2017.
- [23] N. A. Rumana, “Sexually transmitted infections in gays in Tangerang, Jogjakarta and Makassar in 2009 (aspects of medical records in STBP data analysis),” *Indonesian of Health Information Management Journal (INOHIM)*, vol. 1, no. 1, pp. 1–7, 2013. doi: <https://doi.org/10.47007/inohim.v1i1.64>
- [24] P. A. Achdiat, R. Rowawi, D. Fatmasari, and R. Johan, “Level of knowledge of sexually transmitted infection diseases and their complications in Jati-nangor state high school students,” *Dharmakarya*, vol. 8, no. 1, pp. 35–38, 2019. doi: <https://doi.org/10.24198/dharmakarya.v8i1.19534>