
ATTITUDES OF SCIENCE AND SOCIAL STUDIES DEPARTMENT STUDENTS IN URBAN AND VILLAGE HIGH SCHOOL IN PAPUA PROVINCE CONCERNING HIV/AIDS

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ABSTRACT

KEYWORDS

Students; HIV;
Science studies; Social
studies

The knowledge of students in cities and villages about HIV is higher in the low category at 55.2%, then in the medium category at 24.7%, and in the high category at 20.1%, students in cities are most in the medium level of knowledge category while students in villages are most in the high level of knowledge category. The attitude of students in cities and villages has a positive attitude category about HIV prevention. The purpose of this study is to determine the comparison of attitudes of students majoring in science and social studies about reproductive health and HIV in urban and rural high schools in Papua Province. This study used quantitative method with a cross-sectional research design to identification the differences in attitudes between students majoring in science and high school social studies in cities and villages. From this study give some implication such as identified the differences in attitude of students majoring in science and social studies. The result of this study shows that the level of Science students have a more positive attitude towards HIV prevention than social studies students in high schools in cities and villages.

INTRODUCTION

Papua is experiencing complex health problems. An infectious disease that is still a concern is HIV/AIDS. The cumulative number of HIV infection cases reported as of June 2016 places Papua in the top ten provinces with the most cases, namely 22,426 cases. As for AIDS cases, Papua is one of the provinces that reported the most AIDS cases from 1987 to June 2016, namely 13,335 cases. The highest incidence of AIDS cases or AIDS Case Rate per 100,000 population occurs in Papua with a rate of 416.9 cases per 100,000 population (Ditjen & RI, 2016).

Research result Juniasti (2023) shows that The attitude of students in urban and rural areas has a positive attitude category regarding HIV/AIDS prevention. There are differences in knowledge about HIV/AIDS among students in cities and villages with a P value (0.006) < 0.05. However, there is no difference in the attitude of students in urban and rural areas regarding HIV/AIDS prevention with a P value (0.020) > 0.05. The level of knowledge, attitude, and self-motivation has an influence on HIV/AIDS prevention behavior among urban high school students in Sragen district (Indratmoko et al., 2013).

HIV prevalence among students aged 15-24 in Papua is 3%. The main cause of the HIV epidemic in Papua is due to unsafe sexual relations. In addition, due to the low level of education and knowledge about HIV. For students, according to UNICEF, knowledge about

HIV has increased but is still limited. The 2010 Riskesdas survey showed that 42% of the population aged 15 years and over had never heard of HIV/AIDS.

WHO declared AIDS is a global problem. AIDS transmission in Indonesia is currently more dominant in sexual behavior (Anonymous, 2012). In 2015 AIDS-related deaths reached 110,000 people in the children's age group (<15 years). In 2016, there were 1,872 AIDS sufferers in Indonesia, including school children and students. According to data from the Indonesian Child Protection Commission (KPAI) in Subiyakto (2012), it is known that 32% of students aged 14 to 18 years in big cities in Indonesia (Jakarta, Surabaya and Bandung) have had premarital sex and it proves that 62.7% of students lost their virginity when they were still in junior high school.

Most cases of HIV infection occur in productive age, namely 25-49 years, followed by 20-14 years of age and 15-19 years of age (Ministry of Health, 2014). According to UNICEF (United Nations International Children's Emergency Fund), the number of AIDS deaths among students around the world increased by 50% between 2005 – 2012 and shows an alarming trend. About 71,000 students aged 10-19 years died of AIDS in 2005 which increased to 110,000 in 2012 (Priastana & Sugiarto, 2018). In 2011 new HIV cases, 18% of them were children in the age group 15-24 years (UNICEF, 2012).

Counseling interventions on student reproductive health increased the knowledge and attitudes of both students and the science and social studies groups and there was no significant difference in increasing the average score of knowledge and attitudes between students and between the science and social studies groups (Udu & Wiradirani, 2020).

There are no differences in attitudes towards premarital sexual relations between students majoring in natural sciences and social studies at SMAN 1 Temanggung. There is no relationship between knowledge of reproductive health and attitudes towards premarital sexual relations among students majoring in natural sciences and social studies. at SMAN 1 Temanggung (Mentari, 2015).

There are no significant differences in attitudes and there is no relationship between students who have knowledge and attitudes about reproductive health (Mentari, 2015).

Based on the explanation above, it shows that HIV/AIDS is a threat to students with low attitudes about HIV/AIDS. So in this study more specific to identification the attitudes of high school students majoring in science and social studies regarding reproductive health and high school HIV/AIDS in urban and rural areas, Papua Province. Based on those phenomenon, the purpose of study are; (1) to find out the attitudes of students majoring in social studies regarding the reproductive system and HIV/AIDS in urban and rural high schools in Papua Province, (2) to find out the attitudes of students majoring in science about the reproductive system and HIV/AIDS in urban and rural high schools in Papua Province, and (3) to find out the comparison of attitudes of students majoring in science and social studies regarding the reproductive system and hiv/aids in students in cities and villages in Papua Province.

RESEARCH METHOD

Research design

This study used Quantitative method with a cross-sectional design, namely data collection was carried out at one time or a certain period and observations of study subjects were only carried out once.

Time and location of research**Time**

This research will start from June to September 2020

Research sites

The research will be conducted at SMA 4 Jayapura and SMA 1 Keerom district

Population

The population of this study were students majoring in science and social studies at SMA 4 Jayapura and SMA 1 Keerom district

Sample

The sample of this research is students majoring in science and social studies with the amount according to the results of calculations using the formula; (Iemeshow, 1991)

$$n = Z^2 \alpha^2 p(1-p) / d^2$$

Information

n = sample size

$Z_{2i-\alpha}$ = 95% confidence level means $(i-\alpha) = 1.96$

P = proportion of occurrence prevalence = 0.5

d = precision set = 0.1

So that the research sample size;

$$n = (1.96)^2(0.5)(0.5)/0.1^2 = 96 \rightarrow 100$$

Sampling using purposive sampling technique

Variables and operational definitions**Variable**

- 1) Students are high school students majoring in science and social studies
- 2) Knowledge is everything that high school students majoring in science and social studies know about HIV/AIDS
- 3) Attitude is the action or reaction of high school students majoring in science and social studies in preventing exposure to risky behavior towards HIV/AIDS

Operational definition

Table 1. Operational Definition

Variable	Operational definition	Measuring instrument	Results Measure	Measur e Scale
Attitudes of students about HIV/AIDS health	Actions or reactions of high school students majoring in science and social studies in preventing exposure to HIV/AIDS risky behavior	Questionnair e/google form	Positive attitude Negative attitude	Likert

Data analysis

Data analysis in this study used univariate and bivariate analysis. Univariate analysis is used to see the characteristics of the research variables. Bivariate analysis used an independent T-test to see differences in the knowledge of students majoring in science and social studies about HIV/AIDS in urban and rural high schools in Papua province.

RESULTS AND DISCUSSION

Univariate Analysis Results

The results of the characteristic analysis of 159 students of the Science and Social Sciences Department in urban and rural high schools are presented in the table below.

Table 2. Distribution of Characteristics of Students of Science and Social Studies Majors in Cities and Villages

Characteristics	Science		Social		Total	
	n	%	n	%	n	%
Age						
14 years old	1	33,33	2	66,67	3	100
15 years old	15	37.50	25	62.50	40	100
16 years old	24	72,73	9	27,27	33	100
17 years old	63	82,89	13	17,11	76	100
18 years old	3	50.00	3	50.00	6	100
19 years old	0	0.00	1	1.89	1	100
Gender						
Male	39	66,10	20	33,90	59	100
Female	67	67.00	33	33.00	100	100
Class						
X	16	34,78	30	65,22	46	100
XI	17	73,91	6	26,09	23	100
XII	73	81,11	17	18,89	90	100
Students						
City	41	50,62	40	49,38	81	100
Village	65	83,33	13	16,67	78	100
Total	106	66,67	53	33,33	194	100

Source: Primary Data, 2020

Based on the table above, the most distribution of respondents was at the age of 17 years (82.89) in the Science major, and at the age of 15 years (62.50) in the Social Sciences

department. Based on gender, there were more female study respondents in science majors (67.00%) and social studies majors (33.00%). Students in urban and rural areas are more majoring in science.

Table 3. Distribution of Information Sources for Science and Social Sciences Students in Cities and Villages About HIV/AIDS

Resources	Science		Social		Total	
	n	%	n	%	n	%
Teacher	77	72,64	29	27,36	106	100
Parent	47	68,12	22	31,88	69	100
Health workers	74	73,27	27	26,73	101	100
Friend	30	76,92	9	23,08	39	100
Newspaper	18	85,71	3	14,29	21	100
Magazine	6	66,67	3	33,33	9	100
Television	0	0,00	1	100	1	100
Radio	3	50,00	3	50,00	6	100
Internet	78	75,58	25	24,27	103	100

Source: Primary Data, 2020

Based on sources of information about HIV/AIDS, students majoring in science and in urban and rural areas get a lot of information from the Internet (75.58%), teachers (72.64%), and health workers (73.27%). Meanwhile, students majoring in social studies in urban and rural areas got the most information on HIV/AIDS from teachers (27.36%), the Internet (42.8%), and health workers (26.73%).

Table 4. Distribution of Attitudes of Students in Cities and Villages Categories about HIV/AIDS

Attitude	Science		Social		Total	
	n	%	n	%	n	%
Positive	90	69,77	39	30,23	129	100
Negative	16	53,33	14	46,67	30	100
Total	106	66,67	53	33,33	159	100

Source: Primary Data, 2020

Based on the table above, the attitude of students in urban and rural areas regarding HIV/AIDS prevention is mostly in the positive attitude category (55.2%). When compared to the distribution of the attitude categories of students in urban and rural areas about HIV/AIDS, most rural students have a positive attitude category (30.4%), and students in urban areas have the most negative attitudes (26,3%).

Based on the table above, students majoring in science (69.77%) are more positive about HIV/AIDS in both urban and rural areas compared to social studies majors (30.23%). However, negative attitudes about HIV/AIDS were also higher in science majors (53.33%) in both urban and rural areas compared to social studies majors (46.67%).

Results of Bivariate Analysis

Table 5. Bivariate Analysis of Differences in Levels of Attitudes of Students in Towns and Villages about HIV/AIDS

Variable	Science	Social	Total	p-value
	n(%)	n(%)	n(%)	
Attitude				
Positive	90 (69,77)	39 (30,23)	129 (100)	0.002**
Negative	16 (53,33)	14 (46,67)	30 (100)	
Total	106 (66,67)	53 (33,33)	159 (100)	

Source: Primary Data, 2020

*Mann-Whitney test

*Unpaired t test

Bivariate analysis to see differences in attitudes about HIV/AIDS between students majoring in natural sciences and social studies in urban and rural areas used the Mann Whitney U test, because the data were not normally distributed. The results of the analysis for the attitude variable to see differences in attitudes about HIV/AIDS between students majoring in science and social studies in urban and rural areas used a paired t test, because the data were normally distributed, indicating that the p value (0.002) < 0.05 which means This means that there are differences in attitudes about HIV/AIDS between students majoring in science and social studies in urban and rural areas.

Discussion

This study used a sample of students majoring in natural sciences and social studies at SMA Negeri 1 Arso with an age range of 14 to 19 years. The most respondents in both urban and rural science majors were at the age of 17 years, while the most respondents were in the social studies department at the age of 15. According to the National Family Planning Coordinating Board (BKKBN) adolescents start at the age of 10 and end at the age of 21 (Ministry of Health, 2016). Adolescents belong to an age group that is vulnerable to exposure to HIV AIDS. Based on the 2014 Ministry of Health, most cases of HIV infection occur in productive age, namely 25-49 years, followed by 20-14 years of age and 15-19 years of age. According to UNICEF (United Nations International Children's Emergency Fund),

Most of the respondents in this study were female students in cities and villages. The number of female students is greater than the number of male students in cities and villages. Respondents of students in cities showed more interest in natural science education (IPA) programs in senior high schools in cities and in villages. At the time of the sampling study, they did not choose specifically based on science or social studies education programs.

The results of this study indicate that from various sources of information available, students majoring in science and social studies in senior high schools in cities and villages regarding HIV/AIDS's obtained information about HIV/AIDS's dominated through teacher information sources, followed by the internet media. The results of this study are in line with the results of Tiranda's research (2018) that the majority of sources of information about HIV/AIDS were from the media (47.7%). The results of Nugraheni (2018) also shows the majority of information sources are obtained from electronic media. The results of Rahama (2018) shows sexual knowledge in the lesser category is 64.3%. The majority of students'

sources of information regarding sexuality were obtained from friends with a percentage of 38.6%. There is a significant relationship between knowledge about sexuality and students' sexual behavior. Research results. Suminat (2012) shows that there is a correlation between adolescent sexual behavior in dating with parents and peers. There is no correlation between adolescent sexual behavior in dating with media information sources and teachers.

Manafe, Kandou and Posangi (2014) show there is a relationship between knowledge, the role of the teacher, the role of the information media and the role of peers with HIV/IADS prevention in students at SMA Negeri 4 Manado. In line with the results of Yulianingsih (2015) that knowledge, attitudes, information media are significantly related to the risk of contracting HIV/AID's in public high school students in the city of Gorontalo.

Nugrahawati (2019) shows that the Attitudes towards HIV/AIDS prevention were mostly in the supportive category at 54.2%. The majority of information sources are from electronic media at 49.2%. Attitudes toward HIV/AIDS prevention were mostly in the positive category at 52.5%. Nugrahawati (2019) shows that the factors that are significantly related to HIV/AIDS prevention behavior are the level of knowledge and attitudes of the respondents, and the attitude factor is the factor that most influences the behavior of students towards HIV/AIDS prevention. This is also in line with the results of Wulandari (2019) that was a significant effect before and after the health education about HIV/Aids was carried out on the knowledge and attitudes of the Parongpong State Senior High School students in Cihanjuang Village.

This study shows that students majoring in science and social studies in senior high schools in cities and villages have a positive attitude towards HIV/AID's prevention in cities and villages. High school students in rural areas have the most positive attitudes and high school students in urban areas have the most negative attitudes. Positive attitudes about HIV/AIDS prevention were higher for students majoring in natural sciences than social studies majors in senior high schools in cities and villages.

The results of the research show Wirianan (2017) that there are significant differences in the knowledge, attitudes and actions of HIV/AIDS prevention among members and non-members of the AIDS and Drugs Care Student Group (KSPAN), where the knowledge, attitudes and actions of KSPAN members are better than those who are not KSPAN members. The results of the research by Situmorang et al, 2017 show that the results of the study show that less knowledge about HIV AIDS is associated with a negative stigma against PLWHA.

Bivariate analysis test on HIV/AID's prevention attitudes. shows that there are differences in the level of knowledge about HIV/AIDS between students majoring in natural sciences and social studies at senior high schools in cities and villages. There are differences in attitudes about HIV/AIDS between students majoring in natural sciences and social studies at senior high schools in cities and villages. In line with the research results of Tarigan and Wulandari (2020) that there is a significant relationship between the provision of health education and changes in attitudes among high school students towards HIV/AID's. This is in line with the results of Hasanah and Sobri (2015) that there was a difference in the knowledge of students before counseling was carried out and after counseling was carried out, namely that there was an increase in the number of respondents in both categories from before counseling was carried out and after counseling was carried out. So that there is an influence of counseling

about HIV/AIDS on the level of knowledge in preventing HIV/AIDS in class XI MAN 2 Yogyakarta students.

According to Lawrence Green and Marshall Kreuter in Sciavato (2013) that one's knowledge is one of the predisposing factors to change one's behavior. High knowledge is expected to encourage a positive attitude about HIV/AIDS. Based on the results of Adriani's research (2018) that respondents had a good level of knowledge reaching 69% and negative attitudes about HIV/AIDS as much as 13%.

CONCLUSION

Based on the result of study the conclusion of study are; (1) students majoring in social studies in senior high schools in cities and villages have the most positive attitude towards HIV/AIDS prevention, (2) students majoring in social studies in senior high schools in cities and villages have the most positive attitude towards HIV/AIDS prevention, (3) students majoring in natural sciences in cities and villages have the most positive attitudes compared to students majoring in Social Sciences in senior high schools in cities and villages.

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