



**THE RELATIONSHIP BETWEEN KNOWLEDGE ABOUT HIV/AIDS AND ADOLESCENTS' FREE SEXUAL BEHAVIOR**

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**ABSTRACT**

Adolescence is a transitional period that is vulnerable to risky behavior, including promiscuous sex. Lack of knowledge about HIV/AIDS can increase the risk of unsafe sexual behavior, which can potentially lead to HIV/AIDS transmission in adolescents. This study aims to determine the relationship between knowledge about HIV/AIDS and promiscuous sexual behavior in adolescents. This study used a quantitative design with a cross-sectional approach. The sample consisted of 61 students majoring in Nursing Assistant at SMK YPKP, selected using an accidental sampling technique. The research instruments consisted of an HIV/AIDS knowledge questionnaire and a Guttman scale questionnaire on promiscuity behavior. Data were analyzed univariately and bivariately using the Chi-Square test. The results showed that most respondents had sufficient knowledge about HIV/AIDS (78.7%) and negative promiscuity behavior (54.1%). Statistical tests showed a significant relationship between knowledge about HIV/AIDS and promiscuity behavior in adolescents ( $p$ -value = 0.000). All respondents with good knowledge (21.3 %) had positive promiscuity behavior. There is a significant relationship between knowledge about HIV/AIDS and adolescent sexual behavior. Good knowledge plays a crucial role in developing positive and safe sexual behavior.

Keywords: adolescents; free sexual behavior; HIV/AIDS; knowledge

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**INTRODUCTION**

Adolescence is a crucial developmental stage in human life, marked by rapid and significant biological, psychological, cognitive, and social changes. The World Health Organization defines adolescents as individuals aged 10–19, while in Indonesia the age range is often extended to 24 years, provided they are unmarried. During this phase, reproductive organs mature, sex hormones increase, and emotional and cognitive development is not yet fully stabilized. This makes adolescents vulnerable to risky behaviors, including unsafe sexual behavior (WHO, 2021; Riani et al., 2024). The phenomenon of promiscuous sexual behavior among adolescents is an increasingly worrying public health problem. Data from the Indonesian Demographic and Health Survey shows that adolescents have engaged in various forms of premarital sexual behavior, from holding hands, hugging, kissing, to premarital sex. Increasing openness in adolescent relationships, the influence of popular culture, and easy access to information through digital media have contributed to changes in adolescent sexual norms and behaviors in Indonesia (Ministry of Health of the Republic of Indonesia et al., 2018; BKKBN of the Republic of Indonesia, 2024). Promiscuous sexual behavior among adolescents has various negative impacts, including physical, psychological, and social health. These impacts include unwanted pregnancies, unsafe abortions, school dropout, psychological disorders, and an increased risk of contracting sexually transmitted diseases such as syphilis, gonorrhea, chlamydia, and HIV/AIDS. Adolescents who engage in risky sexual behavior are also at risk of experiencing social stigma and long-term health problems that can impact their quality of life (Susanti et al., 2021; WHO, 2021).

Knowledge about HIV/AIDS is a crucial predisposing factor in shaping adolescent sexual attitudes and behavior. According to health behavior theory, individuals who have good knowledge about the risks and modes of transmission of HIV/AIDS tend to have more positive attitudes and safer sexual behaviors. Conversely, low knowledge can lead to misunderstandings and increase adolescents' tendency to engage in promiscuous sex (Notoatmodjo, 2018; K. Marfu'ah, 2023). However, reproductive health and HIV/AIDS education in schools remains suboptimal. Reproductive health materials are often provided in limited, unsustainable ways, and have not been systematically integrated into the curriculum. Field findings indicate that HIV/AIDS education in schools is generally provided only once during specific activities, thus failing to improve adolescents' understanding and awareness comprehensively (BKKBN RI, 2024). Based on this description, research is needed to examine the relationship between knowledge about HIV/AIDS and promiscuous sexual behavior in adolescents.

## **METHOD**

This study used a quantitative approach with a correlational and cross-sectional study design. This design was used to determine the relationship between knowledge about HIV/AIDS as the independent variable and adolescent promiscuity as the dependent variable, which were measured at the same time (Notoatmodjo, 2018). The study was conducted at the YPKP Vocational School of Nursing, Jayapura Regency, in April 2025 after obtaining permission from the relevant authorities. The study population was all students majoring in Nursing at SMK YPKP. The sample consisted of 61 respondents selected using accidental sampling techniques, with inclusion criteria being students aged 15–18 years, able to read and write, and willing to be respondents (Sugiyono, 2017).

The research instrument was a closed-ended questionnaire with a Guttman scale. The HIV/AIDS knowledge questionnaire consisted of 20 items with true and false answer choices, while the promiscuity behavior questionnaire consisted of 10 items with yes and no answer choices. The HIV/AIDS knowledge questionnaire was adopted and modified from an instrument developed by Notoatmodjo (2018), while the promiscuity behavior questionnaire was adopted from Sarwono (2016). The answer scores were summed to determine the knowledge category (good and sufficient) and promiscuity behavior (positive and negative) (Nursalam, 2016).

Data collection was carried out after respondents signed informed consent. The collected data were processed through the stages of editing, coding, entry, cleaning, and data tabulation. Data analysis was carried out univariately and bivariately. Univariate analysis was used to describe the characteristics of respondents and the distribution of variables. Bivariate analysis used the Chi-Square ( $\chi^2$ ) test to determine the relationship between HIV/AIDS knowledge and adolescent promiscuity behavior, with a significance level of  $\alpha = 0.05$ . A p-value  $\leq 0.05$  indicates a significant relationship (Sugiyono, 2017).

## **RESULT**

Table 1, it can be concluded that the distribution of respondents in this sample was relatively balanced between males (50.8 %) and females (49.2%), with slightly more males (31 people) than females (30 people). The 16-year-old age group dominated the sample with a percentage of 34.4%, followed by the 15-year-old and 17-year-old age groups with a percentage of 24.6% each. Respondents aged 18 years had the smallest percentage (16.4 %). The majority of respondents (47.5 %) came from class X, followed by class XI (31.1%) and class XII (21.3%). Most respondents (63.9 %) stated that they had information, while the other 36.1% did not. The sources of information most used by respondents were books (26.2 %), followed by TV (23.0%), the internet (19.7%), radio (16.4%), and counseling (14.8%).

Table 2 showed that the majority of respondents had sufficient knowledge about HIV/AIDS, namely 78.7 % (48 people). Meanwhile, only 21.3 % (13 people) had good knowledge about HIV/AIDS. Overall, it can be concluded that the majority of respondents had sufficient knowledge about HIV/AIDS.

Table 1.  
Respondent Characteristics (n= 61)

Characteristics	f	%
Gender		
Man	31	50.8
Woman	30	49.2
Age		
15 years	15	24.6
16 years	21	34.4
17 years	15	24.6
18 years	10	16.4
Class		
X	29	47.5
XI	19	31.1
XII	13	21.3
Information		
Yes	39	63.9
No	22	36.1
Resources		
Internet	12	19.7
TV	14	23.0
Radio	10	16.4
Book	16	26.2
Counseling	9	14.8

Table 2.  
Respondent Knowledge (n= 61)

Characteristics	f	%
Knowledge		
Enough	48	78.7
Good	13	21.3

The results of the study showed that the majority of respondents had sufficient knowledge about HIV/AIDS, namely 78.7 % (48 people). Meanwhile, only 21.3 % (13 people) had good knowledge about HIV/AIDS. Overall, it can be concluded that the majority of respondents had sufficient knowledge about HIV/AIDS.

Table 3.  
Free Sex Behavior (n= 61)

Characteristics	f	%
Knowledge		
Enough	48	78.7
Good	13	21.3

Table 4, showed that, 54.1 % (33 people), had negative attitudes toward HIV/AIDS. Meanwhile, 45.9 % (28 people) of respondents had positive attitudes toward HIV/AIDS. The difference in proportion between negative and positive attitudes was not significant, indicating that a significant number of respondents still had positive attitudes toward HIV/AIDS.

Table 4.  
The Relationship Between Knowledge and Free Sex Behavior (n= 61)

Connection Knowledge	Free Sex Behavior				Asymp.Sig (2-sided)
	Positive		Negative		
	f	%	f	%	
Enough	15	24.6%	33	54.1%	.000
Good	13	21.3%	0	.0%	

The results of the study showed a significant relationship between knowledge and promiscuity (p-value = 0.000). The majority of respondents with sufficient knowledge (54.1 %) had negative promiscuity behavior, while 24.6% of respondents with sufficient knowledge had positive promiscuity behavior. Meanwhile, all respondents with good knowledge (21.3 %) had positive

promiscuity behavior. These results indicate that good knowledge about promiscuity can influence positive promiscuity behavior.

## **DISCUSSION**

### **Respondent Characteristics**

The results of this study indicate that the distribution of respondents is relatively balanced between males and females, with the majority of respondents being 16 years old and from grade X. Most respondents have information about HIV/AIDS, with the most commonly used sources of information being books, TV, and the internet. Knowledge about HIV/AIDS can be influenced by several factors, including demographic characteristics such as gender, age, and education level. In this study, the majority of respondents were 16 years old and from grade X, which is a critical age and education level in the formation of knowledge and behavior related to HIV/AIDS. The sources of information used by respondents can also influence their knowledge about HIV/AIDS. In this study, books, TV, and the internet were the sources of information most used by respondents.

### **Knowledge about HIV AIDS**

The results of this study indicate that knowledge about HIV/AIDS among adolescents still needs to be improved. The majority of respondents have sufficient knowledge about HIV/AIDS, but there is still room to improve their knowledge. Knowledge and awareness about health can influence a person's behavior. In this context, knowledge about HIV/AIDS can influence promiscuous sexual behavior in adolescents (Siti Nuryasita, 2022). According to (KMarfu'ah, 2023) the statement that knowledge about HIV/AIDS can influence promiscuous sexual behavior in adolescents. Adolescents who have good knowledge about HIV/AIDS tend to have more positive and safe free sex behavior. The researcher's assumption that knowledge about HIV/AIDS can influence free sex behavior in adolescents is supported by the results of previous research. Therefore, health education about HIV/AIDS needs to be increased to increase adolescents' knowledge and awareness about HIV/AIDS, so that it can influence more positive free sex behavior.

### **Free Sexual Behavior in Adolescents**

The result that, 54.1 % (33 people), have negative attitudes toward HIV/AIDS. Meanwhile, 45.9 % (28 people) of respondents have positive attitudes toward HIV/AIDS. The difference in proportion between negative and positive attitudes is not significant, indicating that there are still quite a number of respondents who have positive attitudes toward HIV/AIDS. These results can be explained using the *Health Belief Model* (HBM) theory developed by Rosenstock (1974). According to this theory, a person's behavior is influenced by knowledge and awareness about health. In this context, knowledge about HIV/AIDS can influence adolescent behavior related to HIV/AIDS (Erlin Angeline Malau, 2024). This research is in line with research conducted by DiClemente et al. (2001) which showed that adolescents who have good knowledge about HIV/AIDS tend to have more positive behaviors related to HIV/AIDS. However, other research conducted by (Titik Widayati, 2024) shows that knowledge about HIV/AIDS does not always guarantee positive behaviors related to HIV/AIDS. The researcher's assumption that adolescent behavior related to HIV/AIDS is influenced by knowledge and awareness about HIV/AIDS is supported by the results of this study. However, it is important to remember that adolescent behavior regarding HIV/AIDS is also influenced by other factors such as the environment, family, and peers. Thus, the results of this study show that there are still quite a lot of respondents who have positive behavior regarding HIV/AIDS. Therefore, health education about HIV/AIDS needs to be improved to increase adolescents' knowledge and awareness about HIV/AIDS, so that it can influence more positive behavior related to HIV/AIDS.

### **The Relationship Between Knowledge and Free Sexual Behavior in Adolescents**

The results of this study show that there is a significant relationship between knowledge and promiscuous sexual behavior in adolescents. The majority of respondents with sufficient knowledge had negative promiscuous sexual behavior, while all respondents with good knowledge had positive promiscuous sexual behavior. These results support the *Health Belief Model* (HBM) theory developed by Rosenstock (1974), which states that knowledge and awareness of health can influence a person's behavior (Inggit Rahayu, 2024). In this context, knowledge of HIV/AIDS can influence adolescents' promiscuous sexual behavior. This research also aligns with research conducted by (Ninie Lely Pratiwi, 2023) which showed a significant relationship between knowledge of HIV/AIDS and promiscuous sexual behavior in adolescents. Adolescents who have good knowledge about HIV/AIDS tend to have more positive promiscuity behavior. Other research conducted by (Siti Chodidjah, 2025) also shows that health education about HIV/AIDS can increase adolescents' knowledge and awareness about promiscuity, thereby influencing more positive promiscuity behavior. The researcher's assumption that good knowledge about HIV/AIDS can influence adolescents' promiscuity behavior by increasing awareness and awareness of the risks and consequences of promiscuity is also supported by the results of this study. Adolescents who have good knowledge about HIV/AIDS tend to have positive promiscuity behavior. Thus, the results of this study indicate that knowledge about HIV/AIDS is an important factor in influencing adolescents' promiscuous sexual behavior. Therefore, health education about HIV/AIDS needs to be improved to increase adolescents' knowledge and awareness about free sex, so that it can influence more positive free sex behavior.

### **CONCLUSION**

This study shows that there is a significant relationship between knowledge about HIV/AIDS and promiscuous sexual behavior in adolescents at SMK YPKP Nursing Assistant Department. Adolescents with a better level of knowledge about HIV/AIDS tend to have more positive and safe sexual behavior than adolescents with sufficient knowledge. The results of statistical analysis using the Chi-Square test showed a p-value = 0.000 ( $p \leq 0.05$ ), which indicates that knowledge plays an important role in shaping adolescents' promiscuous sexual behavior. Adequate knowledge helps adolescents understand the risks of HIV/AIDS transmission, thus encouraging healthier decision-making in sexual behavior. Therefore, continuous improvement of reproductive health and HIV/AIDS education in the school environment is essential as an effort to prevent promiscuous sexual behavior and HIV/AIDS transmission in adolescents.

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