

Original Research Article

KNOWLEDGE, ATTITUDES, AND BEHAVIORS OF ADOLESCENTS IN PREVENTING SEXUALLY TRANSMITTED DISEASES

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Abstract

Background: The increasing number of sexually transmitted diseases (STDs) among young adults aged between 15 and 24 years remains a major problem of concern worldwide. Adolescents' poor knowledge regarding sexual and reproductive health, as well as the many misunderstandings regarding sexual issues, can cause adolescents to commit acts that risk increasing the incidence of sexually transmitted diseases.

Objectives: This study aims to analyzed the correlation between knowledge, attitudes, and behaviors of adolescents in preventing sexually transmitted diseases.

Methods: The study used cross sectional designed. This study was conducted at a vocational school in Sidoarjo, East Java, in December 2023. Sample in this study were vocational school's students who were members of health extracurriculars. The sample size in this study was 50 respondents. This study used random sampling technique. This study used questionnaire as the instrument. Data analyzed used Kendall Tau b correlation method.

Results: Most of the respondent were female (72%) and aged of sixteen (60%). The respondent's knowledge about STDs was correlated with behavior to prevent STDs (p-value <0,01). The respondent knowledge about STDs was correlated with attitudes towards preventing STDs (p-value <0,01). The respondent attitudes towards preventing STDs was correlated with behavior to prevent STDs (p-value <0,01).

Conclusion: There was a significant correlation between knowledge about STDs and attitudes towards preventing STDs, a significant correlation between knowledge about STDs and behavior to prevent STDs, and a significant correlation between attitudes and behaviors to prevent STDs

Keywords: *Knowledge, Attitudes, Behavior, Adolescents, Sexually Transmitted Diseases*

INTRODUCTION

The increasing number of Sexually Transmitted Diseases (STDs) among young adults between 15 and 24 years old remains a major issue of concern throughout the country, and more than 340 million new cases occurring each year worldwide (Sham et al., 2020; Voyiatzaki et al., 2021). Most STDs occur in teenagers and young adults who lack awareness and knowledge regarding sexual health (WHO, 2024). Apart from that, adolescence is the period where puberty occurs, namely the period where the sexual organs mature rapidly and makes teenagers motivated to explore sexual experiences which, if carried out without direction, such as without using protection, will trigger the occurrence of sexually transmitted diseases (STDs) (Betan & Pannyiwi, 2020; Kurniawan et al., 2022).

There were around 374 new infections in 2020 in the 15 – 49 year age group who suffered from curable STDs such as chlamydia, gonorrhea, syphilis and trichomoniasis. Meanwhile, in 2022 it is estimated that 8 million people aged 15-49 years will suffer from syphilis and as many as 1.1 million pregnant women will contract syphilis and cause adverse birth outcomes (WHO, 2024).

Sexually Transmitted Infections (STIs) and Human Immunodeficiency Virus (HIV) Infection is a public health problem that extends to become a social, economic and social problem culture. In 2023, the number of people living with HIV (ODHIV) in Indonesia based on the AIDS Epidemic Model (AEM) it is estimated that there are 515,455 people (Indonesia Ministry of Health, 2023). Meanwhile, in East Java in 2022 as many as 773 people will suffer from sexually transmitted diseases (Statistics Indonesia, 2023).

Adolescents' poor knowledge regarding sexual and reproductive health, as well as the many misunderstandings regarding sexual issues, can cause adolescents to commit acts

that risk increasing the incidence of sexually transmitted diseases (Soleymani et al., 2015). In Indonesia, there were no subjects that specifically teach and provide information about sexual health for high school students, especially female students, which is one of the causes of the high incidence of sexually transmitted infections among teenagers (Margiyati & Khasanah, 2014). Sexual education provided in schools is still a quite controversial issue in Muslim countries and is still a matter of debate in which organizations; school or family; responsible for educating youth about infectious diseases (Sham et al., 2020).

Objective(s): The aim of this study is to analyzed the correlation between knowledge, attitudes, and behaviors of adolescents in preventing sexually transmitted diseases.

METHODS

Study Design

The study was observational analytic used cross sectional designed.

Setting

This study was conducted at a vocational school in Sidoarjo, East Java, in December 2023.

Research Subject

Sample in this study were vocational school's students who were members of health extracurriculars. The sample size in this study was 50 respondents.

This study used random sampling technique. The inclusion criteria in this study were adolescents aged 15-18 years and who had interacted with the opposite sex. The exclusion criteria include teenagers aged 15-18 years who have interacted with the opposite sex but the relationship involved is considered a family relationship.

Instruments

This study used questionnaire as the instrument. The questionnaire used in this study has been validated and tested for reliability. The validity test results indicate a value >0.361 (r table). The reliability of the knowledge questionnaire is 0.864, attitude is 0.651, and behavior is 0.691. The knowledge questionnaire consists of 8 questions, attitude 8 questions, and behavior 6 questions.

Data Analysis

Data analyzed using SPSS version 23 for Mac. Hypothesis test of this study used Kendall Tau b correlation method.

Ethical Consideration

In this research, an ethical feasibility test was carried out.

RESULTS

Characteristic of the respondent showed that most of the respondents were female. Most of the respondents were sixteen years old (Table 1).

Table 1. Demographic Characteristics of Respondents (n=50)

Characteristics of Respondents	Σ	%
Sex		
Male	14	28
Female	36	72
Total	50	100
Age		
15	15	30
16	30	60
17	4	8
18	1	2
Total	50	100

Table 2 shows that the majority of respondents have good knowledge about Sexually Transmitted Diseases (STDs) (64%), good attitudes towards preventing Sexually Transmitted Diseases (STDs) (58%), and good

behavior for preventing Sexually Transmitted Diseases (STDs) (72%).

Table 2. Distribution of Adolescent Knowledge, Attitudes and Behavior in Preventing Sexually Transmitted Diseases (STDs)

Variable	n	%
Knowledge		
Good	32	64
Enough	17	34
Not Good	1	2
Total	50	100
Attitudes		
Good	29	58
Enough	20	40
Not Good	1	2
Total	50	100
Behavior		
Good	36	72
Enough	13	26
Not Good	1	2
Total	50	100

The Kendall Tau b correlation to test the correlation between knowledge and behavior shows a p-value <0.01 (<α=0.05), thus rejecting H₀ and accepting H₁. This means that the student's knowledge about Sexually Transmitted Diseases is correlated with student behavior in preventing Sexually Transmitted Diseases. The correlation between knowledge and attitude shows a p-value <0.01 (<α=0.05), thus rejecting H₀ and accepting H₁. This means that student's knowledge about Sexually Transmitted Diseases is correlated with student's attitudes towards preventing Sexually Transmitted Diseases. Likewise, the Kendall Tau b correlation test for the relationship between attitudes and behavior shows a p-value <0.01 (<α=0.05), thus rejecting H₀ and accepting H₁. This means that the attitudes that students have towards preventing Sexually Transmitted Diseases are correlated with student's behavior to preventing Sexually Transmitted Diseases (Table 3).

Table 3. Hypothesis Test Result with Kendall Tau b Correlation Test

Variable		p value	α
The relationship between knowledge and behavior		<0,01*	0,05
The relationship between knowledge and attitudes		<0,01*	0,05
The relationship between attitudes and behavior		<0,01*	0,05

*Significance difference (<0,05)

DISCUSSION

This research defines knowledge as the respondent's understanding of the meaning of sexually transmitted diseases, their symptoms, modes of transmission, and prevention methods. The results of the study showed that even though the respondents interacted with the opposite sex, the majority had good attitudes and behaviors in preventing Sexually Transmitted Diseases. This condition is due to the respondents' good knowledge about sexually transmitted diseases. Knowledge significantly contributes to attitudes. Adolescents' knowledge about sexually transmitted diseases forms the basis for their attitudes towards preventing these diseases (Ristiani, 2014).

The study results showed that there was a correlation between knowledge and attitude. Increasing a person's knowledge about a health condition, including certain types of infections, their symptoms, modes of transmission, the potential fatal impacts, and prevention methods, will enhance their perception and encourage the prevention of risky behaviors (Hernanda et al., 2023; Pratiwi et al., 2022). Attitude is defined as a person's mental state, including feelings and emotions, regarding a fact or situation (Chaiklin, 2011). Attitudes are found to be in harmony with knowledge, meaning that someone with good knowledge tends to have good attitude (Sari, 2016).

The study results showed that there was a correlation between knowledge about Sexually Transmitted Diseases and behavior to prevent them. Knowledge plays an important role in shaping and influencing a person's behavior (Putri & Wahyudiono, 2021). Knowledge about health is a construct formed in a person's mind encompassing detailed and specific information about etiology, prevalence, risk factors, prevention, transmission, symptoms, treatment, and health services available for treating patients when infected (Trevethan, 2017).

Healthy behavior carried out by a person is a manifestation of their knowledge about the benefits of implementing such behavior (Sari & Utami, 2021). Knowledge is a predisposing factor for someone's behavior, meaning that it can motivate someone to act (Aritonang, 2015). Adequate knowledge about reproductive health, especially concerning sexually transmitted infections, can prevent teenagers from engaging in sexual behavior before marriage (Kora et al., 2016).

The study results showed that there was a correlation between attitudes and behavior of preventing Sexually Transmitted Diseases. While knowledge plays an important role in encouraging the formation of healthy behaviors, it alone is not sufficient (Abiodun et al., 2014). Attitude plays an important role in predicting and influencing the formation of a person's behavior (Al-Otaibi, 2013). For example, a negative attitude towards alcohol consumption among teenagers will encourage them to avoid drinking alcohol (Chawla et al., 2007).

CONCLUSION

This research concludes that there was a significant correlation between knowledge about sexually transmitted diseases (STDs) and attitudes towards preventing STDs, a significant correlation between knowledge about STDs and behavior to prevent STDs, and a significant correlation between attitudes and behaviors to prevent STDs.

SUGGESTIONS

Increased knowledge regarding adolescent reproductive health can be provided to increase students' awareness of sexually transmitted diseases and prevent behavior that can trigger sexually transmitted diseases. Adolescents are expected to avoid behavior that can trigger sexually transmitted diseases by seeking information about sexually transmitted diseases from appropriate sources, such as parents, teachers, health workers, and participating in positive youth activities. Schools can also increase sexual education by holding seminars on adolescent reproductive health so that adolescents' knowledge about sexually transmitted diseases increases. Parents should also pay more attention to their sons and daughters' interactions and be more open when discussing adolescent reproductive health. The next research that can be carried out is to test the effectiveness of providing adolescent reproductive health education to increase adolescent knowledge about sexually transmitted diseases and prevent behavior that causes sexually transmitted diseases.

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DECLARATION OF CONFLICTING INTEREST

No conflict of interest has been declared.

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AUTHOR CONTRIBUTION

Nisa Dewanti: Literature search, research data collection, author of research reports and manuscripts.

Tamara Nur Budiarti: Data analysis, data synthesis, and author manuscripts.

Meli Diana: Literature search and data collection

Riesmiyatiningdyah: Prepare the manuscripts

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