

## The Relationship between the Level of Knowledge About HIV/AIDS and the Attitudes of Adolescents Aged 13-21 Years on Premarital Sexual Behavior In Naman Teran Village in 2023

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### ARTICLE INFO

**Keywords:**  
AIDS, HIV

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### ABSTRACT

Premarital sexual behavior is any sexual activity or activity that is motivated by sexual desire carried out before marriage, both religiously and legally. The World Health Organization (2018), states that around 21 million adolescent girls aged 15–19 years in developing countries experience pregnancy every year and almost half of these pregnancies (49%) are unwanted pregnancies. One of the reasons for this pregnancy is sex before marriage. Reports on the development of HIV/AIDS in Indonesia from October to December 2022 reported the number of people infected with HIV as many as 14,640 people. The number of people with AIDS was reported as many as 4,725 people. The highest presentation of HIV infection was reported in the age group 25-49 years (69.2%) followed by the age group 20-24 years (16.7%) and the age group over 50 years (7.6%). The highest presentation of AIDS was in the age group 30-39 years (35.2%) followed by the age group 20-29 years (29.5%) and the age group 40-49 years. Based on data from the 2022 District/City Health Profile, there were 1,352 additional new HIV cases in 2022 and 392 AIDS deaths. With this increase, by 2022 the total number of HIV cases will be 6,210 cases and AIDS will be 5,625. The development of HIV/AIDS cases in North Sumatra among school children or students is 2,034 people. Based on 2021 data, the three regencies/cities with new HIV/AIDS sufferers in succession are Medan City, namely 617 cases or around 35.38%, Deli Serdang Regency with 189 cases (10.84%) and Karo Regency with 178 cases (10.20%).

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## 1. INTRODUCTION

Adolescence is a stage of life that is transitional and not sedentary which is very good for developing all the positive potential they have, such as talents, abilities and interests. Where adolescence is also a period that is prone to negative influences such as drugs, crime, and sex crimes. Through free sex it can be dangerous because it triggers the desire to mix freely between women and men who prioritize lust [1].

Sexual harassment is a form of sexual crime committed by adolescents. Sexual harassment is any form of behavior that connotes or leads to sexual matters. Sexual harassment is a form of sexual crime committed by adolescents. Sexual harassment is any form of behavior that connotes or leads to sexual matters. Sexual harassment is a form of sexual crime committed by adolescents. Sexual harassment is any form of behavior that connotes or leads to sexual matters. Sexual harassment is a form of sexual crime committed by adolescents. Sexual harassment is any form of behavior that has the connotation or leads to sexual matters. Significant sexual development in adolescents makes rapid physical changes and hormonal changes as a trigger for serious adolescent health problems due to sexual urges that make adolescents vulnerable to diseases and reproductive health problems (Kespro), teenage pregnancies with premarital sex [2].

Premarital sexual behavior is any sexual activity or activity that is motivated by sexual desire carried out before marriage, both religiously and legally. The World Health Organization (2016), states

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that around 21 million teenage girls aged 15-19 in developing countries experience pregnancy every year and nearly half of these pregnancies (49%) are unwanted pregnancies. One of the causes of this pregnancy is sex before marriage [3]. The results of a survey by the Department of Health & Human Services (2019) of high school students in the United States found that 41% of students had sexual intercourse and nearly 230,000 babies were born to girls aged 15-19 years. BKKBN data for 2017 found that 3.2 million adolescents aged 15-19 years had unsafe abortions due to premarital sex. The population according to the age group of 15-24 years in Indonesia according to the results of the 2015 Inter-Census Population Survey reached 42,061.2 million or 16.5% [4].

Head of the National Family Planning Coordinating Agency (BKKBN), Muslim Harahap, said that based on 2015 data, 40% of teenagers in Medan City had had sex before marriage. According to research by a university, 40 teenagers in the city of Medan had engaged in premarital sex [5]. Premarital sexual behavior has many negative impacts including unwanted pregnancies (KTD), abortion, risk of contracting sexually transmitted diseases (STDs) such as mole ulcers, chlamydia, trichonomiasis, scabies, syphilis, genital warts (kondyloma akumimala), genital herpes, gonorrhoeae, and risk of contracting HIV/AIDS[6].

Sexually transmitted diseases (STDs) are a type of reproductive tract infection (ISR) that is transmitted through sexual contact. UTI is an infection caused by the entry and reproduction of germs that cause infection into the reproductive tract. The germs that cause infection can be fungi, viruses and parasites. Included in the STD group are gonorrhea, syphilis, mole ulcers, condyloma acuminata, genital herpes, and HIV/AIDS. Of all STDs, HIV/AIDS is the most dangerous type of STD[7].

## 2. METHOD

The type of research used in this study is analytic observational with a cross-sectional approach, namely the measurement of the independent and dependent variables will be carried out at the same time. The research was conducted in Naman Teran Village. The considerations for choosing the location for this research are:

1. There has never been a study entitled The Relationship between Knowledge Levels about HIV/AIDS and the Attitudes of Adolescents Aged 13-21 Years in Naman Teran Village in 2023.
2. The population is sufficient for research
3. The research time required to complete this research is from February to July 2023.

The sample is a part of the population that is expected to be representative or representative of the population. The sample should meet the desired criteria, the desired sample is part of the target population to be studied directly, this group includes subjects who meet the inclusion and exclusion criteria[8].

If the research population is less than 100 then all the samples taken are all, if the research population is more than 100 then the samples that can be taken are between 10-15% or 20-25% or more (Nisa, 2019). The formula for determining the sample if the total population is less than 100 people is as follows:

$$n = \frac{N}{1 + N(d^2 (\%))}$$

n : Samples  
N : Population

This accidental sampling technique is carried out by taking respondents who happen to be available or available somewhere. The sample in this study was adolescents aged 13-21 who came as samples in Naman Teran Village in 2023, namely 35 people. The tools used to collect data are arranged in a questionnaire (list of questions) of 40 questions by selecting a checklist with the following grid:

**Table 1. Knowledge Question Grid about HIV/AIDS for Adolescents Aged 13-21 Years On Premarital Sexual Behavior**

Discussion Topic	No Question	Number of Questions
Definition of HIV AIDS	1, 2, 3, 10, 14	5
Etiology of HIV/AIDS	4, 5, 6, 7, 8, 9, 13, 15, 16, 18	10
Signs of HIV AIDS symptoms	12, 11, 20	3

Prevention of HIV AIDS	17, 19	2
<b>Amount</b>		<b>20</b>

**Table 2. Attitudes of Adolescents Aged 13-21 Years About Behavior Premarital Sexual**

Discussion Topic	No Question	Number of Questions
Definition of premarital sexual behavior	1 dan 2	2
Factors influencing premarital sex	3, 4 dan 5	3
Forms of premarital sexual behavior	6 dan 7	2
Consequences of premarital sex	8, 9, 10, 11, 12, 13, 14, dan 15	8
How to prevent premarital sexual intercourse	16, 17, 18, 19 dan 20	5
<b>Amount</b>		<b>20</b>

The steps for processing data manually generally go through the following steps:

1. Editing (data editing)

During the research, the authors checked the completeness of the respondent's data and the completeness of the contents of the questionnaire filled out by the authors whether there were incomplete data. It is intended that the incoming data can be processed correctly so that data processing can provide results that describe the problem under study then the data is grouped according to the measurement aspect, during the research the authors did not find any deficiencies in filling in the data and questionnaires filled out by the author.

2. Coding sheet (make code sheet)

After all the questionnaires have been edited or edited, coding or "coding" is then carried out. Namely changing data in the form of sentences or letters into numeric or numeric data. The codes provided are as follows:

- a. Code for the adolescent knowledge variable
  - Code 1 : good knowledge
  - Code 2 : sufficient knowledge
  - Code 3: lack of knowledge
- b. Code for the division of attitudes of adolescents
  - Code 1 : positive (>79.2%)
  - Code 2 : negative (<79.2%)
- c. Code for the age division of youth
  - Code 1: middle youth (13-15 years)
  - Code 2: late teens (16-21 years)
- d. Code for education sharing
  - Code 1 : basic education (SD-SMP)
  - Code 2 : secondary education (SMA/SMK)
  - Code 3 : upper education (university)
- e. Code for gender division
  - Code 1: female
  - Code 2: male
- f. Code for resource sharing
  - Code 1: mass media
  - Code 2 : electronic media
  - Code 3: family
  - Code 4: health worker

3. Data entry (enter data)

The author enters the data into the master table and then transfers it into the dummy table according to the variables.

4. Tabulating (tabulation)

Namely creating data tables, according to the research objectives or what the researcher wants. After the data is coded, the researcher enters the data into the master table. In this study, researchers used the SPSS program application PPAW statistics 18 version with the chi square test [9].

### 3. RESULTS AND DISCUSSION

After conducting research on teenagers aged 13-21 years in Naman Teran Village in 2023, the following results were obtained:

#### Univariate Data Analysis

Univariate data analysis was used to see the frequency distribution and percentage of the research variables "Relationship Level of Knowledge about HIV/AIDS in Adolescents Aged 13-21 Years with Attitudes of Premarital Sexual Behavior in Naman Teran Village in 2023", namely:

#### Distribution of Respondents Based on Characteristics

After conducting research on 35 teenagers in Naman Teran Village in 2023, the author obtained results that describe the characteristics of teenagers, namely age, education level, gender and source of information. To see the characteristics of other respondents, you can see the following table:

**Table 3. Distribution of Adolescent Characteristics Age 13-21 Years in Naman Teran Village Year 2023**

Characteristics	Category	Amount (Person)	Presentase (%)
Age	13-15 year	15	42,9
	16-21 year	20	57,1
<b>Total</b>		<b>35</b>	<b>100</b>
Education	Elementary (Elementary-Middle School)	14	40
	Intermediate (SMA/SMK)	18	51,4
	Upper (College)	3	8,6
<b>Total</b>		<b>35</b>	<b>100</b>
Gender	Woman	19	54,3
	Man	16	45,7
<b>Total</b>		<b>35</b>	<b>100</b>
Sumber Informasi	Mass media	29	82,9
	Electronic Media	1	2,9
	Family	1	2,9
	Health workers	4	11,4
<b>Total</b>		<b>35</b>	<b>100</b>

Table 3 above shows the characteristics of the majority of respondents aged 16-21 years, 20 people (57.2%), secondary education (SMA) 18 people (51.4%), 19 women (54.3%) %, and 29 people (82.9%) received sources of information from the mass media.

#### Distribution of respondents based on the level of knowledge of teenagers aged 13-21 about HIV/AIDS

The level of knowledge of young people about HIV/AIDS in Naman Teran Village, Naman Teran District, Karo Regency in 2019, can be seen in the following table:

**Table 4. Distribution of Knowledge Level of Adolescents Aged 13-21 Years about HIV/AIDS in Naman Teran Village in 2023**

Knowledge	Amount (Person)	Presentase (%)
Good	7	20,0
Enough	19	54,3
Not enough	9	25,7
<b>Total</b>	<b>35</b>	<b>100</b>

Based on table 4. it can be seen that of the 35 respondents, the majority had sufficient knowledge, 19 people (54.3%) about HIV/AIDS.

### Distribution of attitudes of adolescents aged 13-21 years regarding premarital sexual behavior

Adolescent attitudes regarding premarital sexual behavior in Naman Teran Village in 2023 can be seen in the following table:

**Table 5. Distribution of Attitudes of Adolescents Aged 13-21 Years on Premarital Sexual Behavior in Naman Teran Village in 2023**

Attitude	Amount (Person)	Presentase (%)
Positive	26	74,3
Negative	9	25.7
<b>Total</b>	<b>35</b>	<b>100</b>

Based on the table above, it can be seen that of the 35 respondents, the majority had a positive attitude, 26 people (74.3%) regarding premarital sexual behavior.

### Bivariate data analysis

Bivariate data analysis is used to see the significance of the relationship between the independent variable and the dependent variable which is carried out using the chi-square ( $\chi^2$ ) statistical test. If  $p = (0.05) >$  from the ChiSquare results then  $H_0$  is accepted and  $H_a$  is rejected, meaning there is no relationship between the research results and theory. If  $p = (0.05) <$  from the ChiSquare results then  $H_0$  is rejected.  $H_a$  is accepted, meaning there is a relationship between the research results and theory.

From the research conducted, data can be obtained regarding the relationship between the level of knowledge about HIV/AIDS and adolescent attitudes towards pre-marital sexual behavior, as follows:

**Table 6 Cross Tabulation of the Relationship between Knowledge Level about HIV/AIDS and the Attitudes of Adolescents Aged 13-21 Years on Premarital Sexual Behavior in Naman Teran Village Year 2023**

Knowledge	Attitude				Uji <i>Chi-Squere</i>
	Positif		Negatif		
	N	%	N	%	
Good	7	20,0	-	-	$p = 0,00$
Enough	19	54,3	-	-	
Not enough	-	-	9	25,7	
<b>Total</b>	<b>26</b>	<b>74,3</b>	<b>9</b>	<b>25,7</b>	

It can be seen that of the 26 respondents who had a positive attitude, the majority had sufficient knowledge, 19 people (54.3%). The results of the ChiSquare statistical test obtained  $p = 0.00 < (0.05)$  and thus  $H_0$  was rejected and  $H_a$  was accepted, that is, there is a relationship between the level of knowledge about HIV/AIDS and the attitude of adolescents aged 13-21 years towards premarital sexual behavior.

### Discussion

From the characteristics of the 35 respondents, the majority were in their late teens (16-21 years) 20 people (57.1%), secondary education (SMA/SMK) 18 people (51.4%), 19 women (54.3%), as well as sources of information from the mass media 29 people (82.9%), and knowledgeable enough 19 people (54.3%), who have a positive attitude 23 people (65.7%). The results of the analysis showed that of the 35 respondents, the majority had sufficient knowledge about HIV/AIDS, as many as 19 people (54.3%).

According to the author's assumption, the knowledge of adolescents aged 13-21 years in Naman Teran Village about HIV/AIDS is sufficiently knowledgeable, because the majority of adolescents aged

16-21 years (57.2%) where age affects the level of knowledge, adolescents in Naman Teran village are knowledgeable enough about HIV/AIDS due to secondary education (SMA/SMK) as many as 18 people (51.4%), where the level of education greatly influences the level of knowledge, and youth who obtain sources of information about HIV/AIDS from the mass media as many as 29 people (82.9%) where the source of information also influences knowledge.

This is in accordance with Wawan's theory, et al (2018) that knowledge is influenced by formal education factors. Knowledge is very closely related to education, where it is hoped that with higher education the person will have a wider/higher knowledge. The results of this study are in line with the research of Inggit Rahayu, et al, entitled "Relationship Level of Knowledge About HIV/AIDS with Premarital Sexual Behavior of Students in 2017." Of the 90 respondents, 49 respondents (54%) had good knowledge, 39 respondents (43%) sufficient level of knowledge and as many as 2 people (3%) for less knowledge level. This shows that the level of knowledge of adolescents about HIV/AIDS is good.

#### 4. CONCLUSION

Based on the results of research regarding the relationship between the level of knowledge about HIV/AIDS and the attitudes of adolescents aged 13-21 years regarding premarital sexual behavior, the following conclusions can be drawn The majority of respondents had sufficient knowledge, 19 people (54.3%) about HIV/AIDS in Naman Teran Village. The majority of respondents had a positive attitude, 26 people (74.3%) regarding premarital sexual behavior in Naman Teran Village. There is a relationship between the level of knowledge about HIV/AIDS and the attitudes of adolescents aged 13-21 years regarding premarital sexual behavior, where of the 26 respondents who are positive and have sufficient knowledge, 19 people (54.3%), in Naman Teran Village, Naman District Teran Karo Regency 2019. The results of the Chi-Square statistical test obtained  $p = 0.00 < (0.05)$ .

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