

## Description of Students' Level of Knowledge, Attitudes and Behavior SMA Santo Thomas 1 Medan Regarding Prevention of Sexually Transmitted Infections in 2022

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### ARTICLE INFO

### ABSTRACT

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Sexually Transmitted Infections (STIs) are various infections that can be transmitted from one person to another through sexual contact. Most sufferers of sexually transmitted diseases are aged 15-49 years. In 2019, the North Sumatra Provincial Health Service reported a significant increase in the incidence of sexually transmitted infections (STIs) in recent years. The increasing trend in the spread of this disease is caused by deviant sexual behavior and the presence of premarital and extramarital sexual relations which is quite high due to the low level of knowledge about sexually transmitted diseases. This study aims to determinedescription of the level of knowledge, attitudes and behavior of students at SMA Santo Thomas 1 Medan regarding the prevention of sexually transmitted infections. The research was conducted using a descriptive research method with a cross-sectional design. The sample for this research was 215 students from SMA Santo Thomas 1 Medan in 2022. Data analysis was carried out using total sampling. The results of testing the level of knowledge, attitudes and behavior regarding STI prevention show that the majority of students at SMA Santo Thomas 1 Medan have knowledge in the good category (60%), attitudes in the good category (94.9%), and behavior in the good category (41.9%). The level of knowledge, attitudes and behavior of SMA Santo Thomas 1 Medan students regarding STI prevention is good.

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## 1. INTRODUCTION

Sexually Transmitted Infections (STIs) are various infections that can be transmitted from one person to another through sexual contact. STIs are more risky if you have sexual relations with multiple partners, either vaginally, orally or anally. There are approximately 30 types of microbes (bacteria, viruses and parasites) that can be transmitted through sexual contact. The most frequently found STIs are gonorrhea, chlamydia, syphilis, trichomoniasis, candidiasis, herpes, condyloma acuminta, and human immunodeficiency virus (HIV) infections.<sup>1,2</sup>

Sexually transmitted infections generally occur due to changes in people's lifestyles. According to WHO. STIs have a major impact on sexual and reproductive health worldwide. More than 1 million STIs can occur every day. In 2020, WHO estimates that there will be 374 million infections, some of which are highly increasing in the world, namely: chlamydia (129 million), gonorrhea (82 million), syphilis (7.1 million) and trichomoniasis (156 million). Common types of STIs in the United States are chlamydia, gonorrhea, and syphilis. These three sexually transmitted diseases are bacterial infections that are easy to treat.<sup>3,2,4</sup>

In Indonesia, the most common sexually transmitted infections in 2019 were syphilis and gonorrhea. The very high prevalence of STIs in Indonesia is found in the city of Bandung, with a prevalence of gonorrhea infections of 37.4%, chlamydia 34.5%, and syphilis 25.2%. Everyone can contract a sexually transmitted disease. The increasing trend in the spread of this disease is caused by deviant sexual behavior, and the presence of premarital and extramarital sexual relations is quite high. Due to the low level of knowledge about sexually transmitted diseases. Most sufferers of sexually transmitted diseases are aged 15-49 years. The incidence of STIs has proven to have increased

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significantly in recent years.<sup>5</sup>

In 2019 in North Sumatra, people aged 15-45 years reported a total of 1,709 new HIV positive cases, an increase compared to the number of new cases found in 2018 of 1,498 cases. The North Sumatra Provincial Health Service reported a significant increase in the incidence of sexually transmitted infections (STIs) in recent years.<sup>6</sup> Based on the background above which states that sexually transmitted infections in high school students are still increasing so researchers are interested in conducting research on "Description of the Level of Knowledge, Attitudes and Behavior of Students at Santo Thomas 1 High School Medan Regarding the Prevention of Sexually Transmitted Infections."

## 2. METHOD

The research was conducted using a descriptive method with a cross-sectional design. This research was conducted in December at SMA Santo Thomas 1 Medan in 2022. The sampling technique in this research used a total sampling technique with a total of 215 respondents, 95 male respondents and 120 female respondents. The data in this research is primary data obtained based on the results of the questionnaire.

## 3. RESULTS AND DISCUSSION

### Results

This research was conducted on students at SMA Santo Thomas 1 class X, XI, XII who met the inclusion and exclusion criteria, totaling 215 respondents. In this study the results of univariate analysis have been summarized in table 1 to table 11. based on table 1 it is known that the majority of respondents are female 55.8%.

**Table 1.** Frequency Distribution of Respondent Characteristics Based on Gender

Gender	N	(%)
Man	95	44.2
Woman	120	55.8
Total	215	100

Table 2 it is known that the most frequently answered STI transmission questions were 99.1% correct.

**Table 2.** Frequency Distribution of Respondents' Correct Answers about STIs

Respondent Question No	n	%
1. Understanding STIs	148	68.8
2. Reason STIs	125	58.1
3. Transmission STIs	213	99.1
4. Symptom STIs	197	91.6
5. Prevention transmission of STIs	179	83.3
6. STIs not transmitted with?	184	85.6
7. Disease which is transmitted through the venereal	184	85.6
8. Function Condom	194	90.2

Table 3 it is known that the majority of respondents' level of knowledge about STI prevention is in the good category 60%.

**Table 3.** Description of the Knowledge Level of Santo Thomas 1 Medan High School Students

Knowledge	n	%
Good	129	60.0
Currently	74	34.4
Not enough	12	5.6
Total	215	100.0

Table 4 shows that the majority of male respondents have a good level of knowledge, 63.2%.

**Table 4.** Description of Knowledge Level at SMA Santo Thomas 1 Medan Based on Gender

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Gender	Knowledge level						Total
	Good		Currently		Not enough		
	n	%	n	%	n	%	
Man	60	63.2	30	31.6	5	5.3	95
Woman	69	57.5	44	36.7	7	5.8	120
Total	129	60.0	74	34.4	12	5.6	215

Table 5 shows that the highest respondent's answer is strongly agree question number seven, the majority of respondents strongly agreed that I would make preventative efforts by living healthily for myself, my family and the closest community from the possibility of being infected with STIs, question number eight the majority of respondents agreed that I would seek information about the development of STIs among teenagers.

**Table 5.** Frequency Distribution of Respondents' Answers regarding Attitudes in STI Prevention

No	Question	Respondent's answer							
		SS		S		T.S		STS	
		n	%	n	%	n	%	n	%
1	Condoms during sex can prevent STIs	111	51.6	89	41.4	12	5.6	3	1.4
2	Having multiple partners can increase the risk of contracting STIs		79.1	170	19.5	2	9	1	5
3	Pain when urinating should be taken to a doctor	140	65.1	73	34.0	1	5	1	5
4	Teenagers don't need to get sex education	161	74.9	38	17.7	15	7.0	1	5
5	I will not have sex before marriage because it could risk transmitting STIs	151	70.2	60	27.9	3	1.4	1	5
6	Counseling/seminars regarding STIs must be included in the school curriculum	103	47.9	104	48.4	7	3.3	1	5
7	I will make preventative efforts by living healthily for myself, my family and the closest community from the possibility of being infected with STIs	154	71.6	59	27.4	1	5	1	5
8	I will look for information about the development of STIs among teenagers	74	34.4	131	60.9	9	4.2	1	5

Table 6 shows that Most respondents' attitudes towards STI prevention were in the good category at 94.9%.

**Table 6.** Description of the attitudes of students at SMA Santo Thomas 1 Medan

Attitude	n	%
Good	204	94.9
Currently	6	2.8
Not enough	5	2.3
Total	215	100.0

Table 7 shows that the majority of male respondents had a good attitude (93.7%). The majority of female respondents also have a good attitude regarding STI prevention with a percentage (95.8%),

**Table 7.** Description of Attitudes at SMA Santo Thomas 1 Medan Based on Gender

Gender	Knowledge level						Total
	Good		Currently		Not enough		
	n	%	n	%	n	%	
Man	89	93.7	3	3.2	3	3.2	95
Woman	115	95.8	3	2.5	2	1.7	120

Total	204	94.9	6	2.8	5	2,3	215
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Table 8 shows that The number of respondents with good knowledge who had a good attitude was 122 people (94.6%), 4 people (3.1%) had a moderate attitude, and 3 people (2.3%) had a poor attitude. There were 70 respondents with moderate knowledge who had good attitudes, 2 people (2.7%) with moderate attitudes and 2 people (2.7%) with poor attitudes. There were 12 respondents with poor knowledge who had a good attitude (100%), there was no moderate attitude and there was no poor attitude.

**Table 8.** Description of Attitudes at SMA Santo Thomas 1 Medan Based on Level of Knowledge

Knowledge level	Attitude						Total
	Good		Currently		Not enough		
	n	%	N	%	n	%	
Good	122	94.6	4	3.1	3	2,3	129
Currently	70	94.6	2	2.7	2	2.7	74
Not enough	12	100	0	0.0	0	0.0	12
Total	204	94.9	6	2.8	5	2,3	215

Table 9 shows that the question most often answered yes by respondents was question number five 82.3%.

**Table 9.** Frequency Distribution of Respondents' Answers to Behavioral Variables

No	Question	Answer Response			
		Yes		No	
		n	%	n	%
1	Have you ever looked for information on how to prevent STIs?	123	57.2	92	42.8
2	Have you ever attended health education/seminars on how to prevent STIs?	77	35.8	138	64.2
3	Would you stay away from friends/family who suffer from STIs?	170	79.1	45	20.9
4	Have you ever looked for information about behaviors that are at risk of transmitting STIs?	164	76.3	51	23.7
5	Do you avoid shaking hands with STI sufferers?	177	82.3	38	17.7

Table 10 shows that Most respondents' behavior towards STI prevention was in the good category at 41.9%.

**Table 10.** Description of the behavior of SMA Santo Thomas 1 Medan

Behavior	n	%
Good	90	41.9
Currently	78	36.3
Not enough	47	21.9
Total	215	100

Table 11 shows that the majority of male respondents had moderate behavior at 38.9%.

**Table 11.** Description of behavior at SMA Santo Thomas 1 Medan based on gender

Gender	Behavior Level						Total
	Good		Currently		Not enough		
	n	%	N	%	n	%	
Man	36	37.9	37	38.9	22	23.2	95
Woman	54	45.0	41	34.2	25	20.8	120
Total	90	41.9	78	36.3	47	21.9	215

## Discussion

### Knowledge level

From the results of data describing the level of knowledge at SMA Santo Thomas 1 Medan, it

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was found that the level of knowledge regarding STI prevention was in the good category. In this study, it was found that respondents knew about the meaning and ways of transmitting STIs. This is because there is a learning topic about STIs in learning about STIs in biology learning from middle school to high school in the topic of the human reproductive system. And also high school students or you could say teenagers also get information from STI posters at school and print or electronic media about adolescent reproductive health. But not too many respondents know the etiology of STIs

Based on the results of Marini's research, teenagers' knowledge about STIs is in the good category. This is in accordance with the results of the research above. However, in contrast to the results of Pati's research at Jatinangor State High School in 2019, it was concluded that knowledge was lacking and Syifa TM in 2016 at State High School 3 Medan found a moderate conclusion regarding the Level of Knowledge, Attitudes & Behavior of High School Students Regarding Infection Prevention Sexually Transmitted (STI).<sup>7,8</sup>

The results of the data analysis describing the level of knowledge at SMA Santo Thomas 1 Medan based on gender showed that there were as many males as having a good level of knowledge 60 people (63.2%) compared to 69 women (57.5%). With a proportion of 95 men (44.2%) and 120 women (55.8%). This is different from the results of research from Qalbi and Niniek who stated that teenage boys know more about STIs than teenage girls.<sup>9,10</sup> According to researchers, gender has no effect on the level of a person's knowledge about STI prevention, because each person has the same opportunity to obtain information that is not limited by the person's gender.

#### **Attitude**

Based on the results of data analysis, the attitude of students at SMA Santo Thomas 1 Medan is good. It can be seen in this study that many respondents have the right attitude towards free sex, prevention of free sex, and attitudes about if they are exposed to STI symptoms, immediately go to the doctor. Based on the results of research conducted by Syifa TM in 2016 at State High School 3 Medan, it was found that the results of teenagers' attitudes were good but different from Picauly DG in 2010 at SMA Harapan 1 Medan with teenagers' attitudes still moderate, but different from this research which shows good attitude towards STI prevention.<sup>7,11</sup>

Based on the results of data analysis, the description of the attitudes of SMA Santo Thomas 1 Medan based on gender, there is no clear difference in the attitudes of respondents towards gender. It can be seen by the good attitude test that there are 89 men (93.7%) and 115 women (115). 95.9%). With a portion of 95 men and 120 women. In accordance with Chiuman's research which states that knowledge of adolescents is the same at every age and gender, resulting in the same attitudes towards STIs, regardless of age and gender.<sup>12</sup>

From the data describing the distribution of attitudes based on level of knowledge, it can be seen that the number of respondents with good knowledge who had a good attitude was 122 people (94.6%), 4 people had a moderate attitude (3.1%), and 3 people had a poor attitude (2.3%). There were 70 respondents with moderate knowledge who had a good attitude (94.6%), 2 people had a moderate attitude (2.7%), and 2 people had a poor attitude (2.7%). There were 12 respondents with poor knowledge who had good attitudes (100%), there were no people with moderate attitudes and there were no people with poor attitudes. From these data it can be seen that not everyone who has a poor level of knowledge will definitely have a poor attitude too. The results of this research are the same as Asfriyanti's research,<sup>13</sup>

#### **Behavior**

From the results of data analysis, the behavior of students at SMA Santo Thomas 1 Medan 2022 is good. These results are the same as the results of research conducted by Haring S, et al in 2016 in high schools in the Kendari City area which stated that behavior towards STI prevention was in the good category. It can be seen that behavioral statements regarding preventing STIs by staying away from friends/family who suffer from STIs have a percentage of 79.1%, and avoiding shaking hands with STI sufferers has a percentage of 82.3%. The percentage obtained was quite high regarding the question of STI prevention behavior.<sup>14</sup>

The results of data analysis describing the behavior of Santo Thomas High School Medan 2022 were good for 90 people (41.9%). With the majority of respondents in the good category being

women, 54 people (45.0%). Behavior is the result of various experiences and human interactions with the environment which can be seen in the form of knowledge, attitudes and behavior.

Meanwhile, according to Wawan and Dewi (2011) behavior is a person's response to an action that can be observed with good or bad intentions. Behavior is also influenced by genetic factors and environmental factors.<sup>15</sup> Behavior has two forms, namely passive and active. Passive form is something that cannot be directly seen by others, such as thinking, responses and knowledge. Meanwhile, the active form is something that can be seen directly by other people, such as action.<sup>15</sup>

#### 4. CONCLUSION

The level of knowledge of students at SMA Santo Thomas 1 Medan regarding STI prevention is good, the majority's attitude is good, and the majority's behavior is good.

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