

Relationship Between The Level Of Knowledge About Sexually Transmitted Disease (STDs) And Personal Hygiene Behavior Of External Genitalia Organs In Female Teenagers

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Article Info	ABSTRACT
Keywords: Level of knowledge, Sexually Transmitted Diseases, Personal hygiene behavior, External genitalia organs.	Background: Sexually Transmitted Disease (STDs) are a health problem that is still quite critical and receives attention until now. This disease often affected by teenagers aged 15-24 years, especially female teenagers. One of the factors causing the emergence of sexually transmitted disease in female teenagers is the vulnerability of external genitalia organs to infection. If this is followed by poor personal hygiene behavior and is not treated immediately, it can cause infertility. Purpose: To find out the relationship between the level of knowledge about sexually transmitted disease and personal hygiene behavior of external reproductive organs in female teenagers at SMA Brawijaya Smart School Malang. Methodes: The research design used analytical observational by cross sectional approach. A total of 84 female students were sampled according to the inclusion and exclusion criteria. Data was obtained through instruments research in the form of questionnaires filled in by respondents. Then, data is presented in the form of frequency distribution table and processed using chi-square test method. Result: The results showed that there was a significant relationship between the level of knowledge about sexually transmitted disease and personal hygiene behavior of external genitalia organs in female teenagers. Conclusion: Based on results of research, there was a relationship between the level of knowledge about sexually transmitted disease and personal hygiene behavior of external genitalia organs in female teenagers at SMA Brawijaya Smart School Malang. Female Teenagers are advised to maintain reproductive health with increase the knowledge from trusted sources so that understanding does not become wrong.
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INTRODUCTION

Sexually Transmitted Diseases (STDs) are a health issue that is quite critical and still receives attention until now (Betan, A. and Pannyiwi, R., 2020). According to the World Health Organization in 2016, more than 1 million people suffer from sexually transmitted diseases every day (WHO, 2018). The most common infections include 142 million cases of *Trichomonas vaginalis*, 131 million cases of *Chlamydia trachomatis*, 78 million cases of

Neisseria gonorrhoea, 6 million cases of syphilis, 417 million cases of herpes simplex type 2, 291 million cases of *Human papilloma virus*, and 530,000 cases of cervical cancer. with a death rate of 264,000 per year (WHO, 2016).

Sexually Transmitted Diseases (STDs) are among the ten infectious diseases that are growing in developing countries, especially in Indonesia (Sitepu, 2021). The HIV/AIDS Information System (2021) states that there were cases of reproductive tract infections including 3,868 cases of syphilis, 3,031 cases of cervicitis, 1,004 cases of *Neisseria gonorrhoea*, and 342 cases of *Chlamydia trachomatis*. The incidence of STDs is spread across each region, especially the East Java region (Achdiat, *et al.*, 2019). Data from the East Java Central Statistics Agency (2017) recorded that there were around 3,931 cases of STDs and in 2019 the total was around 7,012 cases.

Based on the Centers for Disease Control and Prevention report (2018), Sexually Transmitted Diseases (STDs) mostly affect teenagers aged 15-24 years. Data from WHO and UNFPA states that 1 in 20 teenagers suffer from PMS every year (BKKBN, 2013). According to the Malang City Health Profile (2022), it was also recorded that 1,740 teenagers aged 15-24 years visited STDs services, consisting of 225 male teenagers and 1,515 female teenagers. This shows that the incidence of STDs is still high among teenagers, especially female teenagers, where they have a high risk of contracting it and this is thought to be caused by a lack of knowledge about STDs (Achdiat, *et al.*, 2019).

One of the factors causing the emergence of sexually transmitted diseases in female teenagers is the vulnerability of the external reproductive organs to infection caused by the close anatomy of the female reproductive tract between the vagina, urethra and anus. Beside that, poor personal hygiene, such as a closed, damp, unclean genital area, will make it easier for microorganisms to enter and if not treated immediately can spread to other reproductive organs, causing infertility (Mariani, *et al.*, 2021 and Tuntun, 2018). Thus, to maintain reproductive health, knowledge needs to be increased from trusted sources so that understanding does not become wrong (Kiftia, Maulina, & Rizkia, 2020; Auliani, Kiftia, Rizkia, 2021)

In research by Hayati and Waru (2023), it was found that 19 out of 30 women had good reproductive hygiene measures with each 2 women (10.5%) had a less knowledge and 17 women (89.5%) had a good knowledge about sexually transmitted diseases. This shows that there is a significant relationship between knowledge of sexually transmitted diseases and personal hygiene. Based on Preliminary studies on 11 respondents also found that 6 female students did not know enough about sexually transmitted diseases, with them only knowing about HIV/AIDS. Meanwhile, regarding personal hygiene, around 6 female students are lacking in maintaining the health of their genital area properly.

Therefore, by looking at this reality the author wants to know relationship between the level of knowledge about sexually transmitted diseases and the personal hygiene behavior of external genitalia in female teenagers at SMA Brawijaya Smart School Malang considering that providing good knowledge about sexually transmitted diseases (STDs) can encourage them to always pay attention to the cleanliness of the genital area.

METHODS

The research design and method used was analytical observational using a cross-sectional approach which was measured once at a time. This research was conducted in December 2023 at SMA Brawijaya Smart School Malang. The total population is 318 female students with 110 students in class X, 111 students in class XI, and 97 students in class XII.

This research uses a non-probability sampling technique with a purposive sampling method which selects samples from the population according to the criteria desired by the researcher. The number of samples was determined using the Slovin formula and obtained were 84 female students. The inclusion criteria used were female students aged 15-18 years, already menstruating, and in good health (able to fill out the questionnaire). Meanwhile, the exclusion criteria were female students who did not fill out the questionnaire completely.

Data collection was obtained using research instruments in the form of questionnaires filled in by respondents. After obtaining the data, the data is displayed in the form of a frequency distribution table (univariate analysis) and processed using the chi-square test method (bivariate analysis). Researchers have implemented research ethical standards with human research subjects.

RESULTS AND DISCUSSION

Characteristics of Respondents

Based on Table 1, characteristics based on the age of respondents, as many as 25 respondents (29.8%) aged 15 years, 22 respondents (26.2%) aged 16 years, 26 respondents (30.9%) aged 17 years, and 11 respondents (13.1%) aged 18 years. Based on these data, all respondents in this study were teenagers who were classified as middle to late teens, characterized by physical, psychological and social aspects that had begun to mature. According to research by Atik and Susilowati (2021), at this age, especially teenagers, school children (15-19 years) need to receive education, guidance and direction to increase teenagers knowledge regarding reproductive health.

Meanwhile, regarding the characteristics of information sources obtained by teenagers, as many as 1 respondent (1.2%) got information through television/radio, 5 respondents (5.95%) got information through parents, 42 respondents (50%) got information information via the internet/social media, 5 respondents (5.95%) got information through books, 1 respondent (1.2%) got information through friends, and 30 respondents (35.7%) got information through teachers. Based on this data, the most influential source of information obtained by teenagers is the internet/social media. Research by Ardina (2017) states that the majority of teenagers use the internet to search for information related to reproductive health. Talking about the internet, of course social media (Instagram, Twitter, TikTok, Facebook, etc.) also plays a role. Teenagers can more easily understand information through social media because the information is presented in an interesting way.

Table 1. Frequency Distribution Characteristics of Respondents

Characteristics of Respondents	Frequency (n=84)	Percentage (n=100%)
Age		
15 years	25	29.8%
16 years	22	26.2%
17 years	26	30.9%
18 years	11	13.1%
Information Resources		
Television/radio	1	1.2%
Parents	5	5.95%
Internet/social media	42	50%
Book	5	5.95%
Friend	1	1.2%
Teacher	30	35.7%

Level of Knowledge about Sexually Transmitted Diseases

Findings on Table 2 shows that level of knowledge about sexually transmitted diseases in female teenagers at SMA Brawijaya Smart School is 72 respondents (85.7%) have good knowledge and 12 respondents (14.3%) have enough knowledge. Based on this data, it can be seen that the majority of all teenage female students at SMA Brawijaya Smart School have good knowledge. The majority of respondents who have good knowledge come from the age of 15 years. This can be caused by their curiosity and motivation to obtain greater information. This is also strengthened by the theory of Turhamun (2004) which states that high levels of learning motivation among teenagers will show greater curiosity so that knowledge becomes better, and vice versa. Therefore, even though you are still relatively young, if you have a high desire to learn to add information, you will have good knowledge (Sulistyowati, A and Amalia, EA, 2016).

The results of this research are in line with research by Utomo, Daryaswanti, and Pendet (2021), which showed that the majority of teenagers had good knowledge about sexually transmitted diseases at 88.7%. This is because the majority of teenagers have received biology subjects at school and mass media and technology can now be accessed easily. According to Budiman and Riyanto (2013), information obtained from attending school and outside school can have an effect in a short period of time, thereby increasing knowledge and causing change. Beside that, according to Darsini, Fahrurrozi, Cahyono, EA (2019), it is also stated that there are several factors that influence knowledge, such as age, gender, education, experience, information sources, environment and social culture.

Table 2. Level of knowledge about Sexually Transmitted Disease

Level of knowledge	Frequency (n=84)	Percentage (n=100%)
Good	72	85.7%
Enough	12	14.3%
Less	0	0

Personal Hygiene Behavior

Findings on Table 3 shows that personal hygiene behavior among teenagers at SMA Brawijaya Smart School is 43 respondents (51.2%) have good behavior and 41 respondents (48.8%) have poor behavior. Based on this data, it can be seen that more than half of the teenage female students at SMA Brawijaya Smart School have good personal hygiene behavior. However, there were still who had poor behavior in maintaining the cleanliness of the genital area. This can be caused by the individual's habits. They prefer when and how to carry out their own feminine care. This is also supported by personal hygiene behavior carried out by respondents within the category, sometimes with types of behavior such as changing underwear before bed (45.23%).

Beside that, there were respondents personal hygiene behavior that was not appropriate, namely cleaning the feminine area using bath soap every day (58.3%). The use of this soap can affect the pH of the vagina, thereby disrupting the normal flora around it, as a result, the vagina will become a breeding ground for bacteria and fungi (Putri and Windarti, 2022). The results of this research are in line with research by Rini (2015) that the personal hygiene behavior that is often carried out is irregular cleaning of feminine areas and the use of antiseptic soap, as many as 65 female teenage students (75.6%).

Other inappropriate behavior included many respondents who did not undergo a health service examination when experiencing vaginal discharge that smelled and was yellow-green in color (53.6%). This could be caused by the limitations of researchers in providing slightly ambiguous statements. The statement "I had a health check when I experienced vaginal discharge that smelled and was yellow-green in color" can result in the answer being never having a health check when experiencing abnormal vaginal discharge or never experiencing abnormal vaginal discharge at all.

Even though the results of research on personal hygiene behavior are quite balanced, many are dominated by good behavior. As explained by the theory of Lawrence Green (1980) in Adventus, Jaya, IMM, and Mahendra, D (2019), it is said that there are 3 factors that influence a person's health-related behavior, namely predisposing factors including age, knowledge, motivation, habits, enabling factors include the physical environment, whether or not health service facilities are available, and reinforcing factors include the attitudes/behavior of health workers, support from family/community figures.

Table 3. Personal Hygiene Behavior

Knowledge Level	Frequency (n=84)	Percentage (n=100%)
Good	43	51,2%
Poor	41	48,8%

Relationship Between Level of Knowledge about Sexually Transmitted Diseases and Personal Hygiene Behavior of External Genitalia in Female Teenagers

Findings on Table 4 showed that of the 75 respondents who had good knowledge about sexually transmitted diseases, there were 33 respondents (45.8%) with good personal hygiene behavior and 39 respondents (54.2%) with poor personal hygiene behavior. For

teenagers who have enough knowledge about sexually transmitted diseases, from 12 respondents, there were 10 respondents (83.3%) with good personal hygiene behavior and 2 respondents (16.7%) with poor personal hygiene behavior. Meanwhile, there are no teenagers who have less knowledge about good or poor personal hygiene behavior.

Based on the results of statistical tests using Chi square, it was found that significance value = 0.036 was smaller than $\alpha = 0.05$. This means that there is a relationship between the level of knowledge about sexually transmitted diseases and personal hygiene behavior of external genitalia in female teenagers at SMA Brawijaya Smart School Malang. This research is in accordance with the theory put forward by Notoatmojdo (2018) that knowledge is one of the factors that triggers the implementation of behavior so that cognitive or knowledge becomes an important domain in shaping a person's behavior.

This is in line with research by Muin (2013), from 79 respondents, 51 respondents had enough knowledge of sexually transmitted diseases, there were 34 respondents were classified as good personal hygiene behaviour of external reproductive organs (66.7%) and 17 respondents were classified as poor personal hygiene behaviour of external reproductive organs (33.3%). From the results of this research, it can be interpreted that the majority of respondents already understand that sexually transmitted diseases are not only transmitted through sexual intercourse, but can also be done through behavior that protects the genital area.

This research is in contrast to research by Pujiharyati and Sulistyowati (2010) which showed that of 182 respondents, 82% of them had low knowledge of sexually transmitted diseases. This is due to the lack of access to information related to reproductive health. This difference is due to the geographical conditions of SMA Brawijaya Smart School which is in the middle of Malang City where all information is obtained easily, especially through electronic media. The media plays a role in conveying new information so that it can become a new cognitive basis for the formation of behavior (Romlah, SN, Mechory, D., and Wahyuningsih, P., 2017).

This research shows that good knowledge does not necessarily mean that behavior will also be good because behavior can be influenced by several other factors. Respondents who have good enough knowledge and good behavior are because they understand enough about sexually transmitted diseases so that they implement good behavior in protecting the genital area in their daily lives. Meanwhile, respondents who have good enough knowledge, but their behavior is not good, are caused by them having bad habits and a lack of motivation or encouragement from themselves and their families. This is in accordance with the theory by Notoatmojdo (2010) which states that before a behavior is formed, knowledge may be needed. However, the desired behavior cannot necessarily occur unless a person has a strong urge or motivation to take action according to his knowledge.

Table 4. Relationship Between Level of Knowledge about Sexually Transmitted Diseases and Personal Hygiene Behavior of External Genitalia in Female Teenagers

Level of Knowledge	Personal Hygiene Behavior						P-value
	Good		Poor		Amount		
	n	%	n	%	n	%	
Good	33	45.8	39	54.2	72	100	0.036
Enough	10	83.3	2	16.7	12	100	
Less	0	0.0	0	0.0	0	100	

CONCLUSION

Based on the results of analysis and discussion, the level of knowledge about sexually transmitted diseases is related to personal hygiene behavior of external genitalia female teenagers. It is hoped that female teenagers will be able to maintain good personal hygiene behavior of external genital every day and be able to gain more knowledge and insight regarding reproductive health, especially sexually transmitted diseases, in order to prevent and reduce the risk of sexually transmitted diseases.

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