

## The Relationship Between Knowledge and Attitudes with External Genital Hygiene Practices in Female

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### Abstract

**Introduction:** In this era of growing information, the knowledge, and attitudes that high school girls have towards external genitalia hygiene practices are very important. Adequate knowledge about the importance of keeping the genital area clean can help schoolgirls prevent infections and related health problems. In addition, a good attitude towards external genitalia hygiene practices also affects their daily habits in maintaining personal hygiene. In this context, the relationship between schoolgirls' knowledge and attitude is closely related to external genitalia hygiene practices. **Objective:** Knowing the relationship between knowledge and attitudes with external genital hygiene practices in female students at Mahakam Laham High School, Mahakam ulu District in 2023. **Methods:** Correlational design with a cross sectional approach. Sampling using total sampling technique with a sample size of 40 people. **Results and Discussion:** Most of the knowledge about external genital hygiene is not good as many as 21 (52.5%) people. Most of the attitudes towards external genital hygiene are negative as many as 22 (55%) people. Most of the external genital hygiene practices are not good as many as 22 (55%) people. The results of the Chi-Square statistical test obtained a value of  $p = 0.002$ . **Conclusion:** There is a relationship between knowledge and external genital hygiene practices in female students at Mahakam Laham High School, Laham District, Mahakam Ulu Regency in 2023.

**Keywords:** Knowledge; External Genital Hygiene Practice; Female Students; Senior High School;

## **Introduction**

Adolescence is a dynamic developmental phase in an individual's life span. This period is the transition period from childhood to adulthood (puberty) (Nurhayati, 2016). According to WHO, adolescents are at a transitional stage between childhood and adulthood. The age limit for adolescents according to the WHO is 12 to 24 years. In adolescence there are many changes that occur, one of which is cognitive which at this time has begun to tend to think and act (Ernawati, Asrina, &4, 2019). In addition, it began to focus on the physical aspects of the body, experimenting sexually and participating in risky behaviors, one of which was for reproductive health (February, Novryanthi, & Andriani, 2023)

Young women who have just entered puberty with all forms of changing phenomena in themselves, this problem can have a negative impact if not treated early. Vaginal discharge is a classic problem in most women who mostly do not know about vaginal discharge and the causes of vaginal discharge (Darma, 2021)

Reproductive health is a state of complete physical, mental and social well-being not solely free from disease or disability in all matters related to the reproductive system, as well as its functions and processes (Muharrina, Yustendi, Sarah, Herika, & Ramadhan, 2023). Adolescent Reproductive Health Development is carried out to provide information and knowledge related to healthy living behaviors for adolescents, in addition to overcoming existing problems.

The results of Novryanthi's research, (2021), obtained the level of knowledge and behavior in maintaining genetic hygiene in adolescent girls, good knowledge of 14 respondents (21.9%) and less knowledge of 50 respondents (78.1%). Positive behavior in maintaining genetic hygiene 28 respondents (43.7%) and negative behavior 36 respondents (56.3%). Bivariate results have a relationship between knowledge in maintaining genetic hygiene with the incidence of leucorrhoea ( $p = 0.000$ ) and there is a relationship between behavior in maintaining genetic hygiene and the incidence of leucorrhoea ( $p = 0.000$ ) (Novryanthi, 2021)

The results of Setyorini and Lieskusumastuti's research, (2020) found that all 58 respondents were 16-20 years old (100%), the majority of respondents received information about the cleanliness of genetalia organs from teachers 58 respondents (17.9%), students' knowledge about the cleanliness of external genetalia organs, the majority of which were good as many as 54 respondents (93.1%) and enough as many as 4 respondents (6.9%) (Setyorini, Lieskusumastuti, & Lieskusumastuti, 2020)

Young women who pay less attention to reproductive health can be caused by a lack of knowledge and acceptance of appropriate information. Seeing this, to increase the knowledge and awareness of young women about the importance of maintaining personal hygiene, especially reproductive organs, it is necessary to provide complete information, as well as the possibilities that will occur if not maintained. Maintaining reproductive health begins with maintaining personal hygiene including vaginal hygiene to stay clean, normal, healthy and avoid the possibility of diseases including vaginal discharge.

One way that can be done for the treatment of the vagina is to clean the vagina by washing the vagina carefully (Astuti, 2016). Data on the number of female students at SHS Laham for the 2022 period is 40 female students. The type of service provided by PuskeSHSs officers regarding genital hygiene is in the form of health counseling with a frequency of visits by PuskeSHSs officers to SHS Laham 2 times a month. The results of a preliminary study on 8 female students with interviews containing female students knowing about genetic hygiene procedures found that 3 people claimed to already know about genetic hygiene procedures, 1 person did not know and 4 other female students said they did not know.

## Method

Correlational design design with cross *sectional approach*. The population in this study is female students at SHS Mahakam Laham, Laham District, Mahakam ulu Regency. Sampling using *total sampling* technique with a sample size of 40 people.

## Result and Discussion

### Result

<b>Table 1</b>		
Characteristics of Respondents		
<b>Characteristics of Respondent</b>	<b>Frequency (n=40)</b>	<b>Presentase (%)</b>
<b>Age</b>		
15 Years	8	15,0
16 Years	16	40,0
17 Years	15	37,5
18 Years	3	7,5
<b>Total</b>	<b>40</b>	<b>100</b>
<b>Class</b>		
Class 10	9	15,0
Class 11	16	40,0
Class 12	15	37,5
<b>Total</b>	<b>40</b>	<b>100</b>
<b>Never get information</b>		
Ever	20	50,0
Never	20	50,0
<b>Total</b>	<b>40</b>	<b>100</b>

Based on table 1, the frequency distribution of respondents' characteristics of 40 respondents, most of whom were 16 (40%) years old, 16 (40%) grade 11 students, and most had and never received as much information as 20 (50%).

### Analisa Univariat

**Table 2**

Knowledge

Knowledge	Frequency (n=40)	Presentase (%)
Good	19	47,5
Not Good	21	52,5
<b>Total</b>	<b>40</b>	<b>100</b>

Based on the results of the analysis of respondents' knowledge from 40 respondents, more than half of the knowledge about external genetic hygiene was good as many as 19 (47.5%) people.

**Table 3**

Attitude

Sikap	Frequency	Presentase (%)
Positive	18	45,0
Negative	22	55,0
<b>Total</b>	<b>40</b>	<b>100</b>

Based on the results of the analysis of respondents' attitudes from 40 respondents, more than half were positive about external genetic hygiene as many as 18 (45%) people.

**Table 4**

External Genetalia Hygiene Practices

External Genetalia hygiene practices	Frequency (n=40)	Presentase (%)
Good	18	45,0
Not Good	22	55,0
<b>Total</b>	<b>40</b>	<b>100</b>

Based on the results of the analysis of external genetalia hygiene practices of respondents, out of 40 respondents, more than half of the external genetalia hygiene practices were good as many as 18 (45%) people.

### Analisa Bivariat

**Table 5**

Knowledge Relationship with External Genetalia Hygiene Practices in Students at SHS Mahakam Laham, Laham District, Mahakam ulu Regency in 2023

Knowledge	Practice				Total		p-value	OR
	Good		Not Good					
	N	%	N	%	N	%	0,002	11,9
Good	14	35	5	12,5	19	47,5		
Not Good	4	10	17	42,5	21	52,5		
Total	18	45	22	55	40	100		

Based on table 5 of the results of the analysis of the relationship of knowledge to practice, it was found that there were as many as 14 out of 19 (47.5%) respondents who had good knowledge and good practice, while there were as many as 17 out of 21 (42.5%) respondents who had poor knowledge and bad practice. The results of the *Chi-Square* statistical test obtained a value of  $p = 0.002$  because the value of  $p < \alpha$  (0.05) then  $H_a$  was accepted and  $H_o$  was rejected which means that there is a relationship of knowledge with external genetic hygiene practices in female students at SHS Mahakam Laham, Laham District, Mahakam ulu Regency. An odd ratio of 11.9 was also obtained, which means that respondents with knowledge about external genetic hygiene are not good at risk of 11.9 times bad practices.

**Table 6**

The relationship between attitudes and external genetalia hygiene practices in female students at SHS Mahakam Laham, Laham District, Mahakam Ulu Regency in 2023

Sikap	Practice				Total		p-value	OR
	Good		Not Good					
	N	%	N	%	N	%	0,030*	5,3
Positive	12	30	6	15	18	45		
Negative	6	15	16	40	22	55		
Total	18	45	22	55	40	100		

Based on table 4.6. The results of the analysis of the relationship of attitudes towards practice found that there were as many as 12 out of 18 (30%) respondents who had positive attitudes and good practices, while there were as many as 16 out of 22 (55%) respondents who had negative attitudes and bad practices. The results of the *Chi-Square statistical test* obtained a value of  $p = 0.030$  because the  $p$  value  $< \alpha$  (0.05), then  $H_a$  was accepted and  $H_o$  was rejected, which means that there is an attitude relationship with external genetic hygiene practices in female students at SHS Mahakam Laham, Laham District, Mahakam ulu Regency in 2023. An odd ratio of 5.3 was also obtained, which means that respondents with attitudes towards negative external genetic hygiene were at risk of 5.3 times poor practices.

## Discussion

### Characteristics of Respondents

The frequency distribution of respondents' characteristics from 40 respondents, mostly aged 16 years as many as 16 (40%) people, grade 11 students as many as 16 (40%) people, and most have and have never received as much information as 20 (50%).

### Knowledge of external genetalia hygiene

Based on the results of the analysis of respondents' knowledge obtained from 40 respondents, most of the knowledge about external genetic hygiene is not good as many as 21 (52.5%) people. The results of this study are in line with previous research according to Novryanthi, (2021) obtained a good level of knowledge of 14 respondents (21.9%) and less knowledge of 50 respondents (78.1%). The results of Setyorini and Lieskusumastuti's research, (2020) found that the majority of students' knowledge about

the cleanliness of external genitalia organs was good as many as 54 respondents (93.1%) and quite as many as 4 respondents (6.9%). Knowledge is the result of human sensing, or the result of knowing someone about an object through the senses they have so as to produce knowledge (Notoatmodjo, 2019). Knowledge is the thing that people or respondents know about being healthy and sick or well-being. The level of knowledge measured in this study is knowledge about the cleanliness of external genital organs.

The cognitive domain seen from respondents is knowing, meaning that it can remember or recall a material that has been studied before. The measure that a person he knows is he can mention, describe, define and declare. Material to measure the level of knowledge contains the understanding of reproductive health, the benefits of maintaining the cleanliness of the external genital organs, how to maintain the cleanliness of the external genital organs, and the consequences of not maintaining the cleanliness of the external genital organs.

Knowledge is obtained from various sources both formal and non-formal, formal knowledge through education, while non-formal knowledge is obtained from environmental sources around us such as electronic and non-electronic media, as well as knowledge can be obtained from public health center service sources such as health workers such as doctors, nurses and midwives

Researchers assume that the results of most students' knowledge about external genitalia hygiene are not good due to age factors that are still in the adolescent category, thus affecting students' understanding of the importance of external genitalia hygiene. As a person ages, one's level of maturity and strength will be more mature in thinking.

In terms of trust, someone who is more mature is more trusted than a person who is not yet high, his maturity is determined by experience and mental maturity. Environmental factors also affect this result where the environment of female students who both have minimal information sources causes students' knowledge about external genitalia hygiene is not good. The environment is all the conditions that exist around humans and their effects that can affect the development and behavior of people or groups.

### **Attitude to the cleanliness of external genitalia in schoolgirls**

Based on the results of the analysis obtained from 40 respondents, most attitudes towards external genetic hygiene were negative as many as 22 (55%) people. The results of this study are different from previous research according to Firdaus and Astutik (2018) which found that the majority of respondents already had a good external genital organ personal hygiene attitude, which was 33 respondents (66%).

This shows that most respondents already have a positive attitude, readiness, and encouragement to change the personal hygiene behavior of the external genital organs well. Attitude is a very important concept in the socio-psychological component, because it is the tendency to act, and perceive (Notoatmodjo, 2019). Attitude is a person's closed response to a particular stimulus or object, which already involves the relevant opinion and emotion factors (happy-dishappy, agree-disagree, good-not good). According to

Azwar (2017) explained that there are six factors that influence a person's attitude including personal experience, the influence of others who are considered important, culture, mass media, educational institutions and religious institutions, and emotional.

Researchers assume that the results of most students' attitudes towards external genetic hygiene in the negative category are due to health promotion media factors regarding personal hygiene of reproductive organs is one of the factors that can influence respondents' attitudes towards good external genital hygiene. Electronic mass media and print media have a huge influence on the formation of opinions and beliefs of a person. By providing information through mass media about something, it will provide a new cognitive foundation for the formation of attitudes.

The factor of still lack of personal experience of female students in maintaining external genetic hygiene also causes this negative attitude. Personal experiences that occur suddenly or surprisingly that leave the most profound impression on a person's psyche. Events and events that occur repeatedly and continuously, are gradually absorbed into the individual and influence the formation of attitudes (Shukla & Sanjeev, 2022)

### **External Genetalia Hygiene Practices**

Based on the results of respondents' compliance analysis of 40 respondents, most of the external genetic hygiene practices were not good as many as 22 (55%) people and good practices as many as 18 (45%) people. The results of this study are different from previous studies according to Novryanthi, (2021) obtained behavior in maintaining genetic hygiene in adolescent girls in the category of good behavior in maintaining genetic hygiene as many as 28 respondents (43.7%) and those who behaved poorly as many as 36 respondents (56.3%).

Behavior is all biological manifestations of individuals in interacting with the environment, ranging from the most visible behavior to the invisible, from the felt to the most unperceived (Okviana, 2015). Behavior is the result of all kinds of human experiences and interactions with their environment which manifest in the form of knowledge, attitudes and actions. Behavior is an individual's response / reaction to stimuli that come from outside or from within himself (Notoatmojo, 2019). Sexual reproductive organs must also get good external genital organ personal hygiene. External genitalia should not be careless in caring for it and must be extra careful. External genetalia hygiene behaviors in the form of maintaining vaginal hygiene so that it is not moist, washing hands before touching the vagina, wearing cotton underwear, cleaning the vagina after urinating with water, when the cebok rinses it from the direction of the genitals to the rectum, not using chemical cleaning tools for the vagina, drying the vagina with a clean special towel, shaving some pubic hair extra menstrual care (selection of pads and handling dysminore).

How to prevent hygiene and prevent infection include using antiseptics, the use of antiseptics and drugs must meet the rules of use (Ratanto, 2021). Researchers assume that the results of most external genetalia hygiene practices are not good due to age factors that are still in the adolescent category, thus influencing the behavior of female

students in doing external genetic hygiene. Age is also the most important factor in determining positive behavior compared to those below.

Young adults include transitions, both physically, intellectually transitioned, and transitioned social roles. Early adult social development is the culmination of adult social development. Educational factors also influence the results of this study where formal and informal education activities focus on the learning process with the aim of changing behavior, namely from not knowing to knowing, from not understanding to understanding and cannot be able to.

According to (Notoatmodjo, 2014), education influences human behavior, he also said that if the acceptance of new behavior is based on knowledge, awareness, positive attitudes then the behavior will be lasting. The higher a person's level of knowledge, the more precise it is in determining behavior and the faster it will be to achieve the goal of improving health

### **Knowledge Relationship with External Genetalia Hygiene Practices in Students at SHS Mahakam Laham, Laham District, Mahakam Ulu Regency in 2023**

Based on the results of the analysis of the relationship of knowledge to practice, it was found that there were as many as 14 out of 19 (47.5%) respondents who had good knowledge and good practices, while there were as many as 17 out of 21 (42.5%) respondents who had poor knowledge and bad practices. The results of the Chi-Square statistical test obtained a value of  $p = 0.002$ , then  $H_a$  was accepted and  $H_o$  was rejected, which means that there is a relationship of knowledge with external genetic hygiene practices in female students at SHS Mahakam Laham, Laham District, Mahakam ulu Regency.

The results of this study are in line with previous research according to Novryanthi, (2021) obtained behavior in maintaining genetic hygiene in adolescent girls in the category of good behavior in maintaining genetic hygiene as many as 28 respondents (43.7%) and those who behave poorly as many as 36 respondents (56.3%). Bivariate results show a relationship between knowledge in maintaining genetic hygiene and the incidence of vaginal discharge ( $p = 0.000$ ).

Good knowledge of external genetalia hygiene, students will feel calm and ready to face and overcome problems that occur during menstruation. If there is a menstrual event that is not accompanied by the right knowledge and information, then various psychological problems can arise. This is in accordance with the theory that states that the more open young women are in digging for information about their reproductive organs, the wider the insight and understanding of reproductive health. If menstruation is accompanied by the right knowledge, young women will respond to menstruation with positive things or behaviors.

The lack of knowledge about external genetic hygiene in some young women indicates that it is appropriate for young women to obtain information about menstruation. Approaches that can be done include through families, peer groups, school institutions, and adolescent activity groups that care about puberty.



Researchers assume that there is a relationship between knowledge and external genitalia hygiene practices in female students at SHS Mahakam Laham due to the factor of providing minimal information so that students lack knowledge about how to maintain external genetic hygiene both from their teachers and from the internet. The better the young woman's knowledge, the easier it will be to respond to all the information she receives, and vice versa. In addition, the more information received by young women about external genetic hygiene, the better the response of young women in maintaining reproductive organ health and knowing the dangers of not doing external genetic hygiene. This is supported by an odd ratio value of 11.9 which means that respondents with knowledge of external genetic hygiene are less at risk of 11.9 times the practice of not being good.

**The relationship between attitudes and external genitalia hygiene practices in female students at SHS Mahakam Laham, Laham District, Mahakam Ulu Regency in 2023**

Based on the results of the analysis of the relationship of attitudes towards practice, it was found that there were as many as 12 out of 18 (30%) respondents who had positive attitudes and good practices, while there were as many as 16 out of 22 (55%) respondents who had negative attitudes and bad practices. The results of the Chi-Square statistical test obtained a value of  $p = 0.030$ , then  $H_a$  was accepted and  $H_o$  was rejected, which means that there is an attitude relationship with external genetic hygiene practices in female students at SHS Mahakam Laham, Laham District, Mahakam ulu Regency. An odd ratio of 5.3 was also obtained, which means that respondents with negative attitudes risk 5.3 times of bad practice.

The results of this study are in line with previous research according to Permata, (2019) found respondents who had a positive attitude as many as 29 people (63%) more than respondents who had a negative attitude as many as 17 people (37%). Based on bivariate analysis, it was obtained from 29 respondents who had a positive attitude, most of the vulva hygiene behavior during menstruation was good, as many as 17 respondents (93.1%), while from 17 respondents who had a negative attitude, most of the vulva hygiene behavior during menstruation was less as many as 9 respondents (52.9%). From the results of the Chi-Square test, a  $p$ -value of  $0.001 < \alpha(0.05)$  was obtained, this shows a relationship between the attitude of adolescent girls and vulvar hygiene behavior during menstruation and the value of  $OR=15.188$ , this shows that adolescent girls who have a positive attitude have 15 times the chance to do vulva hygiene during menstruation well compared to adolescent girls who have a negative attitude.

Young women's attitudes are related to the behavior of maintaining external genetic hygiene. Many health problems suffered by a person are visible physically because of the lack of proper maintenance of the cleanliness of individual reproductive organs. Psychological aspects, related to factors that encourage adolescents to carry out reproductive hygiene behaviors, for example: perception, motivation, emotions, and learning. The social aspect, related to the desire of adolescents to be accepted in a certain

group environment, so that adolescents will behave in accordance with the rules and norms that exist in their environment.

The attitude of young women is very important in maintaining personal hygiene during menstruation, because during menstruation blood vessels in the uterus are very easily infected, therefore the cleanliness of the genitals must be more maintained because germs are easier to enter and can cause various diseases of the reproductive organs. Choose pads with high absorption, so you still feel comfortable when using them. To maintain cleanliness and health, ideally the use of pads during menstruation should be changed regularly 4 to 5 times a day or every 4 hours. After bathing or urinating, the vagina should be dried with a tissue or towel so that it does not get damp. In addition, the use of underwear should be material made of easily absorbing sweat.

Researchers assume that there is a relationship between attitudes and external genital hygiene practices in female students at SHS Mahakam Laham due to habitual factors where students have not accustomed themselves to carrying out a clean and healthy lifestyle, especially in maintaining genital hygiene during menstruation and have full responsibility for their health conditions. The students have not received much guidance from teachers or from health workers on how to properly care for sex organs during menstruation.

Young women who have a negative attitude in maintaining the health of the reproductive organs will have a sense of responsibility for the health of their reproductive organs by always maintaining the cleanliness of the female area during menstruation such as always changing pads, using clothes that are 12' clean and absorb sweat, and cleaning the female area using clean water. So by always maintaining the cleanliness of the reproductive organs, it is hoped that it will avoid various kinds of bacteria that can cause female organ diseases such as vaginal discharge.

## **Conclusion**

Most knowledge about external genital hygiene is poor for 21 (52.5%) people. Most attitudes towards external genital hygiene were negative for 22 (55%) people. Most external genitalia hygiene practices are poor for 22 (55%) people. There is a knowledge relationship with external genitalia hygiene practices in female students at SHS Mahakam Laham, Laham District, Mahakam ulu Regency in 2023. There is an attitudinal relationship with external genitalia hygiene practices in female students at SHS Mahakam Laham, Laham District, Mahakam ulu Regency

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