

## **ATTITUDES ABOUT VULVA HYGIENE AND THE INCIDENCE OF VAGINAL DISCHARGE AT SMA NEGERI 13 SURABAYA**

Selly Sukmawati; Siswari Yuniarti, Sri Hardi Wuryaningsih

Soetomo Nursing Study Program, Health Polytechnic of the Ministry of Health Surabaya, Indonesia.

### **Abstract**

**Introduction:** Vaginal discharge is a problem of female reproductive organs that often occurs in adolescents in Indonesia. This study aims to determine the relationship between knowledge and attitudes of adolescent girls about vulva hygiene and the incidence of vaginal discharge at SMA Negeri 13 Surabaya. **Methods:** This study used a type of correlational analytical research with a cross-sectional approach. A sample of 65 young women was taken using the proportionate Stratified Random Sampling technique. The independent variable is the knowledge and attitude of adolescent girls, the dependent variable is the incidence of vaginal discharge. The data were analyzed with univariate, bivariate using Chi Square with a value of  $\alpha = 0.05$ . **Results and Data Analysis:** The results of this study showed that out of 65 adolescent girls, most of the adolescent girls (52.3%) had good knowledge, most of the adolescent girls (70.8%) had a positive attitude, most of the adolescent girls (66.2%) experienced physiological vaginal discharge. Most adolescent girls (69.8%) are well-informed to experience physiological vaginal discharge. The results of the Chi Square test were obtained that there was a relationship between adolescent girls' knowledge of vulva hygiene and the incidence of vaginal discharge ( $p\text{-value} = 0.001 < \alpha = 0.05$ ). Almost all adolescent girls (88.4%) have a positive attitude of experiencing physiological vaginal discharge. The results of the Chi Square test obtained that there was a relationship between adolescent girls' attitudes about vulvar hygiene and the incidence of vaginal discharge ( $p\text{-value} = 0.001 < \alpha = 0.05$ ). **Conclusion:** Adolescent girls' knowledge of vulvar hygiene is mostly in the good category. Adolescent girls' attitudes about vulvar hygiene are mostly positive. There is a relationship between knowledge and the occurrence of vaginal discharge. There is a relationship between attitude and the incidence of vaginal discharge. Advice for young women to do vulva hygiene properly and correctly to prevent vaginal discharge. For schools, it is hoped that they can add books in the library related to the hygiene of the reproductive organs of adolescent girls as educational materials and can carry out counseling on the hygiene of female reproductive organs.

**Keywords:** Knowledge, Attitude, Vulva Hygiene, Vaginal Discharge

### **INTRODUCTION**

Vaginal discharge is one of the reproductive organ problems in women that needs special attention. Vaginal discharge is the second disorder after menstrual disorders that often occur in adolescents in Indonesia. Adolescent girls' low knowledge of vulva hygiene causes poor attitudes in doing vulva hygiene which can cause vaginal discharge. Young women do not know how to have good and correct vulva hygiene. Some of the mistakes made by adolescent girls are washing the vagina with less than clean water, using excessive

vaginal cleansing fluid, using tight underwear, and using sanitary napkins during menstruation that is not appropriate, which exceeds 4 hours. With these problems, if not treated immediately, it will cause various problems, including cervical cancer, where vaginal discharge is one of the early symptoms of cervical cancer which is the number one killer for women. In addition, the problems that can be caused by vaginal discharge are infertility, inflammation of pelvic disease, sexually transmitted diseases such as chlamydia (Dewi, 2019)

Data from the Ministry of Health (2021) shows that the level of hygiene of the reproductive organs of Indonesian adolescent girls when menstruation is still low, reaching 90-100/100,000 population per year, which causes cases of vaginal discharge in Indonesia to increase. As much as 60% of vaginal discharge is experienced by adolescent girls, this shows that adolescent girls are more at risk of vaginal discharge. Based on data from the National Population and Family Planning Agency (BKKBN) that in 2019 as many as 50% of adolescent girls had experienced vaginal discharge, in 2020 it increased to 60%, in 2021 it increased to 70% of adolescent girls had experienced vaginal discharge. The results of the Indonesian Demographic and Health Survey (SDKI) showed that the incidence of vaginal discharge in East Java in 2018 was 21,313 cases of vaginal discharge experienced by adolescents.

Vulva hygiene is an action in maintaining the cleanliness and health of the reproductive organs which is useful for physical and psychological well-being. When a person does not have knowledge about how to properly care for the reproductive organs, it can endanger the health of their reproductive organs, but if someone has good knowledge, of course they will behave appropriately to keep their reproductive organs clean. Lack of knowledge and attitude in maintaining the reproductive organs results in vaginal discharge, but most women do not know which vaginal discharge is normal/physiological or abnormal/pathological. Normal vaginal discharge is changing underwear regularly, especially if you sweat frequently, reducing the use of vaginal cleaners because they can kill bacteria or good/normal organisms in the vagina, changing sanitary napkins regularly during menstruation and reducing tiring physical activity. Based on the above background, the researcher is interested in conducting a research entitled "The Relationship of Knowledge and Attitudes of Adolescent Girls About Vulva Hygiene with the Incidence of Vaginal Discharge at SMA Negeri 13 Surabaya"

caused by the influence of hormones and the menstrual process, while abnormal vaginal discharge is caused by infection or inflammation, this occurs due to lack of knowledge and behaviors in maintaining the reproductive organs such as washing the vagina with less clean water, using excessive vaginal cleaning fluids, using tight underwear, and using sanitary napkins during improper menstruation. These factors can result in vaginal discharge and can affect a woman's health status. By doing good and correct vulvar hygiene measures, including cleaning the genetically modified organs with clean water, always maintaining the humidity of the genitalia organs can affect the occurrence of vaginal discharge in adolescent girls. If not treated properly, vaginal discharge can be fatal as the initial symptoms of cervical cancer start with vaginal discharge, infertility, inflammation of pelvic disease, sexually transmitted diseases such as chlamydia (Dewi, 2019).

The efforts that have been made by the government are Youth Care Health Services (PKPR), a government program since 2003 until now which has been carried out at the District Health Office together with the Provincial Health Office. PKPR can provide education and information to adolescents about their health, medical clinical services, counseling, healthy living skills education and peer educator training (Erna 2020). In addition, efforts that can be made by health workers, both nurses and other health workers, are to provide education in the form of

## **METHOD**

The type of research used in this study is correlational analytical research with a cross-sectional approach. The population in this study is all adolescent girls in grade XI of SMA Negeri 13 Surabaya totaling 180 people in the 2023-2024 school year. In this study, the Proportionate Stratified Random Sampling technique was used. The sample in this study amounted to 65 people who were taken proportionally from each class XI, each class was taken 7 people or 8 people.

## RESEARCH RESULTS

### 1. General Data

General data in this study regarding the characteristics of young women based on information sources. Most (55.4%) get information from parents, a small percentage (3.1%) have not received information.

Table 1. Distribution of the frequency of the characteristics of information sources for adolescent girls at SMA Negeri 13 Surabaya, May 2024

No.	Resources	Frequency	Presentase (%)
1	Health Worker	10	15,4
2	Parents	36	55,4
3	Teacher	8	12,3
4	Internet/Sosial Media	9	13,8
5	Not yet received information	2	3,1
	<b>Total</b>	<b>65</b>	<b>100</b>

### 2. Custom Data

Special data in this study included univariate analysis, namely adolescent girls' knowledge of Vulva Hygiene, adolescent girls' attitudes about Vulva Hygiene and the incidence of vaginal discharge, while bivariate analysis was the relationship between adolescent girls' knowledge about Vulva Hygiene and the incidence of vaginal discharge and the relationship between adolescent girls' attitudes about Vulva Hygiene and the

incidence of vaginal discharge.

#### 1) Distribution of Frequency of Knowledge, Attitudes and Incidence of Vaginal Discharge in Adolescent Women

From the results of the study, data was obtained that most of the adolescent girls (52.3%) had good knowledge, most of the adolescent girls (70.8%) had a positive attitude, and most of the adolescent girls (66.2%) experienced physiological vaginal discharge.

Table 2. Distribution of Knowledge Frequency, Vulvar Hygiene Attitudes and Incidence of Vaginal Discharge in Adolescent Girls at SMA Negeri 13 Surabaya May 2024.

No.	N = 65	Frequency (F)	Presentase (%)
1	<b>Knowledge</b>		
	Less	16	24,6
	Enough	15	23,1
	Good	34	52,3
2	<b>Attitude</b>		
	Negative	19	29,2
	Positive	46	70,8
3	<b>Incidence of vaginal discharge</b>		
	Patologis	22	33,8
	Physiological	43	66,2

#### 2) The Relationship of Adolescent Women's Knowledge About Vulva Hygiene with the Incidence of Vaginal Discharge

From the results of the study, it was found that out of 65 adolescent girls, there were 34 young women who had good knowledge, including most of the 34 (69.8%) adolescent

girls experienced physiological vaginal discharge. The results of the Chi Square test obtained a value of  $p$  value = 0.000 or  $< 0.05$ , so there was a relationship between adolescent girls' knowledge of vulva hygiene and the incidence of vaginal discharge at SMA Negeri 13 Surabaya in 2023.

Table 3. The Relationship between Adolescent Girls' Knowledge of Vulva Hygiene and the Incidence of Vaginal Discharge at SMA Negeri 13 Surabaya May 2024

3) The Relationship of Adolescent Women's discharge. The results of the Chi Square test

Incidence of vaginal discharge	Knowledge						Total	p value
	Less		Enough		Good			
	F	%	F	%	F	%	F	%
Patologis	13	59,1	5	22,7	4	18,2	22	100
Physiological	3	7,0	10	23,3	33	69,8	43	100
Total	16	24,6	15	23,1	34	52,3	65	100

Attitudes About Vulvar Hygiene with the Incidence of Vaginal Discharge  
From the results of the study, it was found that out of 65 adolescent women, 46 young women had a positive attitude, including almost all 38 (88.4%) adolescent girls experienced physiological vaginal discharge. The results of the Chi Square test obtained a value of  $p$  value = 0.000 or  $< 0.05$ , so a relationship was found between the attitude of adolescent girls about vulva hygiene and the incidence of vaginal discharge at SMA Negeri 13 Surabaya in 2023.

Table 4. The Relationship between Adolescent Women's Attitudes About Vulva Hygiene and the Incidence of Vaginal Discharge at SMA Negeri 13 Surabaya May 2024

DISCUSSION

knowledge of adolescent girls is quite good because

Incidence of vaginal discharge	Attitude				Total		ρ Value
	Negative		Positive		F		
	F	%	F	%			
Patologis	14	63,6	8	36,4	22	100	0,000
Physiological	5	11,6	38	88,4	43	100	
Total	19	29,2	46	70,	65	100	

1. Young Women's Knowledge of Vulva Hygiene

Based on the results of the study, it shows that most of the young women (52.3%) have good knowledge, a small proportion of young women (24.6%) have less knowledge and a small percentage of young women (23.1%) have enough knowledge. Knowledge is closely related to a person's level of education, where it is hoped that with high education, the person will also have a wider range of knowledge. However, it needs to be emphasized, it does not mean that someone who is poorly educated is absolutely low-educated as well. This is considering that the improvement of knowledge is not absolutely only obtained through education (Notoatmodjo, 2015). Based on the results of Desvi's (2019) research entitled The Relationship between Knowledge and Attitudes with Vulvar Hygiene Behavior during Menstruation in Adolescent Girls at SMPN 01 Beringin Island, South Sumatra in 2019, it was obtained from 46 young women, some of whom were young women (71.7%) who were well-informed. This is because young women have received information about health from their teachers.

From the results of the study, most of the

they already know about vulva hygiene knowledge, know the definition of vulva hygiene, the correct way to clean the vagina is to wash from front to back, know the characteristics of pathological vaginal discharge, and know the causes of vaginal discharge. Most young women get information about reproductive health from their parents. Most parents of young women teach how to take care of their female organs. However, from the results of the study, it was also found that a small percentage of young women do not know good and correct vulva hygiene procedures, have not received a source of information about vulva hygiene which is one of the factors of lack of knowledge of young women.

From the results of the study, adolescent girls do not know if the use of special feminine soap containing alcohol and fragrance is not recommended, adolescent girls do not know that the use of sanitary napkins during menstruation that is worn for more than 4 hours increases the risk of vaginal discharge and it is not recommended that during menstruation should not use tight underwear. Currently, the knowledge of young women can be said to be good. This is in accordance with the theory of knowing is interpreted as remembering a

material that has been studied before. Knowledge at this level is the recalling of something more specific than the entire material studied or the stimuli received.

## 2. Young Women's Attitudes About Vulva Hygiene

Based on the results of the study, it was found that of the 65 adolescent girls of SMA Negeri 13 Surabaya had a supportive attitude towards vulvar hygiene, supported by data, most of the adolescent girls totaling 46 (70.8%) had a positive attitude and almost a part of the adolescent girls as many as 19 (29.2%) had a negative attitude. Positive attitudes of young women about vulva hygiene such as the correct way to wash the feminine area, namely from front to back, changing underwear at least 2 times a day, and changing sanitary napkins during menstruation is done every 4 hours.

A person's cleanliness is an action to maintain health to achieve physical and psychological well-being, if you want to avoid vaginal discharge, of course you must maintain the cleanliness of the feminine area (Nurlaila, 2015). Based on the results of Prilly's (2021) research entitled *The Relationship between Knowledge and Attitudes with the Incidence of Vaginal Discharge in Adolescent Girls at SMAN 2 Bengkulu City in 2019*, 62.7% of adolescent girls had supportive attitudes and did not experience vaginal discharge. However, there are also negative attitudes of adolescent girls such as using water stored in a bucket when washing the feminine area, not immediately checking with a doctor if there are signs of pathological vaginal discharge, using tight underwear during menstruation so that menstrual blood does not go anywhere, using a special antiseptic for fragrant vagina, and during menstruation using sanitary pads with materials that contain perfume and can be worn all day.

Attitude in caring for the reproductive organs is the main factor in maintaining the health of the reproductive organs. The existence of a bad attitude in maintaining the cleanliness of the reproductive organs such as washing with dirty water, using excessive rinsing, using pants that do not absorb sweat, rarely changing underwear and not changing sanitary napkins often can be factors that contribute to the occurrence of vaginal discharge in adolescents (Aini, 2016).

## 3. Incidence of vaginal discharge

Based on the fact that of 65 adolescent girls, data was obtained that most of the adolescent girls (66.2%) experienced physiological vaginal discharge and almost a part of the adolescent girls (33.8%) experienced pathological vaginal discharge. Adolescent girls who experience pathological vaginal discharge have a large number of characteristics with frequent frequency, cloudy

white and milky white, there is itching in the vaginal area. Most of the 15 adolescent girls (65.2%) do not know how to handle vaginal discharge, usually just left and washed with clean water.

Based on the results of Cut Mauliana (2018) research entitled *The Relationship between Vulva Hygiene in Adolescent Girls with Vaginal Discharge at SMAN 1 Teunom, Aceh Jaya Regency in 2018*, it was obtained that from 64 adolescent girls, 44 (68.8%) did not have vaginal discharge. Vaginal discharge or flour albus is a thick white liquid, coming out of the vagina and uterine cavity either smelly or odorless and accompanied by itching in the female area. Vaginal discharge (flour albus) can also be interpreted as excessive discharge from the vagina which is sometimes accompanied by itching, pain, burning in the pubic lips, sometimes accompanied by a bad smell, also causing pain when urinating or having sex (Aini, 2016).

Vulva hygiene includes how to maintain and maintain the cleanliness of the external genital organs. Vulva Hygiene is an action to maintain cleanliness including how to maintain and maintain the cleanliness of the external genital organs. By doing good and correct vulvar hygiene measures, it can prevent vaginal discharge. If not handled properly, vaginal discharge can cause germs and bacteria that cause infections ranging from the bladder mouth, pubic lips to the uterus and ovary ducts, causing pelvic inflammatory disease, infertility, ectopic pregnancy (pregnancy outside the womb), and can cause cervical cancer as one of the number one killer diseases for women (Melina, 2021).

## 4. The Relationship of Adolescent Women's Knowledge of Vulva Hygiene with the Incidence of Vaginal Discharge

Based on table 3,  $p \text{ Value} = 0.000 < \alpha = 0.05$  was obtained, which means that there was a significant relationship between the knowledge of adolescent girls about vulva hygiene and the incidence of vaginal discharge at SMA Negeri 13 Surabaya. From table 3, it was found that out of 65 adolescent girls, there were 34 young women who had good knowledge, including most of the 33 (69.8%) adolescent girls experienced physiological vaginal discharge and a small number of 4 adolescent girls (18.2%) experienced pathological vaginal discharge. There were 15 adolescent girls who had sufficient knowledge, including a small percentage of 10 (23.3%) adolescent girls who experienced physiological vaginal discharge and almost 5 adolescent girls (22.7%) experienced pathological vaginal discharge. There were 16 adolescent girls who had less knowledge, including most of the 13 adolescent girls (59.1%) who experienced pathological vaginal discharge and a small number of adolescent girls 3 (7.0%)

experienced physiological vaginal discharge. It is supported by the theory of Notoatmodjo (2015) which says that a person's knowledge can affect the occurrence of health problems. If a person's knowledge is low, then their health will be lower. This study is in line with Prilly's (2021) research showing that there is a meaningful relationship between adolescents' knowledge of vaginal discharge and the incidence of vaginal discharge ( $p = 0.029$ ). Vaginal discharge is more common in young women with less knowledge than in young women with good knowledge.

Lack of knowledge is also caused by a lack of attention to reproductive health so that they do not pay attention to any matters related to reproductive health. In addition, the many lessons learned by young women in school make young women more focused on learning materials and assignments at school rather than paying attention to the cleanliness of their reproductive organs. Adolescent girls prefer to seek information about the health of their reproductive organs through social media videos that are not necessarily the truth rather than seeking information through health workers or teachers at school, even though schools have tried to install posters about the cleanliness of female organs that already exist in making at UKS. According to the results of the study, most (55.4%) adolescent girls get information about vulva hygiene from their parents, but the cause of young women who are knowledgeable but still experience pathological vaginal discharge is a lack of attitude in the care of female organs, especially when menstruating. In addition, the understanding that young women get is often incorrect, causing wrong behavior towards vulva hygiene.

From the results of the study, a small percentage of adolescent girls (18.2%) are well-informed but experience pathological vaginal discharge caused by other factors, namely body conditions that experience fatigue and stress both physically and psychologically, such as school demands that are too heavy and the presence of accumulated tasks, of course this can affect the work of hormones in the female body, including triggering an increase in the hormone estrogen in the body. The influence of this hormone can also cause vaginal discharge in adolescent girls. In addition, the lack of maintaining a diet such as often consuming foods and drinks that contain high sugar, namely  $> 50$  grams/day can cause lactobacillus bacteria to not be able to distribute all sugar into lactic acid and cannot resist the growth of disease, then the amount of sugar that increases the number of fungi or destructive bacteria will increase, so that it can cause vaginal discharge. Adolescent girls who experience vaginal discharge, both pathological and physiological vaginal discharge, both have less, sufficient, and good

knowledge. Although adolescent girls are well informed about vaginal discharge, experiencing pathological vaginal discharge can be caused by poor attitudes regarding vulva hygiene in maintaining the cleanliness of the genital organs.

##### 5. The Relationship of Adolescent Women's Attitudes About Vulva Hygiene with the Incidence of Vaginal Discharge

Based on table 4,  $p = 0.000 < \alpha = 0.05$  was obtained, which means that there was a significant relationship between adolescent girls' attitudes about vulva hygiene and the incidence of vaginal discharge at SMA Negeri 13 Surabaya. Of the 65 adolescent girls, 46 adolescent girls had a positive attitude, including almost all adolescent girls, 38 (88.4%) experienced physiological vaginal discharge, and almost 8 (36.4%) adolescent girls experienced pathological vaginal discharge. There were 19 adolescent girls who had negative attitudes, including most of the 14 adolescent girls (63.6%) who experienced pathological vaginal discharge and a small number of 5 adolescent girls (11.6%) experienced physiological vaginal discharge.

The attitude of maintaining vulvar hygiene is a treatment where a person takes care of the functions of his genetic organs, the presence of good vulvar hygiene can reduce the risk of vaginal discharge. This research is also supported by the theory that attitude is a readiness or willingness to act and not the implementation of a specific motive. Attitude is not yet an action or activity but is a predisposition to the action of a behavior (Notoatmodjo, 2015).

This study is also in line with Prilly's (2021) research which shows that there is a relationship between the attitude of maintaining vaginal hygiene and the incidence of vaginal discharge with a value of  $p = 0.016 < 0.05$ .

The results of this study were found from 19 adolescent girls who had a negative attitude, including 14 who experienced pathological vaginal discharge. This can happen because their attitude about vulva hygiene is not applied in daily life so it can cause pathological vaginal discharge. Other factors that affect attitudes are personal experience, environment, other people, mass media. Like when teenagers see a trend of dressing, they will also follow such as wearing tight pants, so that it can increase the risk of vaginal discharge.

In addition, based on the results of the study, almost some adolescent girls (36.4%) have a positive attitude but experience pathological vaginal discharge. This is certainly due to the fact that vaginal discharge can arise from other factors such as lack of knowledge, factors that increase estrogen hormones before and after menstruation, fatigue, stress and high-sugar foods consumed  $> 50$  grams/day certainly affect the incidence of vaginal

discharge.

The formation of an attitude of maintaining vulvar hygiene, especially in adolescent girls, begins in the cognitive domain in the sense that adolescent girls must know first about the material so as to generate knowledge and subsequently provoke an inner response in the form of adolescent girls' attitudes towards objects that they know, namely about vaginal discharge.

## CONCLUSION

Based on the results of research at SMA Negeri 13 Surabaya in 2023, it can be concluded that the knowledge of adolescent girls at SMA Negeri 13 Surabaya about vulva hygiene is mostly good. The attitude of young women at SMA Negeri 13 Surabaya about vulva hygiene was mostly positive. The incidence of vaginal discharge in adolescent girls at SMA Negeri 13 was found to be mostly physiological vaginal discharge. There is a relationship between adolescent girls' knowledge of vulva hygiene and the incidence of vaginal discharge at SMA Negeri 13 Surabaya. There is a relationship between adolescent girls' attitudes about vulva hygiene and the incidence of vaginal discharge at SMA Negeri 13 Surabaya

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