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## The Relationship Behavior Of Treat The External Genital Organs With Incidence Of Vulvovaginitis During Menstruation In Adolescent Girls

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### ABSTRACT

The problem of reproductive health disorders that is often found in teenagers during menstruation is the behavior of caring for the external genitalia organs incorrectly, so that many teenagers experience vulvovaginitis during menstruation. The aim of the research was to determine the relationship between external genital organ care behavior and the incidence of vulvovaginitis during menstruation in class VII teenage girls at MTsN Manyar. The design of this research was cross sectional analytical correlation with a population of all class VII female students, 118 respondents, so that a sample of 91 respondents was obtained. The sampling technique used Simple Random Sampling and data collection using a questionnaire sheet, while the statistical test used was Spearman rho. The results of the research showed that the majority of young women behaved well in caring for their external genital organs, 48 respondents (52.7%), the majority of young women did not experience irritation, 35 respondents (38.5%), and young women behaved well in caring for their external genital organs and did not experience irritation. irritation of 31 respondents (88.6%). Based on the Spearman rho test, the p value = 0.000 (<0.05), meaning there is a relationship between the behavior of caring for external genital organs and the incidence of vulvovaginitis in adolescents. It is hoped that MTsN Manyar students will receive education for young women about women's reproductive health through biology lessons.

Keywords: Vulvovaginitis; Menstruation

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## INTRODUCTION

Women's reproductive health among teenagers is very important to pay attention to, if it is not paid attention to it, various health problems will arise. Disorders in adolescents during menstruation are very widespread, one of which is irritation or itching around the vulva and vaginal opening (*vulvovaginitis*). Reproductive health problems that are often found in teenagers during menstruation include incorrect behavior in caring for the external genital organs (using sanitary napkins for a very long time, choosing and wearing underwear that does not absorb sweat, etc.).

Demographic data shows that around one fifth of the world's population are teenagers aged 10-19 years. Research conducted in South Asia in the South Bengal region regarding the cleanliness of the reproductive organs during menstruation of 160 girls found that 32.5% were good, while 67.5% were not good<sup>6</sup>. The results of research conducted at SMP Negeri 8 Manado in 2013 from 167 people (100%) who experienced vaginal irritation during menstruation showed that 107 people (64.1%) experienced irritation and 60 people (35.9%) did not.<sup>19</sup> The results of research conducted by Prasetyowati on Muhammadiyah Metro High School students in 2009 found that the majority (62.5%) of personal hygiene in the feminine area was not good, the majority (77.5%) were not good at maintaining cleanliness during menstruation, and the prevalence of vaginal discharge was 75%.<sup>7</sup> Based on the initial survey conducted by researchers on November 27/ 2014 by giving a questionnaire at MTsN Manyar class VII from 10 respondents (100%), 6 respondents (60%) experienced irritation during menstruation (characterized by: itching, redness of the vulva, pain, skin discomfort and edema) and 4 respondents (40%) did not experience irritation during menstruation.

Menstruation usually occurs between the ages of 10 and 15 years with an average age of 12 years. During menstruation, it is important to maintain and maintain the cleanliness of the external genital organs, one of which is by changing sanitary napkins every 3-4 hours. If menstrual blood is allowed to sit on the sanitary napkin for too long (in damp conditions) and is not replaced immediately, bacteria will easily multiply. In conditions like this, bacteria are easily attacked, causing irritation and the blood vessels in the uterus are very easily infected because germs easily enter and cause disease in the reproductive tract<sup>10</sup>. Nonspecific irritants cause 25 to 70 percent of irritation cases in children and adolescents. Irritation can occur as a result of poor perineal hygiene. Several other problems caused by poor hygiene of the external genital organs are vaginal discharge (flour albus), irritation or inflammation in the vulva and vaginal area which is usually called vulvovaginitis<sup>11</sup>, if vulvovaginitis is not treated immediately or left untreated. can cause diseases of the reproductive tract, for example endometritis, salpingitis and cervicitis.

Management of vulvovaginitis usually uses pharmacological methods or medication. Apart from that, you can also use non-pharmacological methods, one of which is maintaining and maintaining the cleanliness of the external genital organs. Based on the description above regarding the lack of maintaining the cleanliness of female organs which can cause vulvovaginitis, the author is interested in conducting research on "The Relationship between the Behavior of Caring for External Genital Organs and the Occurrence of Vulvovaginitis During Menstruation".

**METHOD**

This research uses the "observational analytical " research method with a correlational research design, namely examining the relationship between variables<sup>14</sup>. This research uses a cross sectional time approach. The population of this study were all class VII female students at MTsN Manyar for the 2023 - 2024 academic year, totaling 118 female students. The research sample consisted of 91 female students. The type of sampling in this research uses probability sampling, namely "simple random sampling", that is, the selection is selected randomly, namely taking samples by writing the respondent code on a small piece of paper, placing it in a box, stirring it, and taking it randomly. The paper taken was used as research material for respondents. The independent variable in this study is the behavior of caring for external genital organs. The dependent variable in this study was the incidence of vulvovaginitis. The instrument used is a questionnaire. In this research, the data analysis is bivariate analysis, namely using the Spearman correlation test. Significance limits, if the p value < 0.05 then the statistical calculation results are meaningful, and conversely if the p value > 0.05 means the results are not significant.

**RESULTS**

Table 1. Frequency Distribution Based on Age Based on Age of Young Women at MTsN Manyar in March 2024

| NO | Tee Age | f  | %    |
|----|---------|----|------|
| 1  | 13 year | 18 | 19,8 |
| 2  | 14 year | 50 | 50,9 |
| 3  | 15 year | 23 | 25,3 |
|    | Total   | 91 | 100  |

From table 1 above, it can be seen that of the 91 (100%) respondents, the majority were teenage girls aged 14 years, namely 50 (54.9%) and a small portion were teenage girls aged 13 years, namely 18 (19.8%).

Table 2. Frequency Distribution Based on Age at First Menstruation (Menarche) at MTsN Manyar in March 2024

| NO | Age at First Menstruation | f  | %    |
|----|---------------------------|----|------|
| 1  | 13 year                   | 28 | 30,8 |
| 2  | 14 year                   | 40 | 44   |
| 3  | 15 year                   | 23 | 25,3 |
|    | Total                     | 91 | 100  |

From table 2 above, it can be seen that of the 91 (100%) respondents, most of the age at first menstruation was 13 years, namely 40 (44.0%) and a small portion of the age at first menstruation was 14 years, namely 23 (25.3%).

Table 3. Distribution of Respondents Based on Behavior of Caring for External Genital Organs During Menstruation in Class VII Adolescent Girls at MTsN Manyar in 2024

| NO | Behavior of Caring for External Genital Organs | f  | %    |
|----|--|----|------|
| 1  | Good Behavior                                  | 48 | 52,7 |
| 2  | Bad Behavior                                   | 43 | 47,3 |
|    | Total  |    |      |

From table 3 above, of the 91 (100%) respondents, the majority of 48 (52.7%) young women have good behavior in caring for external genital organs, while 43 (47.3%) young women have poor behavior in caring for external genital organs.

Table 4. Distribution of Respondents Based on the Incident of Vulvovaginitis During Menstruation in Class VII Adolescent Girls at MTsN Manyar in 2024

| NO | Occurrence of Vulvovaginitis | f  | %    |
|----|------------------------------|----|------|
| 1  | No irritation                | 35 | 38,5 |
| 2  | Mild Irritation              | 27 | 29,7 |
| 3  | Moderate Irritation          | 19 | 20,9 |
| 4  | Severe Irritation            | 10 | 11,0 |
|    | Total                        | 91 | 100  |

From table 4 above, of the 91 (100%) respondents, the majority of 35 (38.5%) young women did not experience irritation in their genitalia, while 27 (29.7%) young women experienced mild irritation in their genitalia, 19 (20.9%) adolescent girls experienced moderate irritation in the genitalia and 10 (11.0%) adolescent girls experienced severe irritation in the genitalia.

Table 5. Distribution of Respondents on the Relationship between Behavior of Caring for External Genital Organs and the Occurrence of Vulvovaginitis During Menstruation in Class VII Adolescent Girls at MTsN Manyar in 2024

| Behavior of Caring for External Genital Organs | No irritation | Occurrence of Vulvovaginitis |                     |                   | Total     |
|--|---------------|------------------------------|---------------------|-------------------|-----------|
|  |               | Mild Irritation              | Moderate Irritation | Severe Irritation |           |
| Good Behavior                                  | 31(88,6)      | 13(48,1)                     | 3 (15,8)            | 1 (10)            | 48 (52,7) |
| Bad Behavior                                   | 4(11,40)      | 14 (51,9)                    | 16 (84,2)           | 9(90)             | 41 (47,3) |
| Total  | 7(100)        | 27(100)                      | 19 (100)            | 10 (100)          | 91 (100)  |
| $\alpha = 0,05$                                |               | $\rho = 0,000$               |                     |                   |           |

Based on table 5, it is known that most of the young women who do not experience irritation in their genitalia have good behavior, namely 31 (88.6%) respondents, compared to bad behavior, which is 4 (11.4%) respondent.

## DISCUSSION

### Identification of External Genitalia Organ Care Behavior in Grade VII Female Adolescents at MTsN Manyar

The results of the identification of behavior in caring for external genitalia during menstruation in female adolescents in grade VII at MTsN Manyar from 91 (100%) respondents showed that the majority of 48 (52.7%) female adolescents had good behavior in caring for external genitalia, while 43 (47.3%) female adolescents had poor behavior in caring for external genitalia.

The results obtained from this study showed that most respondents had good behavior 48 (52.7%) towards the cleanliness of external genitalia organs. This is different from the results obtained from a study conducted by Hani Handayani on female students at the Jakarta Development Middle School in 2011, namely 102 (100%) respondents, the largest group of respondents had good behavior 51 (50%) towards the cleanliness of external genitalia organs.<sup>7</sup>

Lack of care for external genitalia during menstruation can cause irritation of the vulva and vagina (vulvovaginitis). If vulvovaginitis is ignored, infection will occur in the uterus (Bobak, 2004).<sup>2</sup> So the behavior of caring for external genitalia is an effort to maintain and improve health by maintaining the cleanliness of external genitalia.

Changes in a person's behavior can be known through perception, namely through experiences generated through the senses of sight, hearing, smell and so on. Everyone has a different perception, even though the object is the same. Motivation is defined as the drive to act in order to achieve a certain goal. The results of this drive and movement are manifested in the form of behavior. Behavior to maintain vaginal health begins with paying attention to personal hygiene.<sup>7</sup>

Based on the results of the respondents' answers to caring for the genital organs during menstruation, most of the female adolescents aged 14 years with the age of first menstruation (menarche) of 13 years, namely 21 (42.0%) most respondents stated that 89 (97.8%) respondents often cleaned themselves using clean water after urinating or defecating, 64 (70.3%) respondents often cleaned themselves from the front to the back, this is intended so that germs that nest in the anus are not carried to the vaginal area which can cause infection, inflammation and itching. 45 (49.5%) respondents used soap when cleaning during menstruation, the use of soap when cleaning can make the pH of the vaginal area alkaline and can easily cause irritation. 52 (57.1%) respondents sometimes dried their genitals with a towel/tissue after cleaning, keeping the genital area dry can minimize the risk of infection from outside.

The next behavior is 63 (69.2%) respondents sometimes change pads every 1-4 hours a day especially if menstruation is heavy, pads that are used too long in a damp state can become a place for bacteria to grow. Respondents 60 (65.9%) use pads containing perfume, the content of substances contained in perfumed pads can be irritating so that they cause inflammation with itching and vaginal discharge in the genitals. Respondents 50 (54.9%) often wash their hands before and after cleaning, 54 (59.3%) respondents sometimes wear underwear made of cotton or t-shirts, underwear that is not made of cotton will make you feel hot and make the vagina damp. Respondents 40 (44%) wear tight underwear. 52 (57.1%) respondents sometimes change their underwear 2 times a day.

Researchers assume that poor behavior in caring for genital organs can be influenced by age factors, meaning that the more mature the teenager, the more experience and better behavior in caring for genital organs.

### **Identification of Vulvovaginitis During Menstruation in Grade VII Adolescent Girls at MTsN Manyar**

The results of the identification of vulvovaginitis cases during menstruation in female adolescents in grade VII at MTsN Manyar from 91 respondents showed that most 35 (38.5%) female adolescents did not experience irritation in the genitals and a small portion of 10 (11.0%) female adolescents experienced severe irritation in the genitals.

The results obtained from this study showed that most respondents did not experience irritation 35 (38.5%). This is different from the results obtained from a study conducted by Ester Maria on adolescents at SMPN 8 Manado in 2013, from 167 respondents (100%) the largest group of respondents experienced irritation during menstruation 107 (64.1%)<sup>19</sup>.

Vulvovaginitis is inflammation or irritation of the vulva and vagina. Vaginal inflammation can occur in women of childbearing age and women who have reached menopause due to hormonal changes after not menstruating (El-manan M, 2011).<sup>4</sup>

Based on the results of the answers from respondents regarding the occurrence of vulvovaginitis during menstruation, most respondents stated that 47 (51.6%) respondents sometimes felt itching in the genital and groin areas during menstruation, 39 (42.9%) respondents never had redness around the genitals, 32 (35.2%) respondents sometimes felt uncomfortable on the skin of the genitals, 56 (64.8%) respondents never felt hot/stinging (like a burning sensation) around the genitals, 43 (47.3%) respondents never experienced abnormal vaginal discharge that was excessive and had a strong odor.

Researchers assume that the occurrence of vulvovaginitis is very important to pay attention to, especially for adolescent girls who have just started menstruating.

### **Analysis of the Relationship Between External Genital Organ Care Behavior and the Incidence of Vulvovaginitis During Menstruation in Grade VII Adolescent Girls at MTsN Manyar**

The results of the identification of the relationship between behavior in caring for external genitalia and the incidence of vulvovaginitis during menstruation in female adolescents in grade VII at MTsN Manyar from 91 respondents showed that female adolescents who did not experience irritation in the genitalia mostly had good behavior, namely 31 (88.6%) respondents, compared to less good behavior, namely 4 (11.4%) respondents. Female adolescents who experienced mild irritation in the genitalia mostly had less good behavior, namely 14 (51.9%) respondents, compared to good behavior, namely 13 (48.1%) respondents. Female adolescents who experienced moderate irritation in the genitalia mostly had less good behavior, namely 16 (84.2%) respondents, compared to good behavior, namely 3 (15.8%) respondents. Female adolescents who experienced severe irritation in the genitalia mostly had less good behavior, namely 9 (90.0%), compared to good behavior, namely 1 (10.0%).

In this study, it was analyzed using the SPSS version 16.0 for Windows program with the Spearman Rho Test. The results showed that there was a relationship between the independent variable and the dependent variable with  $p = 0.000$  where  $p < 0.05$  so that  $H_0$  was rejected and  $H_1$  was accepted, which means that there is a relationship between the Behavior of Caring for External Genitalia Organs and the Incidence of Vuvovaginitis During Menstruation in Class VII Adolescent Girls at MTsN Manyar.

Caring for the genital organs is an individual health effort to be able to maintain one's own health, improve and increase health values and prevent the emergence of disease (Wijaya, A. Jumantoro,

T.2002). So the behavior of caring for external genital organs is an effort to maintain and improve health by maintaining the cleanliness of external genital organs

After being evaluated, a person will start trying to do something according to what the stimulus wants, so that new behavior occurs according to their knowledge, awareness and attitude towards the stimulus (Notoatmodjo 1013:92)15

Based on Bobak, Lowdermik & Jensen, 2005, the stages of adolescent development are divided into three stages, namely early adolescence (10-14 years), middle adolescence (15-16 years), and late adolescence (17-21 years)2. Age is a factor that represents the level of maturity of a student. Children's thinking power at the age of 13-15 years has developed towards concrete and rational thinking. This means that the more mature a person is, the better they will be at thinking and acting. This age is also included in the period of maturation of human reproductive organs (puberty) which is marked by physical changes, one of which is menarche or the first menstruation in adolescent girls. Behrman (2000), the average age of menarche is 10.5-15.5 years1.

From the results of the study, the researcher assumes that the earlier the age of the first menstruation (duration of menstruation) with the current age which is increasingly mature will be better in acting (practice). So the higher the behavior of caring for external genitalia during a person's menstruation, the smaller the possibility of experiencing vulvovaginitis and vice versa.

Poor behavior in caring for the genital organs will certainly increase the risk of disrupting the balance of moisture in the vaginal area, especially during menstruation. If women do not pay attention to vaginal hygiene properly, various complaints will arise that can cause vaginal irritation. Therefore, if young women want to prevent vulvovaginitis, it is better to care for the external genital organs during menstruation in the right way because there are still many young women who have poor behavior in caring for their external genital organs.

## CONCLUSION

From the results of the study entitled The Relationship between Behavior in Caring for External Genital Organs and the Incidence of Vulvovaginitis During Menstruation in Grade VII Adolescent Girls at MTsN Manyar, it can be concluded as follows:

1. Most adolescent girls at MTsN Manyar have poor behavior in caring for external genitalia.
2. Most adolescent girls at MTsN Manyar experience vulvovaginitis or mild irritation of the genitalia.
3. There is a relationship between behavior in caring for external genitalia and the incidence of vulvovaginitis during menstruation in adolescent girls at MTsN Manyar



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