The Relationship Between Personal Hygiene Behavior and Incidence of Vaginal Discharge Among Seventh and Eight Grade Students

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ABSTRAK Adolescence is a transitional period characterized by physical changes. Changes in physical aspects are the most important because they take place quickly, drastically and lead to reproductive organs. A person's understanding, attitude, and behavior related to maintaining personal hygiene, beautifying appearance, increasing self-esteem, and preventing disease together can be referred to as personal hygiene behavior. Vaginal discharge is one of the symptoms and signs of infectious diseases in women. This study aims to determine the relationship between personal hygiene behavior and the incidence of vaginal discharge. Type of observational analytic research with a cross-sectional approach. The population of seventh and eighth grade students of SMPN 1 Ngariboyo was 179 students. The sampling technique used simple random sampling, obtained a sample of 124 students. The independent variable is personal hygiene behavior while the dependent variable is vaginal discharge. Data collection using a questionnaire. The results showed that there were 82 female students who had poor personal hygiene behavior and 94 female students who experienced vaginal discharge. From the results of the analysis using the gamma correlation test, the p value is 0.030 (<0.05). Based on the description above, there is a significant relationship between personal hygiene behavior and the incidence of vaginal discharge at SMPN 1 Ngariboyo. From the results obtained, there are previous studies that did not provide efforts or information from the consequences of the research results. However, in this study, which resulted in many who had poor personal hygiene behavior and experienced vaginal discharge, researchers tried to provide information to female students about how to maintain good hygiene of female organs.

INDEX TERMS adolescence, personal hygiene behavior, vaginal discharge

I. INTRODUCTION
Adolescents are individuals between the ages of 10 and 19¹(1). Adolescence is a transitional period characterized by changes in the body, mind and emotions. Physical changes are the most significant because they affect the reproductive organs and occur rapidly and dramatically. Reproductive organ care requires special care. Maintenance of reproductive health is determined by knowledge and proper care²(2). Without an understanding of reproductive health, a person is likely to ignore it and eventually engage in behaviors that are detrimental to their own health, resulting in vaginal discharge problems³(3). The importance of maintaining hygiene, especially in the female organs, is to prepare a healthy and bright future for adolescents. Adolescents who have a healthy reproductive system will reduce the risks and negative impacts due to reproductive health problems⁴(4).

The National Population and Family Planning Agency (BKKBN) reports that 75% of Indonesian women experience vaginal discharge. This number differs greatly from Europe due to Indonesia's humid weather⁵(3). At SMPN 1 Ngariboyo, a preliminary survey of 8th grade students found that out of 10 students there were 10 students experiencing vaginal discharge, these students did not know the importance of maintaining good hygiene of their female organs such as, not washing hands before touching the vagina, when cleaning genital organs after urination is not dried.

There is a lot of literature that discusses the relationship between this research, including Astuti's research explaining that the higher the behavior, the lower the occurrence of
vaginal discharge\(^{(5)}\). Another study was also conducted by Anggraini with the results showing that 37 people (92.5\%) experienced less behavior in Sumbersari village, Subang Regency\(^{(6)}\).

If this discharge is not treated immediately, it can be fatal. The consequences are infertility and pregnancy outside the womb. This is because there is a blockage in the fallopian tubes\(^{(7)}\). By increasing knowledge and improving reproductive health in maintaining the hygiene of reproductive organs, it can be started by conducting counseling, especially for adolescent girls who will become prospective mothers who give birth to the next generation of the nation\(^{(8)}\). Health workers can provide reproductive health services early on to prevent vaginal discharge and to overcome reproductive hygiene problems so that later they have understanding, attitudes and behaviors, especially in adolescents\(^{(9)}\).

II. METHOD

This study was an observational analytic using a cross-sectional approach. Data collection using questionnaires. Personal hygiene behavior questionnaire with 20 questions and vaginal discharge with 5 questions. The questionnaire used is not standardized, therefore the questionnaire is tested first to see whether it is valid or not using validity and reliability tests on 30 female students who are not respondents. Validity and reliability tests were carried out only once and obtained valid and reliable questionnaire results. The population of seventh and eighth grade students of SMPN 1 Ngariboyo was 179 students. The technique uses simple random sampling, obtained by 124 students. There are 2 variables, namely personal hygiene behavior and vaginal discharge. In the process of obtaining data, there is no repetition. After getting the results from the questionnaire, the researcher analyzed using the gamma correlation test statistical test.

III. RESULT

A. AGE DISTRIBUTION

<table>
<thead>
<tr>
<th>Age (year)</th>
<th>Frequency (n)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>4</td>
<td>3.2</td>
</tr>
<tr>
<td>13</td>
<td>51</td>
<td>49.2</td>
</tr>
<tr>
<td>14</td>
<td>55</td>
<td>44.4</td>
</tr>
<tr>
<td>15</td>
<td>4</td>
<td>3.3</td>
</tr>
<tr>
<td>Total</td>
<td>124</td>
<td>100</td>
</tr>
</tbody>
</table>

The results in table 1 show that the age of the students is mostly 13 years old, namely 61 people (49.2\%).

B. FREQUENCY DISTRIBUTION OF PERSONAL HYGIENE BEHAVIOR

<table>
<thead>
<tr>
<th>Personal Hygiene</th>
<th>Frequency (n)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not enough</td>
<td>82</td>
<td>66.1</td>
</tr>
<tr>
<td>Good</td>
<td>36</td>
<td>29.0</td>
</tr>
<tr>
<td>Total</td>
<td>124</td>
<td>100</td>
</tr>
</tbody>
</table>

The results in table 2 show that 82 students (66.1\%) experienced less personal hygiene behavior.

C. FREQUENCY DISTRIBUTION OF VAGINAL DISCHARGE

<table>
<thead>
<tr>
<th>Vaginal Discharge</th>
<th>Frequency (n)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathologic Vaginal Discharge</td>
<td>94</td>
<td>75.8</td>
</tr>
<tr>
<td>Physiologic Vaginal Discharge</td>
<td>25</td>
<td>20.2</td>
</tr>
<tr>
<td>Not Vaginal Discharge</td>
<td>5</td>
<td>4.0</td>
</tr>
<tr>
<td>Total</td>
<td>124</td>
<td>100</td>
</tr>
</tbody>
</table>

The results in table 3 show that the most female students experienced vaginal discharge in the pathological vaginal discharge category, namely 94 female students (75.8\%).

D. ANALYSIS OF THE RELATIONSHIP BETWEEN PERSONAL HYGIENE BEHAVIOR AND THE INCIDENCE OF VAGINAL DISCHARGE

<table>
<thead>
<tr>
<th>Personnal hygiene behavior</th>
<th>Vaginal discharge</th>
<th>Total</th>
<th>(p) value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathologic Vaginal Discharge</td>
<td>Physiologic Vaginal Discharge</td>
<td>No Vaginal Discharge</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Not enough</td>
<td>68</td>
<td>82.9</td>
<td>12</td>
</tr>
<tr>
<td>Good</td>
<td>20</td>
<td>55.6</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>75.8</td>
<td>25</td>
</tr>
</tbody>
</table>

The results of data analysis from table 4 using the Gamma test show a \(p\) value of 0.030 (<0.05) that there is a relationship between personal hygiene behavior and the incidence of vaginal discharge.

IV. DISCUSSION

Students in grades VII and VIII of SMPN 1 Ngariboyo can be seen that most students are 13 years old. Of the 124 students there are 82 (66.1\%) students who have poor personal hygiene behavior. Age 13 years is included in the early adolescent phase. Changes occur quite rapidly during this phase and climax. At this age, emotional instability and...
imbalance are prevalent in many ways\(^{10}\). School is the best time to learn habits and practice them. Because as you get older these habits will become permanent. It is during adolescence that physical changes occur. With these changes, their hygiene also needs to be improved\(^{11}\). Personal hygiene behavior is a way that a person does to improve health status\(^{30}\). One of the bad behaviors in maintaining hygiene in the genital organs, such as rarely changing underwear, can be a trigger for infection\(^{12}\). According to the results of research from Nur, it shows that most adolescent girls have poor behavior because they have bad habits towards genital hygiene\(^{13}\). Lack of reproductive health education at school and individual habits in performing poor self-care are among the factors that cause adolescent girls to lack understanding of personal hygiene\(^{14}\). Adolescents do not know the correct way of vulva hygiene and they consider personal hygiene to be a common thing and do not understand the negative impact of incorrect personal hygiene behavior\(^{15}\). The poor hygiene practices of some adolescents highlight the need to teach healthy and appropriate behaviors to keep female organs clean. The approach can start from the family, young women's groups, and school institutions\(^{16}\). Clean female organs can not only prevent vaginal discharge, but can also avoid other diseases such as itching and yeast infections\(^{17}\).

This study is in line with Indriyani, who mentioned that most of MA Al-Hikmah students, namely 60 people (95%), were included in the personal hygiene category which was lacking due to their lack of knowledge about proper genital care. They only do genetalia care as needed without thinking about the negative impact of this behavior\(^{18}\). In line with what was done by Novita, most of the Estu Utomo STIKes students experienced less personal hygiene as many as 60 respondents (68.97%). One of the things that affect one's personal hygiene is ignorance, especially when it comes to female hygiene. Many people still lack knowledge on how to clean them properly\(^{19}\). This analysis is also comparable to that conducted by Angrainai that young women who behave less as many as 40 respondents (55.6%), more than those with adequate and good personal hygiene behavior. The more a person has knowledge, the better his behavior will be. Conversely, the lower one's knowledge, the worse the behavior\(^{20}\).

Researchers argue that female students who experience poor personal hygiene behavior are due to a lack of information about genital personal hygiene. Schools can make efforts by occasionally conducting counseling related to maintaining good hygiene of their female organs. Students can also find information through their own social media.

The results of the study most of the VII and VIII grade students of SMPN 1 Ngariboyo had pathological vaginal discharge 94 (75.8%). Vaginal discharge can be caused by one factor, namely personal hygiene behavior\(^{20}\). Usually women begin to experience vaginal discharge in adolescence\(^{21}\). According to Marhaeni, vaginal discharge is one of the signs of the ovulation process. It is also a sign of a disease. The characteristics of pathological vaginal discharge are that there are many leukocytes, the number is large, it occurs continuously, the color changes, accompanied by complaints, and smells bad\(^{22}\). According to Maysarah's research, normal (physiological) vaginal discharge is influenced by certain hormones\(^{23}\). Pathologic vaginal discharge if not immediately sought for the cause and treated can lead to more severe reproductive tract infections, malignancies and infertility\(^{24}\). Adolescents who experience vaginal discharge have different ways of dealing with discomfort in their feminine area, some overcome it by using feminine cleansing products and some are left alone without using drugs or other cleaners\(^{25}\). Their perceptions vary depending on their culture, socio-economic situation, environment, and depending on the stories they hear from those closest to them\(^{26}\). In this study, many female students just let it go when experiencing vaginal discharge. Therefore, young women should know more about personal hygiene, especially how to deal with vaginal discharge and seek accurate information\(^{27}\).

In line with Ramayanti's research on adolescent girls of SMA Muhammadiyah 5 Yogyakarta, most of them experienced vaginal discharge as many as 39 respondents (17%). One of the influencing factors is the lack of understanding of how to prevent vaginal discharge, by always maintaining vaginal hygiene and moisture\(^{28}\). Another study by Ilmawati, 27 junior high school adolescents (54%) experienced abnormal vaginal discharge accompanied by itching and odor. This shows that vaginal discharge is still quite high and needs to be handled\(^{29}\).

Here the researcher argues that poor personal hygiene practices are the cause of female students experiencing pathological vaginal discharge. Vaginal discharge, which is initially normal, will become abnormal if there is a lack of behavior to maintain good genital hygiene. The initial way that can be overcome is to routinely maintain feminine hygiene.

From the results of the Gamma test p value 0.030 (<0.05). There is a relationship between personal hygiene behavior and vaginal discharge in VII and VIII grade students of SMPN 1 Ngariboyo. Pemilihan's research states that adolescent girls, especially when cleaning vulva hygiene that is lacking, at least experience vaginal discharge every year\(^{30}\). According to Astuti in her research revealed that the behavior of maintaining feminine hygiene can reduce the risk of vaginal discharge. Maintaining cleanliness, for example by cleaning the feminine area with clean water, washing the right way, from back to front\(^{5}\). Research conducted by Nengsih suggests that someone who is reluctant to clean their body is likely to enter bacteria or fungi into the female organs\(^{2}\). This ignorance can lead to vaginal discharge that will impact the physical health, psychological and social functioning of adolescents\(^{31}\). In addition, it can be caused by their lack of information and they don't really think about the hygiene of their female organs\(^{32}\).
This research is in line with Rosidah on adolescent girls of MTS Madinatunnajah where there is a relationship. Where maintaining lack of hygiene can trigger the development of microorganisms\(^\text{[33]}\). This finding is in line with Prasasti’s findings who found the same results in female students at SMP Negeri 10 Denpasar. Vaginal discharge can be avoided if personal hygiene behavior is getting better\(^\text{[34]}\). Similar to Putri’s research which also has a relationship. The better a person’s behavior in doing personal hygiene, the vaginal discharge he experiences is physiological or normal, but the less good a person’s behavior in doing personal hygiene, the vaginal discharge he experiences will be pathological or abnormal\(^\text{[35]}\).

V. CONCLUSIONS

From research conducted at SMPN 1 Ngariboyo, many female students who have poor personal hygiene behavior experience pathological vaginal discharge. There is a significant relationship. It is recommended that the school can hold counseling on feminine hygiene so that students are able to increase their knowledge so that they can apply good behavior. Meanwhile, the surrounding community is expected to increase knowledge and be able to provide support when there are adolescents who experience vaginal discharge due to personal hygiene. And for other researchers, it can be a reference material, input for further research using more methods and variables.

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