

Knowledge, Behavior And Motivation of Students About *Vaginal Hygiene* And Prevention of Pathological Leucorrhoea at Female Islamic Boarding School

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ABSTRACT

Vaginal discharge is a symptom that is very often experienced by most women. Vaginal discharge is divided into two types, namely physiological and pathological discharge. Pathological vaginal discharge can be said to be abnormal vaginal discharge caused by infection or inflammation. The purpose of this study was to see the effectiveness of counseling on increasing knowledge, behavior, and motivation of female students towards vaginal hygiene and prevention of pathological leucorrhoea at boarding schools. This research method is quasi experiment with *pre-test* dan *post-test group design*. The population in this study were Aliyah students in grade 1, grade 2 and grade 3 totaling 130 students. The sample used in this study was proportional stratified random sampling, namely 64 female students. The results of the Wilcoxon test showed a p-value of 0.0001 ($p < 0.05$) on all variables, which means that there are differences in knowledge, behavior and motivation between before and after counseling. The conclusion of this study is that counseling is effective in increasing the knowledge, behavior and motivation of female boarding school students.

Keywords: Vaginal discharge, knowledge, behavior, motivation, reproductive health

INTRODUCTION

Various changes experienced by adolescents can lead to several health problems, especially adolescent reproductive health problems. A common adolescent health problem is the occurrence of vaginal discharge (leukorrhea/fluor albus) in female adolescents. Vaginal discharge is a condition that is often experienced by women throughout their life cycle starting from adolescence, reproductive period and menopause (1). Vaginal discharge can be divided into 2 types, namely normal or physiological and abnormal or pathological vaginal discharge (2). Normal or physiological vaginal discharge occurs in accordance with the female reproductive cycle or in accordance with the female body cycle with a clear type of discharge, not excessive, odorless and does not cause itching or burning. Whereas pathological or abnormal vaginal discharge is characterized by a large amount of discharge, white like stale milk, yellow or greenish, itching, burning, and accompanied by a fishy or rotten smell. The color of the vaginal discharge will differ according to the cause of the discharge. The most common causes of abnormal vaginal discharge are bacteria, fungi and parasites (3). Hormonal factors, hygiene, and the pH level of the vagina also affect the appearance of vaginal discharge symptoms. Vaginal discharge does not actually need to be treated. However, if it starts to bother you, such as the appearance of itching and pain, you should really be aware of vaginal discharge and should not be underestimated. This is because this disorder can cause infertility and cancer (4).

Pathological vaginal discharge can be said to be abnormal vaginal discharge caused by infection or inflammation, this occurs due to unhealthy behaviors such as washing the vagina

with unclean water and using vaginal cleansers excessively. Vaginal discharge affects about 50% of women's lives and affects almost all ages. Research data on women's reproductive health shows that 75% of women in the world must suffer from vaginal discharge, at least once in their lives and 45% of them can experience more than twice (5). The highest predicted incidence of vaginal discharge in South Kalimantan Province is Banjar Regency with 286 people, which is calculated from the number of fertile women aged 15-39 years of 115,297 people, aged 15-49 years of 154,136 people and women aged 30-50 as many as 88,076 people. This data is reinforced by findings in the field, the case in UPT. Martapura 1 obtained 123 women who were carried out early detection of cervical cancer, 117 women with negative IVA results with complaints of thick vaginal discharge, irritation, vaginal discharge accompanied by hip pain, cervicitis and inflammation, 1 negative IVA but suspected cancer and 6 positive IVA (6).

Banjar Regency is a city of santri and there are many Islamic boarding schools. Basically, Islamic boarding schools are Islamic educational institutions, where knowledge related to the Islamic religion is expected to be obtained. The characteristics of life in boarding schools are usually that the female students dress completely closed, and rarely change clothes during the day and the bathroom is used together so that disease transmission will be easily infected. One of the impacts of poor personal hygiene in women is vaginal discharge, which is no exception for adolescents in the pesantren environment. Based on data that in Aliyah An-Najah Cindai Alus Banjar Regency there are many female students experiencing vaginal discharge (7). Factors that cause vaginal discharge include not drying the genitals after urinating (BAK), using tight clothing, not using cotton underwear, washing the female organs in the wrong direction, not immediately changing pads during menstruation, using vaginal cleansing soap, using antibiotics and stressful conditions. Factors that can affect the occurrence of vaginal discharge, of course, can affect the degree of health and well-being of women. Therefore, maintaining personal hygiene is very important to pay attention to. A person's ability to improve genital hygiene is a must-have behavior to prevent infections in the genitalia. Poor external genitalia care will trigger vaginal discharge. In fact, many adolescents do not understand and care about how to care for their reproductive organs (8).

According to Lawrence Green (1991), behavior is influenced by three main factors, namely predisposing factors, enabling factors and reinforcing factors (9). Things that affect the occurrence of vaginal discharge are knowledge, attitude, and motivation in personal hygiene. Vaginal discharge that occurs due to infection is generally caused by poor personal hygiene habits. In addition, leucorrhea can also occur due to geographical conditions where Indonesia is one of the countries where the humidity level is quite high so that adolescents will have a great opportunity to experience leucorrhea. Behaviors that can affect the incidence of vaginal discharge include attitude and motivation about female organ hygiene. In addition, the knowledge a person has will affect the behavior of preventing vaginal discharge and the level of knowledge of adolescents affects health conditions. Lack of adolescent health knowledge (predisposing factor) has negative behavioral implications (10). The knowledge that a person has will affect the behavior of preventing vaginal discharge and this is in line with the statement that the level of knowledge of adolescents affects health conditions (10). Based on the statement of Octaviana (2023), it can be seen how important adolescent knowledge is for their health. As well as poor individual female organ hygiene care behavior will be the cause of vaginal discharge. The cause of vaginal discharge is also related to the attitude of individuals who do not pay attention to the hygiene of their reproductive organs (11).

Self-care or personal hygiene is self-care that is done to maintain health both physically and psychologically. Reproductive health education is one of the alternatives that can be done to adolescents to know how to maintain the hygiene and health of female reproductive organs in order to avoid reproductive organ diseases, especially in adolescent girls. Based on a number of previous studies, it is known that health promotion can change people's knowledge, attitudes and perceptions from negative to positive. Based on the description above, it is necessary to conduct a study to analyze the effect of reproductive health counseling on

knowledge, behavior and motivation regarding the prevention of pathological vaginal discharge at Aliyah An-Najah Cindai Alus, Banjar Regency.

This research method is a quasi experiment using a pre-test and post-test group design. This research was conducted at the boarding school Aliyah An-Najah Cindai Alus Banjar Regency. The population in this study were Aliyah students in grade 1, grade 2 and grade 3 who attended school at Ponpes Aliyah An-Najah Cindai Alus, totaling 130 students. The sampling technique used in this study was proportional stratified random sampling. The sample was grouped into 3 strata and obtained a proportional sample, which was 64 female students. Primary data collection was carried out using questionnaire sheets in the form of pre-test and post-test related to knowledge, behavior and motivation about vaginal hygiene and prevention of pathological vaginal discharge to respondents. The study used pretest and posttest questionnaires as data collection tools to determine changes in knowledge, behavior and motivation of students before and after counseling on vaginal hygiene and prevention of pathological vaginal discharge at Pondok Pesantrem Aliyah An-Najah Cinda Alus, Banjar Regency. Data processing was carried out after data collection by performing editing, coding, entry, cleaning and analyzing steps. Data processing using a computer through SPSS. Univariate analysis using frequency distribution with percentages and bivariate analysis with Wilcoxon test.

RESULT AND DISCUSSION

Based on the results of the study, the distribution of pretest and post test knowledge of respondents on vaginal hygiene and prevention of pathological vaginal discharge can be seen in the following table

Table 1. Frequency distribution of knowledge about vaginal hygiene and prevention of vaginal discharge in Ponpes Aliyah An-Najah Cindai Alus Banjar Regency

Knowledge	Pre test		Post test		p-value
	Frequency	Percentage	Frequency	Percentage	
Bad	70	100%	0	0%	0,0001
Good	0	0%	70	100%	
Total	70	100%	70	100%	

Source: Primary data, 2024

Based on table 1, the results of the study can be seen that the frequency distribution of knowledge about vaginal hygiene and prevention of vaginal discharge in respondents before counseling had poor knowledge of 70 people (100%), while after counseling there was an increase in good knowledge as many as 70 people (100%). The results of the pre and post test after counseling showed that respondents already understood the importance of maintaining vaginal hygiene. The results of the Wilcoxon test showed a p-value of 0.0001 ($p < 0.05$) which means there is a difference in knowledge between before and after counseling. Before counseling, schoolgirls' knowledge of vaginal hygiene and vaginal discharge prevention was poor. Poor knowledge can be caused by adolescents not understanding or only receiving information that is not comprehensive. Adolescents should have the opportunity to get information about reproductive health from health workers, teachers and the media. This great opportunity is expected to further increase knowledge about vaginal discharge, so that adolescents can perform daily vaginal discharge prevention behavior properly and correctly. Adolescents who carry out vaginal discharge prevention behavior properly are expected to improve their health status. After counseling, students' knowledge increased to good. Knowledge can be defined as information that occurs after a person is obtained through the senses, namely the senses of sight, hearing, and smell. Most humans get information through sight and hearing. Knowledge or cognitive domain is a domain that is very important to shape a person's actions (9).

This is in accordance with what was stated by Nurhamidah (2018), the p-value = 0.000 ($p\text{-value} < 0,05$), it can be concluded that there is a significant difference between the pre-test and post-test knowledge values for counseling on increasing the knowledge of female students about vaginal discharge. Counseling can increase knowledge in respondents,

because this method involves all the senses to receive information and is given directly by the counselor. Knowledge is the result of knowing, and this occurs after people perceive a certain object. Sensing occurs through the five human senses, namely the senses of sight, hearing, smell, taste and touch. Most human knowledge is acquired through the eyes and ears (13). Therefore, adolescent women will increasingly know and understand knowledge about vulva hygiene. Some adolescents already have good knowledge about vulvar hygiene but have not practiced it properly which causes adolescents to still often have vaginal discharge, while if adolescents have less knowledge it is due to a lack of information or health education about the importance of doing good and correct vulvar hygiene (14).

Tabel 2. Frequency distribution of behavior about vaginal hygiene and prevention of vaginal discharge at Ponpes Aliyah An-Najah Cindai Alus Banjar Regency.

Behavior	Pre test		Post test		p-value
	Frequency	Percentage	Frequency	Percentage	
Bad	57	81,4%	7	10%	0,0001
Good	14	18,6%	63	90%	
Total	70	100%	70	100%	

Source: Primary data, 2024

Based on table 2, it can be seen that the frequency distribution of behavior about vaginal hygiene and prevention of vaginal discharge on respondents before counseling who have poor knowledge (81.4%) and have good knowledge (18.6%). After counseling, respondents who have poor knowledge (10%) and good knowledge (90%). Wilcoxon test results showed a p value of 0.0001 (<0.05), which means there is a difference in behavior between before and after counseling

Behavior is influenced by personal experience, the influence of people who are considered important. The knowledge factor possessed by respondents plays an important role in determining good behavior (15). Counseling activities are one of the educational activities. Educational activities can influence a person's perspective on themselves and their environment, which is intended to develop or improve certain abilities (16). Counseling is provided on the correct way to maintain genital hygiene with powerpoint media, leaflets and question and answer sessions. The posttest results show that the intervention provided can provide behavioral changes regarding how to maintain genital organ hygiene. From the intervention provided, the students became aware of the benefits and objectives of maintaining the correct genital organs. This increase in knowledge has a positive impact on improving student behavior in maintaining their genital organs. This is in accordance with what was stated by Handayani (2013), stating that health counseling on reproductive health from health workers is very important. Moreover, each individual has a different level of absorption. So that health education with counseling is needed to instill health values in a person. The increase in adolescent behavior about vaginal hygiene and vaginal discharge prevention is due to increased knowledge of adolescents after being given counseling which includes the cognitive domain which is influential in shaping one's actions (17).

Based on table 3 of the research results, it can be seen that the frequency distribution of motivation about vaginal hygiene and prevention of vaginal discharge on respondents before counseling who have poor knowledge (80%) and have good knowledge (20%). After counseling, respondents who had poor knowledge (88.6%) and good knowledge (11.4%). Wilcoxon test results showed a p value of 0.0001 (<0.05) which means there is a difference between before and after counseling. This is in accordance with what was stated by Rahayu (2017), there is a significant difference between the pre-test knowledge value and the post-test which provides a change in behavior, so that there is an encouragement (motivation) to maintain genital organ hygiene.

Table 3. Frequency distribution of motivation about vaginal hygiene and vaginal discharge at Ponpes Aliyah An-Najah Cindai Alus Banjar Regency

Motivasion	Pre test		Post test		p-value
	Frequency	Percentage	Frequency	Percentage	
Buruk	56	80%	62	88,6%	0,0001
Baik	14	20%	8	11,4%	
Total	70	100%	70	100%	

Source: Primary data, 2024

Counseling provides changes in the level of knowledge and behavior that make the motivation to continue to maintain and maintain genital hygiene. As an effort to maintain the cleanliness of female intimate organs, awareness of personal hygiene is needed. Personal hygiene is an action to maintain one's cleanliness and health for physical and psychological well-being. One way to instill awareness is to first foster a good perception of maintaining genital hygiene through counseling activities (18). Motivation can determine the attitude of adolescents in taking preventive measures such as vaginal discharge problems by maintaining genital hygiene. Adolescents who lack motivation will have a negative response to vulvar hygiene, and vice versa (19). When a person obtains information, the information will be received, processed, then responded to and a person can see the difference from something that will have a good or bad impact on him. Through knowledge, a person can understand and understand that maintaining vulvar hygiene is something positive that needs to be done. So that after showing an attitude related to this information, respondents can have motivation based on the knowledge they have. Attitude formation and change are determined by two factors, namely: internal factors how individuals respond to the outside world, and external factors that exist outside the individual which is a stimulus to form or change attitudes (20). Green argues that attitude is a predisposing factor, which facilitates changes in practice/behavior. In order to prevent the occurrence of too frequent vaginal discharge, it is necessary to change attitudes to be more agreeable / positive / good with the influence of internal factors and external factors that can provide motivation for attitude change (9)

According to the assumptions of research changes that show that health education on vaginal discharge knowledge in adolescent girls has increased, it can be interpreted that there is an effectiveness of health education on vaginal discharge knowledge in adolescent girls. This is in line with research According to Egi Ade S (2015), which states the actual purpose of health education, that health education is an effort or activity to create community behavior that is conducive to health. This means that health education seeks to make people realize or know how to maintain their health, how to avoid or prevent things that harm their health, the health of others, where to seek treatment when sick, and so on. The ultimate goal of education is to make people aware of practicing healthy living behaviors for themselves and their communities (21). Education affects the process of learning, the higher a person's education, the easier it is for that person to receive information. Increased knowledge is not absolutely obtained in formal education, but can also be obtained in non-formal education. A person's higher education is obtained information from both other people and the mass media. The more information that enters, the more knowledge gained about health (22). Health education is very effective in increasing knowledge about vaginal discharge in adolescent girls, so that it can reduce the incidence of vaginal discharge in adolescent girls. This is in line with the results of research conducted by Wandha and Miraswati (2021) showing that health education is very effective in increasing the knowledge and attitudes of adolescent girls in handling vaginal discharge and this is also in line with the results of research conducted by Fauziah (2017) saying that health education can increase knowledge about the prevention of pathological vaginal discharge (23,24).

CONCLUSION

Based on the research that has been done, it can be concluded that there are changes in knowledge, behavior and motivation of students before and after counseling on vaginal hygiene and prevention of pathological vaginal discharge at ponpes Aliyah An-Najah Cindai Alus Banjar Regency. Based on the results of this study, it is expected that the boarding school to foster socialization activities with health-related pilot programs on knowledge about the prevention of pathological vaginal discharge and the surrounding environment and this socialization activity is not only limited to this research, but can be carried out on an ongoing basis and for the local Health Office to increase the provision of information in the form of counseling to adolescent girls in particular and conduct evaluation and monitoring of vaginal discharge prevention behavior so as to reduce the risk of vaginal discharge incidence in adolescent girls.

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