PHSAJ - Public Health Sebelas April Journal
Volume 2, No. 2, November 2023

https://ejournal.unsap.ac.id/index.php/phsaj

FACTORS RELATED TO THE INCIDENCE OF VAGINAL DISCHARGE AMONG FEMALE ADOLESCENT IN X JUNIOR HIGH SCHOOL DISTRICT SUMEDANG 2023

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Article Info

Article history:

Received Oct 12, 2023
Revised Nov 20, 2023
Accepted Nov 26, 2023

Keywords:

Vaginal discharge
Knowledge
Personal Hygiene
Lifestyle

ABSTRACT

Vaginal discharge has long been a problem for women. Adolescents are one part of the population at risk of vaginal discharge that needs special attention. An initial survey of adolescent girls at X Junior High School in March 2023 found that 7 (70%) students experienced vaginal discharge and 3 (30%) students did not experience vaginal discharge. The purpose of this study was to determine the factors that influence the incidence of vaginal discharge in adolescent girls at SMP X Conggeang District, Sumedang Regency. The method used was descriptive analytic research with a cross sectonal design. The sampling technique used was Proportional Stratified Random Sampling with 69 respondents. The results showed that there was an influence between knowledge (p-value = 0.003) with the incidence of vaginal discharge. There is an influence between personal hygiene (p-value=0.005) with the incidence of vaginal discharge and there is no influence between lifestyle (p-value=0.067) with the incidence of vaginal discharge. It is expected that adolescents need to have the awareness to seek correct information about reproductive health problems, especially about the incidence of vaginal discharge. Schools are more proactive in providing counseling guidance on adolescent reproductive health issues.

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1. INTRODUCTION

Understanding adolescent reproductive health is one of the important things to know because adolescence is a transition period from children's reproductive organs to adult reproductive organs. Monks et al. (2006) said that adolescents are individuals aged between 12-21 years who are experiencing a transition from childhood to adolescence, with the division of 12-15 years of age is early adolescence, 15-18 years of age is middle or middle adolescence, and 18-21 years of age is late adolescence.

Adolescence is often preceded by the maturity of the reproductive organs that provide many changes in adolescents. One of the changes in adolescents is physical changes that have a major influence on the development of the adolescent psyche such as body growth followed by the functioning of reproductive organs and other secondary sexual signs, which can lead to reproductive health problems in adolescents, one of which is vaginal discharge. The reproductive health problem of vaginal discharge that can occur in adolescence is often not taken seriously by women

because in general they consider vaginal discharge as normal. Whereas vaginal discharge can be an indication of diseases such as uterine cancer (Husseini in Satriani et al., 2022)..

According to Koes Irianto (2014) Vaginal discharge or what is known by the medical term Flour Albus is excessive fluid that comes out of the vagina. The vagina produces fluids to maintain moisture, clean from the inside, and maintain vaginal acidity because it contains many beneficial bacteria. Normal vaginal discharge is clear white in color, when attached to underwear it will be bright yellow, mucus-like consistency, thin or thick.

Vaginal discharge can be divided into 2 types, namely normal or physiological and abnormal or pathological vaginal discharge. (Pradnyandari, Surya, & Aryana, 2019).. Normal vaginal discharge occurs in accordance with the female reproductive cycle or in accordance with the cycle of the female body with a clear type of discharge, not excessive, odorless and does not cause itching or burning. Whereas abnormal vaginal discharge is characterized by a large amount of discharge, white like stale milk, yellow or greenish, itchy, sore, and accompanied by a fishy or rotten smell, very disturbing comfort for women. (Marhaeni, 2016).

According to the World Health Organization (WHO) in 2018 in Aldriana & Haryanti (2018), that about 75% of women in the world will definitely experience vaginal discharge at least once in their lifetime, and as many as 45% will experience it twice or more, while women in Europe who experience vaginal discharge are 25%.

Data in Indonesia 90% of women experience vaginal discharge and as many as 60% are experienced by adolescent girls (Prabawati et al., 2019). About 90% of women in Indonesia have the potential to experience vaginal discharge because Indonesia is a tropical climate, so fungi are easy to develop which results in many cases of vaginal discharge. Vaginal discharge symptoms are also experienced by unmarried women or adolescent girls aged 15-24 years, which is around 31.8%. This shows that adolescents are more likely to have vaginal discharge. (Azizah in Mularsih & Elliana, 2019).

According to statistical data, the total population in West Java Province reaches 11,358,740 people or women who experience vaginal discharge 27.60% of the total population in West Java are adolescents and women of childbearing age aged 10-24 years. (Department of Health, 2015).

A preliminary study of 10 adolescent girls aged 12-14 years at SMP X was conducted on March 20, 2023, by means of non-formal interviews with 10 students, it was found that 7 people (70%) of SMP X students who experienced vaginal discharge because they did not know about the causes, treatments that must be done if vaginal discharge occurs and there is still a lack of understanding about vaginal discharge itself so that there are still many adolescents who consider vaginal discharge as a common and trivial thing, in addition to embarrassment when adolescents experience vaginal discharge often makes them reluctant to consult a doctor while 3 people (30%) did not experience vaginal discharge. From this description, the researcher is interested in conducting research on "Factors Affecting the Incidence of Vaginal Discharge in Adolescent Girls at SMP X Sumedang Regency in 2023".

2. METHODS

The research method used is quantitative research with a cross sectional approach. The population in this study were adolescent students aged 12-14 years at SMP X Sumedang Regency, classes VII, VIII, totaling 186 people. The sampling used in this study was Proportional Stratified Random Sampling with 69 respondents. The instrument used was a questionnaire using google form media. Data analysis includes univariate and bivariate analysis using the Chi-square test.

3. RESULTS AND DISCUSSION

3.1. Results

A. Univariate Analysis

1. Knowledge

Table 1 Frequency Distribution of Knowledge

Knowledge	Frequency	Percent (%)
Good	17	24,6
Simply	39	56,5
Less	13	18,3
Total	**69**	**100,0**

Based on table 1 on the Frequency Distribution of Knowledge, it shows that the highest percentage of respondents belonging to the moderate category is 39 respondents (56.5%).

2. Personal Hygiene

Table 2 Frequency Distribution of Personal Hygiene

Personal Hygiene	Frequency	Percent (%)
Good	15	21,7
Simply	30	43,5
Less	24	34,8
Total	**69**	**100,0**

Based on table 2 on the Frequency Distribution of Personal Hygiene, it shows that the highest percentage of respondents belonging to the moderate category is 30 respondents (43.5%).

3. Lifestyle

Table 3 Lifestyle Frequency Distribution

Lifestyle	Frequency	Percent (%)
Good	21	30,4
Simply	31	44,9
Less	17	24,6
Total	**69**	**100,0**

Based on table 3 on the Frequency Distribution of lifestyle, it shows that the highest percentage of respondents belonging to the moderate category is 31 respondents (44.9%).

4. Incidence of Vaginal Discharge

Table 4 Frequency Distribution of Vaginal Discharge

Incidence of Vaginal Discharge	Frequency	Percent (%)
Experience	48	69,6
Not experienced	21	30,4
Total	**69**	**100,0**

Based on table 4 above, it shows that out of 69 adolescent girls at SMP X Sumedang Regency who have experienced vaginal discharge as many as 69.6% (48 respondents), while they have never experienced as many as 30.4% (21 respondents).

B. Bivariate Analysis

1. Knowledge

Table 5 Cross Tabulation of Knowledge with Vaginal Discharge Incidence

Knowledge	Incidence of Vaginal Discharge						P Value
	Experience		Not experienced		Total		
	f	%	f	%	f	%	
Good	13	11,8	4	5,2	17	17,0	
Simply	31	27,1	8	11,9	39	39,0	0,003
Less	4	9,0	9	4,0	13	13,0	
Total	48	48,0	21	21,0	69	69,0	

Based on table 5, it is known that 69 respondents (100%) there were a majority of respondents with sufficient knowledge as many as 39 respondents (56.5) who experienced vaginal discharge as many as 31 respondents (27.1%), and who did not experience vaginal discharge as many as 8 respondents (11.9%). While the results of the chi-square statistical test using the Statistical Program for Social Science (SPSS) application obtained a p value = 0.003 at the 95% confidence level with (0.05). Thus the p-value (0.003) <0.05 which indicates that there is a significant relationship between the knowledge of adolescent girls and the incidence of vaginal discharge at SMP X Sumedang Regency.

2. Personal Hygiene

Table 6 Cross-tabulation of Personal Hygiene with Vaginal Discharge Incidence

Personal Hygiene	Incidence of Vaginal Discharge						P Value
	Experience		Not experienced		Total		
	f	%	f	%	f	%	
Good	11	10,4	4	4,6	15	15,0	
Simply	26	20,9	4	9,1	30	30,0	0,005
Less	11	16,7	13	7,3	24	24,0	
Total	48	48,0	21	21,0	69	69,0	

Based on table 6, respondents whose personal hygiene is good, there are only 11 respondents (10.4%) who experience vaginal discharge and those who do not experience only 4 respondents (4.6%). Meanwhile, those whose personal hygiene is sufficient who experience vaginal discharge are 26 respondents (20.9%) and those who do not experience only 4 respondents (9.1%). Meanwhile, those whose personal hygiene is less, who experience vaginal discharge are 11 respondents (16.7%) and those who do not experience 13 respondents (7.3%). Based on the results of the chi-square statistical test using the Statistical Program for Social Science (SPSS) application, the p value = 0.005 at the 95% confidence level with (0.05). Thus the p-value (0.005) <0.05 which indicates that there is a significant relationship between personal hygiene of adolescent girls and the incidence of vaginal discharge at SMP X Sumedang Regency.

3. Lifestyle

Table 7 Cross Tabulation of Lifestyle with Vaginal Discharge Incidence

Lifestyle	Incidence of Vaginal Discharge						P Value
	Experience		Not experienced		Total		
	f	%	f	%	f	%	
Good	16	14,6	5	6,4	21	21,0	
Simply	24	21,6	7	9,4	31	31,0	0,067
Less	8	11,8	9	5,2	17	17,0	
Total	48	48,0	21	21,0	69	69,0	

Based on table 7, the results of the chi-square statistical test using the SPSS application obtained a p-value = 0.067 at the 95% confidence level with (0.05). Thus the p-value (0.067) >0.05 which indicates that there is no significant relationship between the lifestyle of adolescent girls and the incidence of vaginal discharge at SMP X Sumedang Regency.

3.2. Discussion

A. Knowledge Overview

The picture shown in this study is that the knowledge of adolescent girls about vaginal discharge at SMP X Sumedang Regency in 2023 is mostly with sufficient categories, namely 39 respondents (56.5%), while the good category is 17 respondents (24.6%), and for knowledge with a frequency of less categories, namely 13 respondents (18.3%). This is because by having sufficient knowledge about vaginal discharge, adolescent girls are able to prevent vaginal discharge, understand the symptoms and how to prevent vaginal discharge.

Knowledge about vaginal discharge is an important tool in preventing vaginal discharge and for adolescent health. According to Notoatmodjo (2012) knowledge covered in the cognitive domain has 6 levels, namely: Know, understand, application, analysis, synthesis, evaluation.

Meanwhile, the results of research conducted by Siti Novy Romlah, Puji Wahyuningsih, Dwi Mechory (2018) found that out of 85 respondents, 57 students (67.1%) had good knowledge, while the fewest were students in the category of poor knowledge as many as 28 students (32.9%). This shows that most students have good category knowledge, because the school is located in an urban area where information about vaginal

discharge is easy to access or obtain through the media, especially electronic media. Media has a very important role in conveying new information about something that provides a new cognitive basis for the formation of behavior towards this matter.

Not in line with the results of research conducted by Febria (2020) entitled "The Relationship between the Level of Knowledge of Adolescent Girls with the Incidence of Vaginal Discharge in Mtsn Koto Tangah Padang Students in 2020", namely 78 respondents, there were 52.6% with a high level of knowledge about vaginal discharge in schoolgirls. There are still many of these students experiencing vaginal discharge with low knowledge, and it can be concluded from the table that students with low levels of knowledge can experience vaginal discharge. Knowledge is the result of knowing, and this occurs after sensing a certain object. Sensing occurs through the five human senses, namely the senses of sight, hearing, smell, taste and touch. Most human knowledge is obtained through the eyes and ears (Notoatmodjo, 2012).

The researcher assumes that by having sufficient knowledge about vaginal discharge, adolescent girls are able to prevent the occurrence of vaginal discharge, understand the symptoms and how to prevent the incidence of vaginal discharge. This is in accordance with the results of the study which proved a significant relationship between knowledge and the incidence of vaginal discharge.

B. Personal Hygiene Overview

The picture shown in this study is that the personal hygiene of adolescent girls about vaginal discharge in SMP X Conggeang District, Sumedang Regency in 2023 has the highest percentage of respondents who are classified in the sufficient category, namely 30 respondents (42.5%), while the good category is 15 respondents (21.7%), and for personal hygiene with a frequency of less categories, namely 24 respondents (34.8%). This is because personal hygiene is less considered, such as often using dirty toilets, unhealthy lifestyles such as rarely exercising, often scratching female organs, if it is allowed and considered trivial, it will have a negative impact on the health of reproductive organs and reduce the quality of life.

Personal hygiene is the cleanliness and health of individuals that aims to prevent various diseases in themselves and others both physically and psychologically. Personal hygiene includes the care of the eyes, ears, nose, mouth, nails, feet and hands, skin and genital area. (Silalahi & Putri, 2017).

In line with research conducted by Batubara & Rahmayani (2022), in the Personal Hygiene factor, the majority of female students have poor Personal Hygiene behavior, as many as 64 people (54.2%). This is due to personal hygiene that is less noticed such as lack of personal hygiene.

Not in line with research conducted by Ekawati (2019), showing that most respondents had good personal hygiene behavior as many as 53 respondents (79.1%) while 1 respondent (1.5%) had poor personal hygiene behavior. This is because most of the respondents who have poor personal hygiene behavior are due to lack of access to information and habits regarding personal hygiene.

The researcher assumes that poor personal hygiene is due to the lack of information received by adolescents in SMP X so that most of them still do not know the causes of vaginal discharge.

C. Lifestyle Overview

The picture shown in this study is that the lifestyle of adolescent girls about vaginal discharge in SMP X Conggeang District, Sumedang Regency in 2023 has the highest percentage of respondents who are classified in the moderate category, namely 31 respondents (44.9%), while the good category is 21 respondents (30.4%), and for lifestyles with a frequency of less categories, as many as 17 respondents (24.6%). This is because the majority of teenagers in SMP X already know how to dress well and the average teenager has a good lifestyle.

According to Kotler, translated by Bob Sabran (2009:210) said: "Lifestyle is broadly defined as a person's pattern of life in the world which is revealed in his activities, interests and opinions. Lifestyle describes the whole person who interacts with his environment." Lifestyle is a collection of behavioral characteristics that matter in a time and place, including social relationships, entertainment use, and clothing.

In line with research conducted by Yeni Purnamasari on lifestyle, it shows that the highest percentage of respondents belonging to the good category is 42.2% (27 respondents). This is because many teenagers in SMA X already know about how to dress properly, know what foods can cause vaginal discharge and the average teenager has a good lifestyle.

D. Incidence of Vaginal Discharge

The picture shown in this study is that out of 69 adolescent girls at SMP X who have experienced vaginal discharge as much as 69.6% (48 respondents), while considering that they have never experienced as much as 30.4% (21 respondents).

Vaginal discharge is where white discharge from the female genitalia and is not blood. Vaginal discharge can also attack women ranging from young age, healthy reproductive age and old age and does not recognize the level of economic and socio-cultural education. (Trisetyaningsih & Febriana, 2019).

In line with Febria's research (2020), it can be seen that most 93.6% of adolescent girls experience vaginal discharge and as many as 6.4,% of adolescent girls do not experience vaginal discharge. In this case, the incidence of vaginal discharge in female students is almost all female students experience vaginal discharge. Vaginal discharge is a liquid that comes out of the vagina. Under normal circumstances, this fluid does not come out, but it is not necessarily pathological. Normal vaginal discharge includes: before or after menstruation and stress, both physical and psychological while pathological vaginal discharge includes: fungal infections, bacterial infections, protozoan parasitic infections, gonorrhea infections and cervical cancer malignancies.

E. The Effect of Knowledge on the Incidence of Vaginal Discharge

Based on the bivariate table 5, the results of the chi-square statistical test using the SPSS application obtained a p value = 0.003 at the 95% confidence level with (0.05). Thus the p-value (0.003) <0.05 which shows that there is a significant relationship between the knowledge of adolescent girls and the incidence of vaginal discharge at SMP X.

Knowledge is the result of knowing, and this happens 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 obtained through the eyes and ears. Knowledge or cognitive is a very important domain in shaping a person's actions (overt behavior). Because from experience and research it turns out that behavior based on knowledge will be more lasting than behavior that is not based on knowledge. (Notoatmodjo, 2012).

Adolescent girls who have good knowledge are very influential on the incidence of vaginal discharge. Because with the knowledge possessed by these young women, it will lead to a desire from a person to do what he already knows, such as knowledge about the prevention of vaginal discharge. Limited knowledge and understanding can lead young women to risky directions. In this study there are still many young women who have poor knowledge, this is because there are still many young women who do not know how to prevent vaginal discharge.

This research is in line with that conducted by Novita Lusiana with the title "Factors Affecting Vaginal Discharge in Adolescent Girls at SMAN 11 Pekanbaru in 2018". The statistical test results obtained a p value = 0.050 (<0.05), it can be concluded that there is an influence between knowledge and the occurrence of vaginal discharge in adolescent girls at SMAN 11 Pekanbaru. The knowledge factor is related to the occurrence of vaginal discharge, because before conducting research, researchers have briefly described vaginal discharge to adolescent girls at SMAN 11 Pekanbaru, but have not made the knowledge of adolescent girls increase, this happens because it is the first time hearing and knowing the meaning of vaginal discharge explained. So that when questions arise in the research questionnaire, young women tend not to master the vaginal discharge that has been conveyed by the researcher.

Not in line with research conducted by Chyka Febria entitled "The Relationship between the Level of Knowledge of Adolescent Girls with the Incidence of Vaginal Discharge in Students of Mtsn Koto Tangah Padang in 2020" The results of the study in table 3 show that of the 78 respondents, 93.6% had vaginal discharge as much as 97.6% who had vaginal discharge due to a low level of knowledge and only 89.2% had vaginal discharge with a high level of knowledge. This result is reinforced by the chi square test conducted by the researcher obtained a value = 0.184 (p> 0.05) where there is no significant relationship between the level of knowledge and the incidence of vaginal discharge. Knowledge is a person's insight into an object or thing. Knowledge is a very important domain in shaping a person's actions. An action based on good knowledge will be more lasting than an action that is not based on good knowledge (Notoatmodjo, 2012).

From the results of the study, the researcher assumes that by having sufficient knowledge about vaginal discharge, adolescent girls are able to prevent vaginal discharge, understand the symptoms and how to prevent vaginal discharge. This is in accordance with the results of the study which proved a significant relationship between knowledge and the incidence of vaginal discharge.

F. The Effect of Personal Hygiene on the Incidence of Vaginal Discharge

Based on bivariate Table 6, the results of the chi-square statistical test using the SPSS application obtained a p value = 0.005 at a 95% confidence level with (0.05). Thus the p-value (0.005) <0.05 which shows that there is a significant relationship between personal hygiene of adolescent girls and the incidence of vaginal discharge at SMP X.

Personal hygiene is individual hygiene and health that aims to prevent various diseases in oneself and others both physically and psychologically. Personal hygiene includes the care of the eyes, ears, nose, mouth, nails, feet and hands, skin and genital area. (Silalahi & Putri, 2017).

This research is in line with the research of Batubara & Rahmayani (2022), with the title "Factors Associated with the Incidence of Vaginal Discharge (Flour Albus) in Adolescent Girls at the Modern Pesantren Al-Zahrah Bireuen" Based on the results of the chi-square test of the relationship between personal hygiene and the incidence of vaginal discharge (Flour Albus) with a confidence level of 95% (α = 0.05) the results of the calculation show that there is a significant relationship between personal hygiene and the incidence of vaginal discharge (Flour Albus) in adolescent girls with a p value (0.003) < α (0.05), RP value = 4.22 and 95% CI = 1.54 - 11.59 so that santriwati who have poor personal hygiene behavior will increase the risk of vaginal discharge (fluor albus) by 4.22 times greater than santriwati who have good personal hygiene behavior.

Not in line with Ekawati's research (2019), with the title "Relationship between Personal Hygiene Behavior and the Incidence of Vaginal Discharge in Adolescent Girls at Smp Negeri 3 Gamping Sleman Yogyakarta" it was found that there was no relationship between personal hygiene and the incidence of vaginal discharge in adolescent girls at SMP Negeri 3 Gamping Sleman Yogyakarta which showed a p value of 0.159 and a significant value of 0.05 (p-value = 0.159> α = 0.05), where the p-value is greater than the significant value (0.159> 0.05). From the description above, personal hygiene does not affect the incidence of vaginal discharge, but genital personal hygiene habits, personal hygiene of hair in the female organ area, and personal hygiene of hands; stress management; and poor knowledge can lead to vaginal discharge. If the incidence of vaginal discharge is not resolved immediately, many unexpected things will occur, ranging from urinary tract infections, female organ infections that cause complaints of pathological vaginal discharge, and can even become one of the risk factors for cervical cancer and do not rule out the end of death.

From the results of the study, the researcher assumes that personal hygiene is not good due to the lack of information received by adolescents in SMP X so that most of them still do not know the causes of vaginal discharge, as for the causes of vaginal discharge because of personal hygiene that is less considered such as often using dirty toilets, unhealthy lifestyles such as infrequent exercise, often scratching the female organs, if it is allowed and considered trivial it will have a negative impact on the health of the reproductive organs and reduce the quality of hyd up.

G. The Effect of Lifestyle on the Incidence of Vaginal Discharge

Based on table 7, the results of the chi-square statistical test using the SPSS application obtained a p value = 0.067 at the 95% confidence level with (0.05). Thus the p-value (0.067) >0.05 which indicates that there is no significant relationship between the lifestyle of adolescent girls and the incidence of vaginal discharge at SMP X.

According to Kotler, translated by Bob Sabran (2009:210) said: "Lifestyle is broadly defined as a person's pattern of life in the world which is revealed in his activities, interests and opinions. Lifestyle describes the whole person who interacts with his environment." Lifestyle is a collection of behavioral characteristics that matter in a time and place, including social relationships, entertainment use, and clothing.

The results showed that there was no effect of Lifestyle of adolescent girls on the incidence of vaginal discharge at SMP X with a p-value of 0.156 (p<0.05). This is because the majority of adolescents in SMP X already know how to dress properly and the average teenager has a good lifestyle. From the results of the study, the researcher assumes that lifestyle is not related to the incidence of vaginal discharge because the average teenager in SMP X has a good lifestyle.

4. CONCLUSIONS

Based on the results of research that has been conducted and the discussion that has been described previously regarding "Factors Affecting the Incidence of Vaginal Discharge in Adolescent Girls at SMP X District Sumedang Regency in 2023", the following conclusions are obtained:

a. The description of the knowledge of adolescent girls about vaginal discharge is mostly in the sufficient category, namely 39 respondents (56.5%).
b. The picture of personal hygiene of adolescent girls about vaginal discharge is mostly in the sufficient category, namely 30 respondents (43.5%).
c. The description of the lifestyle of adolescent girls about vaginal discharge is mostly in the sufficient category, namely 31 respondents (44.9%).
d. The picture of vaginal discharge shows that out of 69 adolescent girls who have experienced vaginal discharge as much as 69.6% (48 respondents), while those who have never experienced as much as 30.4% (21 respondents).
e. There is an effect of knowledge of adolescent girls on the incidence of vaginal discharge with a p-value (0.003) <0.05.
f. There is an effect of personal hygiene of adolescent girls on the incidence of vaginal discharge with a p-value (0.005) <0.05.
g. There is no effect of lifestyle of adolescent girls on the incidence of vaginal discharge with a p-value (0.067) <0.05.

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