

## The Correlation between Personal Hygiene Behavior with The Use of Sanitary Pads During Menstruation In Fluor Albus Incidence

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### Abstract

Vaginal discharge (fluor albus) is an excessive white discharge from the sexual intercourse other than blood. In Indonesia, as many as 75% of Indonesian women experience vaginal discharge. Based on adolescent health screening data from Magetan District in 2020, as many as 63% of young women at the MA / SMA level experience vaginal discharge. Factors that are likely to influence the incidence of fluor albus are personal hygiene behavior and the use of sanitary napkins. The purpose of this study was to determine the relationship between personal hygiene behavior and the use of sanitary napkins to the incidence of fluor albus in female students at the Al-Jahro Islamic Boarding School in Magetan. Rancang cross sectional research with teknik *total sampling*. The sample are 80 female students at Pondok Pesantren Al-Jahro Magetan with inclusion & exclusion criteria. The research data used questionnaires with validity and reability test before. The questionnaires including fluor albus, personal hygiene behaviour and the using of sanitary pads. The analysis used *the chi square* test. The results of the analysis showed a significant relationship between personal hygiene behavior and the use of sanitary napkins with the incidence of fluor albus in the female students of the Al-Jahro Magetan Islamic Boarding School ( $p = 0.000$ ;  $p = 0.002$ ). To prevent fluor albus incidence we have to taking care of our personal hygiene especially when it comes to genital hygiene.

**Keyword:** *fluor albus, personal hygiene, sanitary napkins, islamic boarding schools, female students*

### INTRODUCTION

Vaginal discharge (*fluor albus*) is an excessive white discharge from the sexual intercourse. Women of all ages can be affected to *fluor albus* both physiological and pathological. Normally, vaginal discharge occurs during the pre-menstrual and post-menstrual periods, and pathological discharge occurs with all genital infections.<sup>1</sup>

According to WHO, women in the world who experience vaginal infections are 10-15% of 100 million women. In Indonesia, around 90% of women are at risk of vaginal discharge due to the tropical climate in Indonesia, this facilitates the development of fungi which results in high cases of vaginal discharge experienced by Indonesian women.<sup>2</sup> Data from the Population and Family Planning Agency (BKKBN) in 2010 showed that as many as

75% of Indonesian women experienced vaginal discharge at least once in their lives and 45% of them could experience vaginal discharge twice or more.<sup>3</sup> Then based on the health screening data of adolescents in Magetan District in 2020, as many as 63% of young women at the MA / SMA level experienced vaginal discharge. This shows that there is still a high incidence of vaginal discharge in young women in Magetan Regency. <sup>4</sup>

Personal hygiene is an action to maintain one's hygiene and health, which aims to maintain physical and psychic well-being. The lack of applying personal hygiene behavior to the reproductive organs can be one of the causes of vaginal discharge.<sup>5</sup> Cultural differences in islamic boarding school life such as curriculum differences that require students to have longer study hours so as to trigger stress,

lack of efforts of pesantren in providing knowledge of female students in maintaining and implementing ways to maintain personal hygiene, and lack of efforts to maintain facilities, especially cleanliness of water and toilets can also be a trigger factor for the lack of awareness of female students in maintaining their cleanliness.<sup>6</sup>

Sanitary napkins are disposable products that are used repeatedly every month for menstrual needs. Unhealthy behaviors that are often found in islamic boarding school environments such as improper use of pads and not immediately changing pads during menstruation can trigger genitalia disorders in women characterized by vaginal discharge.<sup>7</sup> Based on this, researchers are interested in conducting a study on the Relationship between Personal Hygiene Behavior and the Use of Sanitary Napkins against the Incidence of Fluor Albus in Santri Putri at the Al-Jahro Islamic Boarding School in Magetan.

## METHOD

This research is analytical observational with a cross-sectional approach with a total sampling technique. This research was conducted at the Al-Jahro Islamic Boarding School in Magetan. The research sample was queuing p utri at the Al-Jahro Islamic Boarding School with the inclusion criteria forgirls who have experienced menstruation and exclusion criteria forqueuing women who have gynecological diseases or a history of reproductive disorders such as cervical cancer, gonorrhea, syphilis, vaginitis, vulvitis, cervicalitis, HIV / AIDS, and pelvic inflammatory disease. In the study, data collection was carried out using questionnaire instruments that were distributed to the subjects. Data analysis in this study used the chi-square test. This study has been approved by the Ethics Committee of the Faculty of Medicine,

University of Muhammadiyah Semarang  
No. 033/EC/KEPK-FK/UNIMUS/2022.

## RESULT

Table 1. Characteristics of Respondents

Variable	Frequency (%)
<b>Age</b>	
15 years	16 (20,0)
16 years	30 (37,5)
17 years old	16 (20,0)
18 years old	18 (22,5)
<b>Class</b>	
Grade 10	37 (46,3)
Grade 11	20 (25,0)
Grade 12	23 (28,8)
<b>Personal Hygiene</b>	
Behavior	37 (46,3)
Good	43 (53,8)
Bad	
<b>Use of Dressings</b>	
Good	60 (75,0)
Bad	20 (25,0)
<b>Fluor Albus Occurrence</b>	
Experiencing Fluor	54 (67,5)
Albus	26 (32,5)
Not subject to Fluor	
Albus	

Based on table 1, it is known the variable feruence distribution of respondents. The total number of respondents was 80 female students consisting of 15 years old as many as 16 respondents (20.0 %), 16 years as many as 30 respondents (37.5 %), 17 years as many as 16 respondents (20.0 %), up to 18 years as many as 18 respondents (22.5 %). Based on class, female students who were respondents in this study were in grade 10 as many as 37 respondents (46.3 %), class 11 as many as 20 respondents (25 %) to class 12 as many as 23 respondents (28.8 %). Of the 80 female students, as many as 37 respondents (46.3 %) had good *personal hygiene* behavior, 43 respondents (53.8 %) had bad *personal hygiene* behavior. Of the 80 female

students, as many as 61 respondents (76.3 %) had a habit of using pads well, 19 respondents (23.8 %) had a habit of using pads badly. Respondents who experienced

*fluor albus* were 54 respondents (67.5 %) and those who did not experience *fluor albus* as many as 26 respondents (32.5 %).

Table 2. Relationship of personal hygiene behavior and the use of sanitary pads with the incidence of *fluor albus*

Variable	<i>Fluor Albus</i> Occurrence		PR (CI 95%)	p value
	Yes n (%)	Not n (%)		
Personal Hygiene Behavior				
Bad	43 (100,0)	0 (0,00)	3,364	0,000
Good	11 (29,75)	26 (70,25)	(2,050 - 5,520)	
Use of Dressings				
Bad	19 (95,00)	1 (5,00)	13,571	0,002
Good	35 (58,30)	25 (41,70)	(1,703 - 108,128)	

In the variable use of sanitary napkins, it was found that students with good habitual use of pads experienced more *fluor albus* compared to those who had poor *personal hygiene* behavior, namely as many as 35 female students with a percentage of 95.00% of the total respondents who had bad habits of using sanitary napkins. Based on the test results using *chi square*, a *p-value* = 0.002 (sig<0.05) was obtained, indicating that there was a relationship between the use of pads and the incidence of *fluor albus*, with a PR value = 13.571 which means, female students with the habit of using bad pads are at 13 times greater risk of experiencing *fluor albus* events.

## DISCUSSION

Based on research that has been carried out on female students, it was found that there was a significant relationship between *personal hygiene* behavior and the incidence of *fluor albus*. This study is similar to the preliminary research which stated that there was a significant relationship between *personal hygiene* behavior and the incidence of *fluor*

*albus* in female students at the Al-Munnawir Islamic Boarding School, Yogyakarta,<sup>8</sup> and high school students in Jatinangor, Bandung.<sup>9</sup> In the study, it was found that more female students who had poor personal hygiene habits experienced *fluor albus*.<sup>8</sup> Another study conducted at SMAN 1 Simpang Hilir, North Kayong, also revealed that female students who do not pay attention to personal hygiene behavior by still wearing tight panties and have the habit of cleaning the genital organs in the wrong direction also affect the occurrence of *fluor albus*, especially *pathological fluor albus*.<sup>2</sup>

The vagina stores as much as 95% of *lactobacillus* bacteria and the rest are pathogenic bacteria. If the hygiene of the pubic is not maintained, it can increase the risk of infection where pathogenic bacteria can interfere with the growth of *lactobacillus* bacteria which is the normal flora of the vagina. The disturbed normal flora can cause the proliferation of pathogenic bacteria in the vagina to be unbearable, triggering an infection characterized by the occurrence of vaginal discharge.<sup>10</sup> According to research

conducted by Umi Sadaatun, dense activities that start from before dawn to return to sleep hours cause students' lack of concern for their hygiene, especially the genital organs, which indicates that students do not pay attention to personal hygiene behaviors so as to increase the risk of vaginal discharge.<sup>8</sup>

The woman's pubic is also a sensitive place and an open place so that pathogens very easily get inside. According to research conducted by Abrori, anatomically the female genitals are adjacent to the anus and urethra, so that if the female students do not pay attention to how to clean the pubic properly, both after urinating and defecating, then the pathogen feces that come from the anus and urethra are very easy to enter. How to clean the pubic by washing from front to back (vagina to anus) is more recommended because it reduces the risk of transferring bacteria, viruses and fungi originating from the anus to the vaginal burrow.<sup>2</sup>

Another personal hygiene behavior that needs to be considered is the use of panties. The material of the panties recommended for use is the one made of cotton fabric. Cotton fabrics can easily absorb liquids and sweat so that it can prevent the genitals from becoming warm and moist. Moist genital organs can increase colonization of bacteria, fungi, and parasites growing on the vagina.<sup>2,9</sup> Increased colonization of the pathogen can increase infections that can trigger vaginal discharge because the normal flora present in the vagina is successfully suppressed.<sup>11</sup> Synthetic panties with the property of not easily absorbing sweat can affect the incidence of *fluor albus* in young women.<sup>2</sup> In this study, it was found that the students at the Al-Jahro Magetan Islamic boarding school still have limited knowledge about personal hygiene, especially when washing the genital organs which should be done from the front (vaginal burrow) to the back (anus). In addition, students also often use

panties with materials that are not easy to absorb liquids, thereby increasing the moist condition of the genital organs.

The use of dressings should not exceed 4 hours and should be changed as often as possible when it is full of blood. This is because pads full of blood can store bacteria which if not immediately replaced will cause moist conditions in the genital organs which can increase the risk of vaginal discharge.<sup>7</sup> Meanwhile, based on research conducted by Isnaniar at SMK Muhammadiyah 2 Pekanbaru, the use of *panty liners* that are routinely replaced less than once every 5 hours can prevent the genital organs from becoming moist so as to prevent the growth of fungi or bacteria that cause vaginal discharge.<sup>12</sup> This indicates the importance of a woman paying attention to the frequency of using pads to avoid vaginal discharge.<sup>13</sup>

The reason why students do not often change pads is because of activities during busy learning hours, causing students to forget or are reluctant to go repeatedly to the toilets and bathrooms that have been provided. This also indicates the lack of attention of the students to always bring replacement pads when doing activities or traveling, and not to immediately change the pads if the menstrual blood contained in the pads is quite a lot. In this study, it was found that the use of sanitary napkins in female students at the Al-Jahro Islamic Boarding School tends to be good, but there are still some students who still have the habit of using pads that are not suitable, thereby increasing the risk of developing vaginal discharge.

## CONCLUSION

There is a significant relationship between *personal hygiene* behavior and the use of sanitary napkins with the incidence of *fluor albus* in the female students of The Al-Jahro Islamic Boarding

School in Magetan. It can be conclude that the female students have to maintaining their genital hygiene to preventing *fluor albus*.

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