

Research Article

Literature review: The effect of using non-herbal panty liners on abnormal vaginal discharge in adolescent girls

Shohebatuz Sofiyah, Setiana Andarwulan

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**Corresponding author:*

E-mail:

shohesofiyah16@gmail.com

ABSTRACT

Teenagers are very vulnerable to experiencing problems such as vaginal discharge and because of that teenage girls often wear panty liners outside of their menstrual period. Improper use of panty liners will make vaginal discharge abnormal. Therefore, this literature review aims to find out how to use non-herbal panty liners so that they can cause abnormal vaginal discharge. This research uses literature review with data sources from the PubMed, Research Gate, and Google Scholar databases with a range of 2018-2021. The results of this literature review contained 4 journals which stated that the effect of using panty liners could cause vaginal discharge but under normal conditions and 4 journals also stated that abnormal vaginal discharge was caused by panty liners. It can be concluded that abnormal vaginal discharge is caused by a different way of using panty liners and the lack of information about using panty liners properly.

Keywords: Pantyliner, reproductive organs, vaginal discharge in adolescents

Introduction

According to the Population and Family Planning Agency (BKKBN), a teenager is someone aged 10-24 years who is single (unmarried). Meanwhile, according to WHO, adolescents are vulnerable population aged 12-24 years.

In the period of adolescence there is a very rapid growth and development both physically, emotionally, and psychologically. This period is also known as the maturation of the reproductive organs and is usually referred to as puberty. This period is a period of transition from childhood to adulthood.

In this adolescent period will experience changes in physical organs very quickly, and these changes are not balanced with mental

and emotional, so that the incident makes teenagers become confused, therefore experts think that the need for guidance and support from around the environment for development and growth in these adolescents so that they become more mature and healthy adolescents both spiritually, physically, and socially [1].

According to the Ministry of Health in 2020, this age of adolescents is vulnerable to problems in their reproductive health, reproductive health is a condition that as a whole, both physically, mentally and socially, is also free from various diseases or is not disabled and everything can function properly [2].

One of the problems that occur in adolescent reproductive health is vaginal discharge, normal vaginal discharge is characterized by

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being clear, watery in texture, odorless, not itchy. The abnormal vaginal discharge is moldy, itchy, rash, milky white/yellow/gray/green/reddish-brown liquid, thick texture, excessive fluid volume (> 4 ml/day), smells fishy and foul. Abnormal vaginal discharge can be prevented by living a healthy life such as when you finish urinating, clean the vagina by moving it from front to back using clean water, dry the vagina and around the pubic hair with a tissue with one wipe, wear pants made of soft and not tight material, change immediately. If the CD is wet or uncomfortable, don't sit on the toilet seat because there are many germs that are prone to infecting the vagina,

Knowledge about the dangers of vaginal discharge in every woman is very important, because if not treated immediately, vaginal discharge will become abnormal vaginal discharge and can lead to egg infection which will be fatal, resulting in infertility [3].

According to the World Health Organization (WHO), annually predicts 1-20 teenagers in the world who experience vaginal discharge. In 2013 the number of women in the world as many as 6.7 billion people, and about 75% who have experienced vaginal discharge, in Indonesia in 2013 experienced leukorrhoea as much as 90% because there is a tropical climate [4]. In the 2009 BKKBN survey, there were 75% of women who suffered from vaginal discharge at least once and 45% experienced vaginal discharge twice or more.

The problem of abnormal vaginal discharge in adolescent girls is usually caused by the use of panty liners because according to them using pantyliners every day and at any time will keep the vagina clean and dry. The use of pantyliners is one of the causes of abnormal vaginal discharge problems in adolescents. This panty liner can absorb sweat and fluids that come out of miss v. Use panty liners at least every 3-4 hours.

According to Farage in 2017, the use of pantyliners every day when experiencing vaginal discharge can trigger the development of bad bacteria in the vagina". With the use of this pantyliner can cause fluid from the vagina to be reduced.

Panty liners can also increase eubacterium species in the vagina and can cause a decrease in the number of lactobacillus species in the vagina as a normal flora as a result of which there is an increased risk of abnormal vaginal discharge, which is called abnormal vaginal discharge, namely moldy vaginal area, itching, rash, milky white/yellow discharge. /grey/green/reddish brown, thick texture, excessive fluid volume (>4 ml/day), fishy smell [5]. This literature review aims to determine the effect of non-herbal panty liners for abnormal vaginal discharge in adolescent reproductive health.

Materials and Methods

The writing of this literature review is based on a collection of the best international and national journals. Journals were collected through the PubMed database of 13 articles, Reaserch Gate of 100 articles, Google Scholar of 182 articles spanning the years 2018-2021, then from each database from pubmed, google scholar, and research gate, 3 screening stages were carried out. Stage 1 is to find out the range of articles from 2018-2021, at screening stage 2 is looking at paid and unpaid journals, and screening 3 is reviewing (background, methods, results, and discussion). So in total, all database results from Pubmed, Google Scholar, and Research Gate found 8 articles that were suitable as literature review material.

Results and Discussion

The use of panty liners that affect whiteness

The use of panty liners is usually used by teenage girls so that the vagina is not moist, but this literature review discusses the effect of panty liners on abnormal vaginal discharge, where abnormal vaginal discharge is characterized by moldy vaginal discharge, itching, rash, milky white/yellow/gray discharge. /green/reddish brown, thick texture, excessive fluid volume (>4 ml/day), smells fishy and rotten. But in normal vaginal discharge, the characteristics are clear or slightly white in color, watery in texture, odorless, not itchy, solid white in color which is usually close to the time of menstruation.

In a study from Kristina and Afrida (2021) who used the literature review method, it was

concluded that the use of panty liners what is not good is the frequency of replacing pantyliners which are less than 2 times a day which if done continuously can result in excessive vaginal discharge [6].

In a study conducted by Putri and Budiarmo (2021) using the correlation analytic method with a cross-sectional design. The study subjects were 130 respondents using a questionnaire as a data collection tool. This study states that the use of panty liners can cause abnormal vaginal discharge, which in this study obtained a prevalence ratio value of 2.52, which means that respondents with poor use of panty liners will have a 2.52 times higher risk of experiencing fluor albus compared to respondents with good use of panty liners. The use of panty liners is not good can increase humidity in the genital area including increased sweating, making it easier for bacteria or fungi to grow and thrive [7].

According to research from Aurellia and Nainggolan (2021), this study was conducted using a cross sectional method, then this study stated that panty liners can cause abnormal vaginal discharge because in this study it was known that the use of panty liners could increase the risk of vaginal recurrence. It can be seen that the incidence of vaginal discharge in female students who use panty liners is 24% [8]. The level of vaginal discharge in female students who do not wear panty liners but vaginal discharge is 76%. Using panty liners can cause vaginal discharge five times greater than not using panty liners [9].

According to research from Anggraini (2021), the research method used is correlation analysis using cross sectional, and this study states that the use of panty liners causes normal vaginal discharge. This study describes female students who experience normal vaginal discharge using panty liners as much as 69.2%. And the results of this study are that respondents who use panty liners very often will not experience vaginal discharge with 4-5 hours of changing [10].

Then the research conducted by Juliani (2018), the method is carried out using an analytical survey research type with a cross sectional approach, where in his research states that panty liners can also cause normal

vaginal discharge. wearing pantyliners. In the frequency of changing pantyliners, it was found that the majority of teenagers had abnormal vaginal discharge with a replacement frequency of more than 2 times per day, with this it is certain that abnormal vaginal discharge is also likely to occur with more frequent replacement of pantyliners [11].

In his research, Mayasari (2021), used a cross sectional approach. Which states that panty liners can cause abnormal vaginal discharge, in his research there are: 105 respondents used herbal sanitary napkins with the highest normal incidence of 35 (70%) and the lowest abnormal use of normal sanitary napkins 12 (21.8%) [12]. The incidence of abnormal vaginal discharge on ordinary sanitary napkins is 55 (100%) and the incidence of vaginal discharge on herbal sanitary napkins is 50 (100%) [13].

According to research from Fitri (2018), the method used is analytic observational with a cross sectional approach. Which states that panty liners can cause vaginal discharge normally, Based on the results of research conducted by researchers at SMK Muhammadiyah 2 Pekanbaru, it was stated that of the 108 teenagers who used panty liners, 106 (98.15%) teenagers had Fluor Albus, the results of the chi square test showed there is no significant effect between the use of panty liners and the incidence of fluor albus in SMK Muhammadiyah 2 Pekanbaru, with a P-value of 0.434. This happened because respondents used panty liners properly so that there was no increase in the number of bacteria caused by humidity in the feminine area [14].

The latest research is from Orizona and Yulianty (2018), the method uses an analytical survey type of research with a cross sectional approach. In his research, it was stated that panty liners can cause normal or normal vaginal discharge. Based on the results of the bivariate analysis, it is known that from 42 respondents who wore pantyins and normal vaginal discharge occurred as many as 36 people (26.7%) and abnormal vaginal discharge as many as 6 people (4.2 %). This research at Darussalam Senior High School shows that abnormal vaginal discharge is also likely to occur at a

more frequent frequency of changing pantyliners, because vaginal discharge can be caused by other factors such as using dirty water, using public toilets, wearing pants that are too tight and choosing the wrong pantyliner. like pantyliners which contain a lot of chemicals [15].

Based on the literature review above, the effect of using panty liners that cause vaginal discharge in adolescent girls, there are 4 journals including: Anggraini (2021) Juliani (2018), Fitri (2018), and Orizona and yulianty (2018) adolescent girls experience normal vaginal discharge and 4 journals from the journals Kristina and Afrida (2021), Putri and budiarso (2021), Aurellia and Nainggolan (2021), and Mayasari (2021) adolescent girls experience abnormal vaginal discharge.

It can be seen that the incidence of adolescent girls who experience normal vaginal discharge is due to: Using the panty liner properly, changing the panty liner often will not experience abnormal vaginal discharge with 4-5 hours of changing so that there is no increase in the number of bacteria caused by humidity in the feminine area. And in adolescents who experience abnormal vaginal discharge due to improper use of panty liners, it can increase humidity in the genital area including increased sweating, making it easier for bacteria or fungi to grow and develop.

Conclusion

Most young women use panty liners when outside of menstruation which aims to keep the vagina dry and not moist, many young women do not know how to use panty liners correctly but not a few young women also know how to use panty liners correctly. The use of a bad panty liner is changing the panty liner < 2x a day and as a result the vagina is easily infected with fungi, bacteria, and causes abnormal vaginal discharge (yellow/grey/green/brown color, very thick texture, foul smelling and fishy). But if the frequency of using panty liners is correct and always changing panty liners regularly at least 3-4 times a day or replaced after urinating / defecating to avoid the growth of bacteria and fungi in the vagina.

The result of using panty liners is one of the causes of vaginal discharge, whether normal or

abnormal. By using this panty liner, it can increase the temperature by 1.5°C so that it will increase the growth of bacteria and fungi in the vagina and cause vaginal discharge. Panty liners should be worn for a short period of time when there is excess mucus and should be changed as often as possible, but young women use the panty liners incorrectly and abnormal vaginal discharge occurs [8].

Suggestion

It is expected that you always apply correct personal hygiene, if you want to use panty liners, try to change them at least 3-4 times a day and pay attention to the ingredients in the panty liners that will be used and choose panty liners made from natural ingredients.

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