Health Research Journal, 210-216
Volume 1 Number 6 April 2024
URL: https://jurnal.cakrabirawamedia.com/index.php/hrj/

ISSN 2988-5469 (Print) 2988-3075 (Online)

The Connection Between Students' Stress Level and Physiological Vucility Incident

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ABSTRACT

Adolescent girls' reproductive organs are more sensitive than those of boys at this time of development and change in the reproductive system. A disorder known as vaginal discharge, or flour albus, is when the vagina leaks too much fluid. There are two categories of vaginal discharge: physiologically normal normal vaginal discharge and pathologically aberrant vaginal discharge. Stress is one of the things that contributes to vaginal discharge in teenagers. Stress conditions—both psychological and physical—have an impact on how a woman's body uses its hormones, one of which can raise the hormone estrogen. Women will experience vaginal discharge as a result of this rise in the hormone estrogen. The purpose of this study was to ascertain how stress and the prevalence of physiological.

Keywords: stress level, vaginal discharge in adolescents, vulva hygiene

BACKGROUND

The female reproductive organ tubes are shorter than the male reproductive organ tubes, which causes the female adolescents' reproductive organs to be more sensitive than the male reproductive organs during adolescence (Nurhidayati & Rismawati, 2020).

Keeping the reproductive organs clean is one of the many factors contributing to the high number of women experiencing vaginal discharge. Thus, frequent underwear changes—at least twice a day after bathing—can help maintain the reproductive organs. This has to be done often since it's important to make sure the female organs remain dry. swap out your underwear. In addition, keep in mind that wearing undergarments that are overly tight can result in poor blood circulation in addition to being hot (Setiani Ti, et al., 2015).

The World Health Organization (WHO) reports that 1 in 20 teenagers worldwide are thought to have vaginal discharge annually. Around 75% of the 6.7 billion women who lived on the planet in 2013 reported having vaginal discharge.

In 2013, there were 739,004,470 European women and 25% experienced vaginal discharge. In Indonesia, around 90% of women have the potential to experience vaginal discharge because Indonesia is a tropical climate, so fungi easily grow and develop, which results in many cases of vaginal discharge in Indonesian women. The results of research in East Java in 2013 showed that of the 37.4 million women, 75% of them were teenagers who experienced vaginal discharge (Nurul et al., 2014). Noor Azizah reported that 36 (72%) female students experienced pathological vaginal discharge and 14 (28%) female students experienced physiological vaginal discharge in research conducted at SMK Muhammadiyah Kudus. 40 (55.6%) female students experienced vaginal discharge out of a total of 72 female students in research conducted at SMAN 1 Seunuddon, North Aceh.

Reproductive health according to the World Health Organization (WHO) is a condition of overall health from various aspects, including mental, physical and social aspects, not only

free from various diseases but also various things related to the reproductive organs, processes and functions (Abiyoga et al., 2018).

Reproductive problems in adolescents need to receive appropriate treatment, because these problems often occur in developing countries, such as Indonesia due to the lack of access to information about reproductive health, especially vaginal discharge (Hurlock, 2015).

Vaginal discharge is a problem that really disturbs women's comfort. The discomfort caused by vaginal discharge results in a reduction in self-confidence because it is accompanied by an unpleasant odor, a wet feeling in the underwear and sometimes a very annoying itching feeling. Vaginal discharge cannot be taken lightly because the consequences can be fatal if not treated quickly. Vaginal discharge can cause infertility and is one of the symptoms caused by cervical cancer (Sarasvati et al, 2017).

Vaginal discharge or flour albus is a condition where excess fluid comes from the vagina. Vaginal discharge is divided into two types, namely normal (physiological) vaginal discharge and abnormal (pathological) vaginal discharge. Physiological vaginal discharge can occur in every woman and does not cause complaints. Some teenagers just before puberty will experience vaginal discharge. If the fluid that comes out of the vagina has characteristics such as yellowish white, grayish or even greenish, thick, has a slight odor, is greater in quantity, feels itchy, it is very likely that the vaginal discharge that occurs is pathological vaginal discharge (Oriza & Yulianty, 2018).

According to Sari (2013), behavior that can influence the incidence of vaginal discharge includes attitudes, motivation, information and the role of parents regarding hygiene of female organs. Apart from that, activities that are tiring and result in a lack of rest or sleep will trigger stress and the possibility of vaginal discharge will increase (Abiyoga et al, 2018). Results of other research on the reproductive health of adolescent women in Indonesia who experience vaginal discharge 75% of the time in their lives and 45% have experienced vaginal discharge twice or more (Dechacare, 2016).

The results of research in 2013 in East Java showed that there were 37.4 million women who experienced vaginal discharge and 75% of them were teenage girls. Meanwhile, based on a preliminary study conducted by researchers on young women in July 2022 at SMA Negeri 1 Wates, Kediri Regency, there were 10 female students as respondents, 8 (80%) of the female students experienced problems with excessive discharge from the vagina which caused them to frequently change their underwear. So that out of 10 respondents, 2 (20%) respondents did not experience vaginal discharge. There are also some female students who have difficulty sleeping, get tired easily, feel panicked, often sleep late, are easily angry or irritated, and have difficulty concentrating during class hours.

Vaginal discharge in teenagers can be caused by not carrying out proper vulva hygiene, dirty toilets, wearing tight underwear made from material that does not absorb sweat, rarely changing underwear, rarely changing sanitary napkins during menstruation, fatigue, hormonal imbalance, stress. physical and psychological stress (Hana et al., 2018).

One of the factors that causes vaginal discharge in teenagers is stress. Stress conditions, both physical and psychological stress, will affect the work of the hormones in a woman's body, one of which can cause the hormone estrogen to increase. This increase in the estrogen hormone will cause vaginal discharge in women. Stress can also cause a decrease in the production of glucocorticoids and catecholamines and will affect the performance of the hypothalamus gland which causes immunity to decrease (Hana et al., 2018).

Stressors or causes of stress in adolescents can originate from their academic life, especially from external demands and demands from their own expectations. External demands can come from school assignments, study loads, parents' demands to succeed at school and social adjustments in the school environment. Meanwhile, the demands of student expectations can be sourced from students' abilities in following lessons (Heiman & Kariv, 2015).

Even though vaginal discharge is experienced by many women, many of them often ignore this incident without making appropriate treatment efforts. Conditions like this which are initially physiological vaginal discharge could endanger their own reproductive health if left alone without proper treatment. Lack of knowledge and education about vaginal discharge is one of the triggers for the increase in the incidence of vaginal discharge in women, especially in young women. So from the problems above, it can be concluded that it is important to provide knowledge from an early age to young women, especially how to manage stress well and how to deal with vaginal discharge so that these two problems can reduce the incidence of vaginal discharge in teenagers.

Based on the background above, researchers are interested in conducting research on "The Relationship between Stress Levels and the Incidence of Physiological Vaginal Discharge in Female Students at SMA Negeri 1 Wates, Kediri Regency".

METHODS

An observational design with a cross-sectional approach is used in this study. 52 female students from classes XI IPA 1 and XI IPA 2 made up the population. Purposive sampling is used in the sampling procedure. 52 responders were used to create the research sample. Stress level is the study's independent variable, while vaginal discharge is the study's dependent variable. A questionnaire is the research instrument. The Chi Square Test was employed in this study's data analysis.

RESULTS

Table 1. Research Results

Respondent Characteristics	Frequency	Percentage
1. Age		
16 Years	26	50%
17 Years	26	50%
1. Class		
Class XI IPA 1	26	50%
Class XI IPA 2	26	50%
Variable Characteristics	**Frequency**	**Percentage**
2. Stress Level		
No Stress	24	46%
Mild Stress	19	36%
Moderate Stress	5	10%
Severe Stress	4	8%
3. Vaginal discharge		
No Vaginal Discharge	8	15%
Vaginal Discharge Occurs	44	85%

The study's findings revealed that 26 (or 50%) of the 52 respondents, who were 16-year-old female students in class XI, had the same scores. In the meantime, 26 responses, or 50%, were 17 years old. This indicates that 26 responders (or 50%) were in classes XI IPA 1 and based on that level. In contrast, there were 26 responders (50%), in class XI IPA 2. This indicates that there are exactly the same number of female students in classes XI IPA 1 and XI IPA 2, specifically 26 individuals in each class.

The table above shows that the majority of female students are not stressed, 24 respondents (46%), almost half of them experience mild stress, 19 respondents (36%). Meanwhile, 5 respondents (10%) experienced moderate stress and a small number of female students experienced severe stress, namely 4 respondents (8%). And of the 52 respondents, the

majority experienced vaginal discharge, 44 respondents (85%). The small percentage who did not experience vaginal discharge was 8 respondents (15%).

Statistical Test Results

Table 2. Statistical Test Results

Test	Variable	Niali Asymp.Sig (2-Sided)
Chi Square	Stress Level Vaginal Discharge	0.012

Table 2 shows the results of data analysis using the Chi Square test, the value of Asymp.Sig (2-Sided) = 0.012 or $p \leq 0.05$, meaning that H0 is rejected and H1 is accepted, which means: there is a relationship between the level of stress and the incidence of physiological vaginal discharge in female students at State High Schools. 1 Wates, Kediri Regency.

DISCUSSION

Adolescent Girls' Stress Levels at Wates 1 Public High School

52 female students' stress levels were measured using research data from Wates State High School. The results indicated that 24 respondents (46%), 19 respondents (19%), 5 respondents (10%), and 4 respondents (8%) reported mild, moderate, and severe stress, respectively.

Research by Judha et al. (2019) is not the same as this research. According to the findings of a study involving 60 participants, 12 students (20%) reported normal stress levels, 45 students (75%) reported mild stress, and 3 students (5%) reported high levels of stress. right now. Compared to the results of my research, this study found more responses in the mild stress group for the stress category of respondents. This could be caused by a number of variables, including variations in the sample size.

Stress is the body's response to mental strain brought on by a person's burdens in life as well as psychosocial pressures. A person will experience happiness if they can handle stress well; on the other hand, depression will set in if they are unable to handle stress well (S. Y. S. Salat & E. Suprayitno, 2019).

According to the cross-tabulation of age and stress level, 8 persons (30.8%) reported mild stress, 11 people (17.3%) reported mild stress, and 13 people (16%) did not experience any stress at all. This demonstrates that managing stress levels is influenced by age as well. As people age, they consider an increasing number of issues. As a result, overthinking will cause psychological disruption in the respondent. Stress symptoms will result from improper handling of it, and depression will result even if this is done repeatedly without any coping mechanisms or preventative measures.

Adolescence is a period that is prone to stress or, as stated by Yanti's Theory, S. (2009), can be described as an unstable period. In particular, school-aged teenagers must have responsibilities, such as responsibility for studying, submitting assignments, passing exams, and so on. Stress can also be caused by various factors, both from the individual himself and from the surrounding environment. Stress is usually the cause of this in teenagers, therefore stress can affect hormonal decline.

According to Agnihotri (2018), stress in high school teenagers is caused by the pressure of high achievement, due to competition to get the highest grades. Social stress can also trigger stress due to social interactions with peers such as conflict. A busy schedule is also a cause of stress, such as having a large schedule of lessons and activities outside of learning (extracurricular) to develop non-academic achievements.

Based on these results, researchers are of the opinion that the level of stress experienced by respondents is mostly in the mild category. This occurs because most respondents have problems that can be controlled so that it does not have much of an impact on the respondents' psychology, resulting in excessive stress. Apart from that, the results of the questionnaire regarding stress levels were that most respondents experienced sleep disorders such as difficulty falling asleep, frequently waking up at night, waking up feeling lethargic, often having nightmares and not sleeping soundly. Apart from sleep disturbances, respondents also have feelings of fear, such as fear of the dark, fear of being left alone, fear of meeting strangers, fear of large animals and fear of large crowds. There were also several respondents who experienced intelligence disorders, including difficulty concentrating and poor memory.

The incidence of physiological vaginal discharge in young women at SMA Negeri 1 Wates

Based on research data conducted at Wates State High School, the stress level results of 52 female students showed that 8 respondents (15%) did not experience vaginal discharge, while 44 respondents (85%) experienced vaginal discharge. These results are in accordance with the results of the questionnaire that was given to research respondents.

This research is in line with research conducted by Agustiyani (2011) showing that the respondents who experienced vaginal discharge the most were 17 people (53.1%) while there were 15 respondents (46.9%) who did not experience vaginal discharge. Respondents who did not experience vaginal discharge were probably because the respondents had good behavior or habits in maintaining the cleanliness of their feminine areas. This research is the same as the research I conducted in that the majority of respondents experienced vaginal discharge.

The results of research conducted by Prameswari et al., (2018) stated that the majority of respondents experienced physiological vaginal discharge, 61 respondents (73.5%). Indonesia is a country with a tropical climate so 90% of women in Indonesia have the potential to experience vaginal discharge. The physiological vaginal discharge experienced by respondents could occur due to several reasons, including before menstruation and after menstruation, during the fertile period or when sexually aroused.

Vaginal discharge is a white, thick-textured secretion that comes out of the vagina or uterine cavity, either odorless or odorless and accompanied by itching in the feminine area. Vaginal discharge can also be interpreted as excess fluid coming out of the sexual canal (vagina) which is sometimes accompanied by itching, pain, a burning sensation on the genital lips, a foul smell, and causes pain when urinating or having intercourse (Aini, 2016).

The results of cross tabulation of age with the incidence of physiological vaginal discharge show that 22 respondents aged 16 years experienced vaginal discharge (84.6%), 22 respondents aged 17 years experienced vaginal discharge (84.6%). Based on these results, in this study, age was not an issue regarding the vaginal discharge experienced by the respondents. There is no difference between young and older ages regarding the vaginal discharge problems that respondents experience, both young and older both have the same risk of vaginal discharge.

Vaginal discharge is a problem that is still a problem for most women. In general, vaginal discharge is caused by several factors that indicate unhealthy behavior such as wearing tight clothing made from synthetic materials, dirty toilet conditions, exchanging towels and underwear with other people, cleaning the feminine area from back to front, stress, fatigue, high levels of vaginal discharge. quite high blood sugar, hormonal imbalance and a dirty surrounding environment (Hana et al., 2018). If vaginal discharge is not treated properly, it will result in more serious complications, including cancer in the genital area, and even

female fertility (infertility), which can make a person feel anxious due to lack of self-confidence (Iskandar, 2014).

Based on the results of the discussion above, the researcher is of the opinion that most of the respondents who experienced vaginal discharge due to the questionnaire answers given by the respondents had one of the signs of vaginal discharge including, the respondent had excessive discharge from the vagina (outside of the menstrual period) in the last 1 month, the respondent Discharges vaginal discharge from the vaginal canal (clear white, cloudy and not too thick, creamy texture, slimy white, cloudy white with a texture like lubricant), discharges vaginal discharge that smells but is not itchy. XI with lots of assignments at school.

The Relationship between Stress Levels and the Incidence of Physiological Vaginal Discharge in Adolescent Girls at Wates 1 Public High School

Based on research data conducted at Wates State High School, the results of the Chi Square test from 52 respondents obtained the Asymp p value. Sig. (2-tailed) = 0.012 or $p \leq 0.05$. It can be concluded that there is a relationship between stress levels and the incidence of physiological vaginal discharge in female students at SMAN 1 Wates, Kediri Regency.

These results are different from research conducted by Wijayanti et al. (2020), stated that there is no relationship between stress and vaginal discharge. This result is different from the research I conducted which stated that there was a relationship between the level of stress and the vaginal discharge problems experienced by respondents. This research is in line with research conducted by Agustiyani (2011) showing that the Chi Square test results obtained a $\chi 2$ value of 9.111 on df 1 with a significance level (p) of 0.003 so that it can be stated that there is a significant relationship between the level of stress and the incidence of vaginal discharge in young women in class XI IPA 1 and Science 2 at SMA Taman Madya Jetis Yogyakarta.

The stress experienced by respondents will have an impact on the incidence of physiological vaginal discharge. The state of the body experiencing stress, including physical stress and psychological stress (from piling up work). . In research (Shadine, 2014), it is explained that a body that experiences fatigue and stress, both from a psychological and physical perspective, has an effect on the work of the estrogen hormone which can trigger vaginal discharge in women.

The function of hormones in a woman's body will be influenced by the condition of the body under stress, both physical stress and psychological stress (such as work, accumulation, academic demands, and low test scores) will cause an increase in the hormone estrogen. Increased estradiol is an increase in female vaginal discharge mostly caused by the hormone estrogen. Stress can disrupt the function of the hypothalamus gland, which reduces immunity, and causes a decrease in the synthesis of glucocorticoids and catecholamines. Immunity decreases, making it easier for bacteria in the vagina to multiply quickly and suppress the growth of normal vaginal flora which will ultimately cause pathological vaginal discharge (Hana et al., 2018). This shows that one of the factors causing vaginal discharge in women is stress.

These findings support the researchers' hypothesis that there is a substantial correlation between respondents' occurrence of vaginal discharge and stress. The stress that the respondent experiences throws the body's equilibrium off, particularly in terms of their immune system. Vaginal discharge is one of the disorders that will arise from the respondent's health disturbances. Stress-related mental instability also leads to an uncontrollable release of female hormones in the body, which results in vaginal discharge. In addition to stress, other reasons that can cause vaginal discharge include physical exhaustion, using an IUD while pregnant, and poor personal hygiene, which includes not washing your genitalia properly, using panty liners and vaginal cleansing soap constantly, changing your underwear infrequently

CONCLUSION

Based on research on the relationship between stress levels and vaginal discharge at SMAN 1 WATES, it can be concluded as follows:

1. Of the 52 female students, there were 24 respondents who did not experience stress (46%), then 19 respondents experienced mild stress, and 5 respondents experienced moderate stress (10%), while 4 respondents experienced severe stress (8%).
2. Data from research on the incidence of physiological vaginal discharge from 52 respondents found that 8 respondents (15%) did not experience vaginal discharge, while 44 respondents (85%) experienced vaginal discharge.
3. The results of data analysis using the Chi Square test showed that the Asymp.Sig (2-Sided) value = 0.012 or $p \leq 0.05$, meaning that H0 was rejected and H1 was accepted, which means: there is a relationship between the level of stress and the incidence of physiological vaginal discharge in female students at SMA Negeri 1 Wates, Kediri Regency.

REFERENCES

Abiyoga, Aries,dkk. (2018). Hubungan Antara Gangguan Pola Tidur dengan Flour Albus (Keputihan) pada Remaja. Jurnal Medika Karya Ilmiah Kesehatan.

Agnihotri. K.A. (2018). Stress and Students. Laxmi Book Publication. Solapur.

Agustiyani, D. (2011). Hubungan Tingkat Stress dengan Kejadian Keputihan pada Remaja Putri Kelas X dan XI Di SMA Taman JetisYogyakarta. Naskah Publikasi.

Aini, Mella Qurrotul. (2016). "Hubungan Sikap Menjaga Kebersihan Organ Genetalia Eksterna Dengan Kejadian Keputihan Pada Mahasiswi Poltekkes Kemenkes Tasikmalaya." Jurnal Keperawatan Poltekkes Tasikmalaya Vol 12.

Hana, C., Zuhdy, N., & Widyasih, H. (2018). Stres Psikososial dan Kejadian Fluor Albus Patologis pada Santri. Jurnal Forum Kesehatan.

Heiman & Kariv. (2015). Task-Orirnted versus Emotion-Oriented Coping Strategies: The Case of College Students. College Student Journal, 39 (1): 72-89.

Hurlock. (2015). Psikologi Perekembangan : Suatu Pendekatan Sepanjang Rentang Kehidupan. Yogyakararta : Erlangga.

Judha Mohamad, & Y.Tjatjo Yunita. (2019). Hubungan Tingkat Stres Terhadap Kondisi Sosial Dengan Kejadian Keputihan Fisiologis. Vol. 14. No. 2, April 2019 Lapau. (2013). Metodologi Penelitian: Yayasan Pustaka Obot Indonesia. Jakarta.

Nurhidayati, N., & Rismawati, R. (2020). Hubungan Personal Hygiene dengan Kejadian Leukore. Jurnal Kebidanan, 12(1), 1 - 110.

Nurul et al., (2014). Kajian Faktor Threat dan Coping Terhadap Partisipasi Wanita dalam Program Skrining Kanker Leher Rahim di Biro Konsultasi Yayasan Kucala. Jurnal Program Studi Kesehatan Masyarakat Pascasarjana UGM, Yogyakarta.

Oriza, N., & Yulianty, R. (2018). Faktor yang Berhubungan dengan Kejadian Keputihan pada Remaja Putri di SMA Darussalam Medan. Jurnal Bidan Komunitas.

S. Y. S. Salat and E. Suprayitno. (2019). "Hubungan Kecemasan Ibu Menyusui Dengan Kelancaran Pengeluaran Air Susu Ibu (ASI) Di Bps Kerta Timur Kecamatan Dasuk Kabupaten Sumenep. Relationship Between Mother's Anxiety Analysis With The swiftness of Breast Milk In BPS Kerta Timur Kecamatan Dasuk Kab,"vol. 5, no. 2, pp. 51–56.

Setiani Ti, Prabowo T, Paramita Dp. (2015). Kebersihan Organ Kewanitaan Dan Kejadian Keputihan Patologi Pada Santriwati Di Pondok Pesantren Al Munawwir Yogyakarta. J Ners Dan Kebidanan Indonesia. 2015;3(1):39–42.