

THE INFLUENCE OF HEALTH EDUCATION ON FEMININE HYGIENE WITH KNOWLEDGE AND ATTITUDES OF ADOLESCENTS IN DEALING WITH VAGINAL DISCHARGE

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ABSTRAK: PENGARUH PENDIDIKAN KESEHATAN HYGIENE KEWANITAAN DENGAN PENGETAHUAN DAN SIKAP REMAJA DALAM MENANGANI KEPUTIHAN

Latar Belakang: Data yang diperoleh dari Puskesmas Panjang Tahun 2020 yang mengalami keputihan 28% , dan tahun 2021 ada 34%, Pada bulan Januari-Juli 2022 terdapat 89 pasien datang dengan keluhan keputihan, 45% terjadi pada usia remaja, 39% merupakan keputihan fisiologis dan 16% patologis. Kurangnya pengetahuan wanita di Indonesia tentang keputihan sehingga mereka menganggap keputihan sebagai hal yang umum dan sepele.

Tujuan: diketahui efektivitas pendidikan kesehatan hygiene kewanitaan dengan pengetahuan dan sikap remaja dalam menangani keputihan di wilayah kerja puskesmas panjang tahun 2023.

Metode: Penelitian ini menggunakan jenis penelitian kuantitatif, dengan rancangan *pra eksperimen*. Populasi dalam penelitian ini adalah seluruh remaja yang berada di wilayah kerja puskesmas panjang sebanyak 110 remaja. Sampel sebanyak 52 responden. Teknik pengumpulan data dengan menggunakan lembar kuesioner dan analisa data yang digunakan adalah uji *T-Dependent*.

Hasil: didapatkan bahwa rata-rata pengetahuan sebelum penyuluhan sebesar 54,4, rata-rata pengetahuan sesudah penyuluhan sebesar 77,6, rata-rata sikap sebelum penyuluhan sebesar 38,2, rata-rata sikap sesudah penyuluhan sebesar 43.4.

Kesimpulan: Ada pengaruh penerapan pendidikan kesehatan hygiene kewanitaan terhadap pengetahuan dan sikap dalam menangani keputihan di wilayah kerja Puskesmas Panjang.

Saran: Bagi pihak sekolah agar membuat program kesehatan bagi remaja mengenai kebersihan genital khususnya pencegahan keputihan patologis karena akan membantu siswi memperoleh informasi yang benar dan tepat

Kata Kunci : Pendidikan kesehatan, Keputihan, Remaja

ABSTRACT

Background: Data obtained from the Panjang Public Health Center in 2020 showed that 28% of patients experienced vaginal discharge, and this increased to 34% in 2021. From January to July 2022, 89 patients visited with complaints of vaginal discharge, with 45% occurring among adolescents, 39% identified as physiological discharge, and 16% as pathological discharge. The lack of knowledge among Indonesian women about vaginal discharge leads them to consider it a common and trivial issue.

Objective: To determine the effectiveness of women's hygiene health education on adolescents' knowledge and attitudes in handling vaginal discharge in the working area of the Panjang Public Health Center in 2023.

Method: This study used a quantitative approach with a pre-experimental design. The population consisted of all adolescents within the working area of the Panjang Public Health Center, totaling 110 individuals. A sample of 52 respondents was selected. Data collection was conducted using questionnaires, and data analysis was performed using the Dependent T-Test.

Results: The average knowledge score before the educational session was 54.4, which increased to 77.6 afterward. The average attitude score before the session was 38.2, rising to 43.4 after the session.

Conclusion: The implementation of women's hygiene health education had a positive impact on adolescents' knowledge and attitudes toward handling vaginal discharge in the Panjang Public Health Center area.

Recommendation: Schools are advised to develop health programs for adolescents focusing on genital hygiene, particularly the prevention of pathological vaginal discharge, as this will help students receive accurate and relevant information.

Keywords: Adolescent, Health education, Vaginal Discharge

INTRODUCTION

Adolescence is a transitional phase between childhood and adulthood. This term refers to the period from the onset of puberty to the attainment of maturity, typically starting around the age of 14 in males and 12 in females. The transition to adulthood varies from one culture to another, but is generally defined as the time when individuals begin to act independently, apart from the influence of their parents (Ahyani, L. N. & Astuti, D., 2018).

The World Health Organization (WHO) states that the adolescent stage spans from 10 to 19 years of age. In the year 2020, this age group accounted for approximately 42% of the world's population. According to data from the Indonesian Ministry of Health (Depkes RI) in 2020, adolescents in Indonesia make up around 20% of the total

population. In Lampung Province, the total number of individuals aged 10-19 years reached 1.4 million, with adolescent female comprising 48.4% of the total in year 2020 (the Central Bureau of Statistics of Lampung Province).

Adolescent females undergo various changes during this period, including both psychological and physical changes. These changes often involve alterations in specific organs, including the reproductive organs (Ahyani, L. N. & Astuti, D., 2018). Such changes can be confusing for teenagers who experience them, and one common reproductive change experienced by adolescents is health issues like vaginal discharge. Lack of awareness among adolescent female about vulva hygiene can contribute to issues like vaginal discharge. This knowledge and attitude encompass poor bowel and urinary habits such as inadequate cleansing, improper wiping direction, excessive use of soap, fragrances, or rinses, wearing tight and non-absorbent undergarments, infrequent underwear changes, and infrequent pad changes (Sekar, P., Machmudah, & Sayono, 2016).

Women are particularly vulnerable to reproductive health problems due to the susceptibility of their reproductive organs to external infections, given their proximity to the anus. Therefore, reproductive health requires serious attention, and one issue related to women's reproductive health is vaginal discharge (Rohmatin et al., 2022).

According to WHO, women often overlook the hygiene of their external genitalia. Vaginal infections affect 10-15% of 100 million women worldwide annually, with about 15% of teenagers experiencing bacterial candida infections resulting in vaginal discharge. This occurrence is often due to teenagers' lack of knowledge about reproductive issues (Nurchandra, D., Mirawati, M., & Aulia, F., 2020). A

study by Ekasari et al. in Lampung in 2014 found that out of 37.4 million individuals, 75% of adolescents experienced vaginal discharge (Pipin Nofia, Suprihatin, Triana Indrayani, 2022). Data from the Panjang Primary Health Care in 2020 indicated a 28% occurrence of vaginal discharge, increasing to 34% in 2021. From January to July 2022, 89 patients presented with complaints of vaginal discharge, with 45% occurring in adolescent age groups. Among them, 39% were physiological discharge, and 16% were pathological discharge.

The lack of knowledge among Indonesian women about vaginal discharge often leads them to perceive it as common and trivial. Due to embarrassment, women tend to avoid seeking medical consultation for such issues, mistakenly considering them insignificant. However, vaginal discharge should not be taken lightly. Persistent or recurrent discharge due to infections can lead to reproductive organ complications and even indicate the presence of tumors or cervical cancer symptoms that could result in fatality (Shadine, 2012). The Indonesian government has shown considerable concern for women's issues, particularly reproductive health. One policy, stipulated in Government Regulation No. 61 of 2014 regarding reproductive health, is in line with Law No. 36 of 2009 on health, particularly Article 137. Another government initiative is the PIKKRR (Youth Reproductive Health Counseling and Information Center) program from BKKBN (National Population and Family Planning Board), which aims to educate and counsel adolescents. Through discussions, information sharing, consultation, and raising awareness about reproductive matters, this program aims to enhance adolescent girls' knowledge about feminine hygiene (Nurchandra et al., 2020).

Neglecting these reproductive health issues can lead to severe consequences if not addressed early or adequately. Other consequences include ectopic pregnancies and infertility. Pathological vaginal discharge can also be an early symptom of uterine cancer, a dangerous condition that could lead to death (Eduan, Ju1asmi, 2020).

Health education is a learning experience aimed at enhancing knowledge, attitudes, and behaviors related to individual or group health (Ernawati et al., 2018). Previous studies have indicated that inadequate health education can influence adolescent girls' knowledge and attitudes toward hygiene maintenance. For instance, research by Iswatun et al. (2022) demonstrated significant differences in knowledge, attitudes, and actions following health education. Providing health education is an alternative way to improve

knowledge, attitudes, and behaviors among adolescents. Many adolescent females who neglect genital hygiene experience vaginal discharge and report feelings of insecurity and dirtiness due to this issue. Thus, health education is crucial to imparting positive knowledge about vaginal discharge to adolescent female (Gultom et al., 2021).

Based on a preliminary survey conducted among 15 adolescents in the Panjang Primary Health Care, 60% were unaware of the causes of vaginal discharge, and 40% did not know preventive measures. Among these respondents, 35% experienced vaginal discharge, characterized by itching, slight yellowish coloration, and 60% did not experience any discharge.

If vaginal discharge occurs without proper information, it can trigger psychological anxiety in teenagers. Accurate information is expected to reduce the incidence of vaginal discharge among adolescents. Given the urgency of this issue, the author is motivated to conduct research titled "The Effect of Feminine Hygiene Health Education on the Knowledge and Attitudes of Adolescents in Managing Vaginal Discharge in the Panjang Primary Health Care in 2023."

RESEARCH METHODS

This quantitative research was carried out in the working area of Panjang Primary Health Care, Bandar Lampung, from March 2023 to June 2023. The research design used a pre-experimental design with a group pre-test and a post-test design. The population of this study consists of all adolescent females in the working area of Panjang Primary Health Care, totaling 110 adolescents, with a sample size of 52 adolescents who were determined by purposive sampling technique and met the specified criteria.

The independent variable in this study is health education about vaginal discharge. The dependent variables in this study are adolescents' knowledge and attitudes regarding vaginal discharge. The research instruments include a health education module on feminine hygiene, a knowledge questionnaire (pretest and posttest) validated for knowledge assessment, and an attitude questionnaire (pretest and posttest) validated for assessing attitudes towards vaginal discharge.

Data analysis technique employed univariate analysis to describe variables by creating frequency distribution tables for respondent characteristics, including age, education, gender, and knowledge level before and after receiving health education. Furthermore, bivariate analysis is used to compare the values of the dependent variable based on the independent variable, namely before and after receiving health education. In this case, the data variables are of nominal and interval scales, so the statistical test used is paired t-test or paired t-test. The data analysis process is performed using SPSS 17.0 for Windows. In this analysis, a hypothesis (H_a) can be accepted if the calculated t-value is greater than the tabulated t-value at a certain level of significance. If the data is normally distributed, the appropriate statistical test is a parametric test, such as the Paired T-Test. The Paired T-Test is utilized to determine the difference in mean knowledge scores of adolescents before and after receiving health education (Notoadmodjo, 2018).

RESEARCH RESULTS

Univariate Analysis

The following are the results of the analysis of knowledge before and after being given feminine hygiene health education.

Table 1
Knowledge before and after being given feminine hygiene health education in the Panjang Primary Health Care in 2023

Knowledge	N	Mean	Minimum score	Maximum score	Standard Deviation
Before	52	54.47	29	71	10.67
After	52	77.61	54	96	10.66

Based on table 1, it can be seen that before being given counseling on feminine hygiene, out of 52 respondents, the average knowledge was 54.4, with a minimum score of 29 and a maximum score of 71, standard deviation 10.67. Meanwhile, after being given counseling on feminine hygiene, the average value of knowledge is 77.6, with a minimum score of

54 and a maximum score of 96, standard deviation 10.66. Furthermore, the analysis of attitudes before and after being given health education on feminine hygiene presented.

Table 2
Attitudes before and after being given feminine hygiene health education in the Panjang Primary Health Care in 2023

Attitude	N	Mean	Minimum score	Maximum score	Standard Deviation
Before	52	38.29	24	47	4.39
After	52	43.42	36	52	3.26

Based on table 2, it can be seen that before being given counseling on feminine hygiene, out of 52 respondents, the average attitude was 38.29, the minimum score was 24 and the maximum score was 47, the standard deviation was 4.39. Meanwhile, after being given counseling on feminine hygiene, the average attitude was 43.42, the minimum score was 36 and the maximum score was 52, the standard deviation was 3.26.

Before testing the hypothesis, the analysis requirements test was carried out, namely the normality test. The data normality test aims to detect the distribution of data in a variable that will be used in research. The following are the results of the normality test in table 3.

Table 3
Normality test results

Variable	Sig	Description
Pretest Knowledge	0,053	Normal
Posttest Knowledge	0,088	Normal
Pretest Attitude	0,197	Normal
Posttest Attitude	0,200*	Normal

The table above shows that all data are normally distributed, so the hypothesis test used is the dependent t-test, since the normality test is > 0.05.

Bivariate Analysis

The results of the analysis of differences in knowledge about managing vaginal discharge after feminine hygiene health education are presented in Table 4.

Table 4
Differences in knowledge about managing vaginal discharge after health education on feminine hygiene in the working area of Panjang Primary Health Care in 2023

Knowledge	Mean	SD	p Value	N
Before	54.4	10,67	0,000	52
After	77.6	10,66		52

The research revealed that the average pretest knowledge score before feminine hygiene health education was 54.4, with a standard deviation (SD) of 10.67. Meanwhile, the average posttest knowledge score after feminine hygiene health education was 77.6, with an SD of 10.66. Therefore, it can be concluded that there is a significant difference in average knowledge scores before and after receiving feminine hygiene health education. The statistical test yielded a value of $p = 0.000$ ($p\text{-value} < \alpha$), indicating that at $\alpha = 5\%$, it can be interpreted that there is an influence of implementing feminine hygiene health education on knowledge about managing vaginal discharge in the Panjang Primary Health Care in 2023.

Furthermore, the analysis results of attitude differences in managing vaginal discharge after receiving feminine hygiene health education are presented in Table 5.

Table 5
Attitude differences in managing vaginal discharge after feminine hygiene health education in the Panjang Primary Health Care in 2023

Attitude	Mean	SD	p Value	N
Before	38.2	4.39	0,000	52
After	43.4	3.26		52

The research findings revealed that the average pretest attitude score before feminine hygiene health education was 38.2, with a standard deviation (SD) of 4.39. Meanwhile, the average posttest attitude score after feminine hygiene health education was 43.4, with an SD of 3.26. Thus, it can be concluded that there is a significant difference in average attitudes before and after receiving feminine hygiene health education. The statistical test yielded a value of $p = 0.000$ ($p\text{-value} < \alpha$), indicating that at $\alpha = 5\%$, it can be interpreted that there is an influence of implementing feminine hygiene health education on attitudes toward managing vaginal discharge in the working area of Panjang Primary Health Care in 2023.

DISCUSSION

Knowledge

The research findings indicated that the average pretest knowledge score before feminine hygiene health education was 54.4, with a standard deviation (SD) of 10.67. Meanwhile, the average posttest knowledge score after feminine hygiene health education was 77.6, with an SD of 10.66. Based on the questionnaire analysis, there was an increase in the students' knowledge about vaginal discharge and the prevention of pathological discharge. The responses obtained from the questionnaire analysis showed an increase in knowledge among the respondents after receiving health education, with an increase of 8.09 points. In the statement "Normal vaginal discharge is clear, watery, itchy, and odorous," respondents answered correctly; however, 5.6% of respondents still answered incorrectly. All respondents answered correctly about the definition of vaginal discharge.

Knowledge or cognitive understanding is a crucial domain for the formation of individual behavior (Notoatmodjo, 2014). Health education is an integral part of overall health efforts, emphasizing the enhancement of healthy behaviors. Its goal is to transform individuals' or communities' behavior from unhealthy to healthy (Notoatmodjo, 2014). This is in line with Nurul's (2016) research, which revealed that a lack of understanding about the causes of vaginal discharge is one of the factors contributing to a lack of awareness of prevention measures. Furthermore, limited knowledge about the primary causes of vaginal discharge leads adolescents to have poor reproductive hygiene practices. Iswatun (2021) stated that knowledge after receiving health education had an average score of 21.03. Pratiwi (2018) reported that after receiving health education, female students demonstrated good knowledge with an average score of 87.84.

The low level of respondent knowledge about preventing pathological discharge could be attributed to the absence of specialized reproductive health education in the school curriculum, resulting in a lack of awareness about the topic. According to the researcher, the limited knowledge of students before receiving health education could be influenced by various factors, with personal experiences being one of them. Experiences can effectively instill knowledge and enhance soft skills, making it easier to develop decision-making abilities, which are manifestations of scientific and ethical reasoning.

Attitude

The research findings indicated that the average pretest attitude score before feminine hygiene health education was 38.2, with a standard deviation (SD) of 4.39. Meanwhile, the average posttest attitude score after feminine hygiene health education was 43.4, with an SD of 3.26. Therefore, it can be concluded that there is a significant difference in average attitudes before and after receiving feminine hygiene health education.

According to Notoatmodjo (2012), attitude refers to a hidden reaction or response of an individual toward a stimulus or object. This response pertains to how an individual's ability generates positive and negative attributes (Maulana, 2009). The psychologist Newcomb stated that attitudes indicate readiness or willingness to act and are not just the execution of specific motives (Azwar, 2015). As per Wawan (2015), the moral concept from educational institutions significantly shapes the belief system, indirectly affecting attitudes. One of the factors influencing attitudes is an individual's personal experience. Attitudes can more easily form when personal experiences occur in situations involving emotional factors. The negative attitudes of adolescent girls toward preventing pathological discharge may stem from the lack of personal experiences in receiving education or information about preventing pathological discharge during adolescence.

Effectiveness of feminine hygiene health education on knowledge

The statistical test yielded a value of $p = 0.000$ ($p\text{-value} < \alpha$), which means that at $\alpha = 5\%$, it can be interpreted that there is an influence of implementing feminine hygiene health education on knowledge about managing vaginal discharge in the Panjang Primary Health Care in 2023.

Health education is a process of behavior change within a community, enabling them to know, be willing, and capable of making changes to achieve increased production, income, or benefits, as well as improved societal welfare (Subejo, 2010). Previous research results also identified the same phenomenon, showing an increase in knowledge among adolescent girls after receiving health education (Devega, 2019). Livana's research (2018) similarly found an impact of health education on knowledge.

Based on these research findings, it can be understood that health education is crucial when provided to female students. Through health education, their knowledge can be improved. This aligns with the school's perspective, as they

recognize the low level of knowledge about preventing pathological discharge among adolescent girls within the Panjang Primary Health Care. The school believes that providing reproductive health education, particularly regarding preventing pathological discharge, is highly necessary. Increasing the dissemination of information through health education to adolescent female about preventive behaviors for vaginal discharge can reduce the risk of pathological discharge occurrence. In this research, all respondents experienced an increase in knowledge after receiving health education. The research analysis demonstrates an increase in knowledge before and after receiving health education, indicating that health education is effective in enhancing the knowledge of adolescent girls regarding the prevention of pathological vaginal discharge.

Effectiveness of feminine hygiene health education on attitudes

The statistical test yielded a value of $p = 0.000$ ($p\text{-value} < \alpha$), indicating that at $\alpha = 5\%$, it can be interpreted that there is an influence of implementing feminine hygiene health education on attitudes towards managing vaginal discharge in the Panjang Primary Health Care in 2023. Attitude is the second level in behavior. A person will change their attitude if they are able to change the cognitive component first. Good knowledge does not guarantee having a positive attitude. Middle cook, as cited by Azwar (2009), states that message repetition aids attitude change. According to Notoatmodjo (2010), someone who adopts a new behavior goes through a process, namely awareness, which is acquired as someone better understands the stimulus or object, and when the object is known and attractive, it leads to the interest stage. Basic education is a process of attitude change applied as early as possible through teaching and training (Salma, 2017).

The research results conducted by the researcher showed that the majority of children experienced an improvement in attitudes towards preventing pathological discharge among female adolescent in Panjang. Health education related to preventing pathological discharge is highly necessary to enhance knowledge in maintaining reproductive organ hygiene, fostering positive attitudes towards reproductive organ hygiene, and forming good habits in caring for reproductive organs. Providing accurate information can improve adolescents' knowledge towards a more positive direction, leading to supportive attitudes and actions in organ care, ultimately changing their behavior in the right direction to prevent pathological discharge.

Based on the research findings, after conducting an intervention in the form of health education, the percentage of positive attitudes among adolescent female increased to 89.7%. The average attitude score after receiving education was 43.68, with the lowest score being 33 and the highest being 52. In this research, out of 52 respondents who were given education, attitude improvement was observed after receiving health education. When reviewing the master table, respondents had the same scores before and after receiving health education, both having the highest score in the category of 15 in attitude-related questions. According to the researcher, the attitude of adolescent girls improved after health education was provided using methods like lectures with Power Point and presentations and leaflets, ensuring that all conveyed messages or information were well received by the respondents.

CONCLUSION

Based on the discussion, it can be concluded that:

There is an influence of implementing feminine hygiene health education on knowledge and attitudes towards managing vaginal discharge in the working area of Panjang Primary Health Care in 2023 ($p\text{-value} 0.000$).

SUGESSTION

Schools are encouraged to develop health programs for adolescents focusing on genital hygiene, particularly the prevention of pathological vaginal discharge, to ensure that female students receive accurate and appropriate information. Female students are also expected to learn proper personal genital hygiene practices to prevent pathological vaginal discharge.

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