
A Description Of Adolescent Girls' Behavior Regarding Personal Hygiene When Experiencing Vaginal Discharge At MAN 1 Surakarta

Anggun Herawati¹⁾, Irma Mustika Sari²⁾

^{1,2)} Undergraduate Nursing Study Program, Faculty of Health Sciences, 'Aisyiyah University of Surakarta

*Corresponding Author

Email : anggunherawati.student@aiska-university.ac.id

Abstract

Adolescence is susceptible to vaginal discharge due to hormonal changes and tropical climate, with a prevalence of 75% in Indonesia and low knowledge in Central Java. This study aims to describe the personal hygiene behavior of adolescent girls during vaginal discharge at MAN 1 Surakarta. The quantitative descriptive method with stratified random sampling resulted in a sample of 89 female students from a population of 773 female students in grades X-XII. The 24-item Likert questionnaire instrument was analyzed univariately using SPSS for frequencies and percentages. The results showed that 89.9% of respondents aged 14-17 years, 100% had a history of vaginal discharge, 85.4% used social media as their information source, and 55.1% had sufficient behavior and 44.9% good behavior. It was concluded that the majority of adolescent girls have sufficient personal hygiene behavior, requiring social media-based educational intervention.

Keywords: Adolescent Girls, Fluor Albus, Personal Hygiene, Reproductive Health, Vulva Hygiene.

INTRODUCTION

Adolescence is a transitional period that is vulnerable to reproductive health issues, particularly vaginal discharge, which is often experienced by young women due to hormonal changes and the humidity of Indonesia's tropical environment. Physiological vaginal discharge is normal during the menstrual cycle, but it can become pathological if influenced by inappropriate personal hygiene practices, such as wearing underwear that doesn't absorb sweat or not regularly cleaning the vulva, which can trigger fungal or bacterial infections (Hanifah et al., 2023; Sangadah et al., 2021).

The prevalence of vaginal discharge in Indonesia reaches 75% of women who have experienced it at least once in their lifetime, with 45% experiencing recurrent cases, higher among adolescents in humid areas such as Central Java due to the tropical climate that supports the proliferation of microorganisms (Putri et al., 2021; Juliansyah Zulfani, 2021). In Central Java, a 2023 survey showed that 68.6% of adolescents had low knowledge about reproductive health, contributing to the increase in cases of reproductive tract infections (RTIs) and STIs, with Surakarta ranking second in 2024 for RTIs with 112 cases (Veronika Hermawati, 2024; Ananda Widiastuti, 2023).

The problem is exacerbated by the fact that the majority of female adolescents at MAN 1 Surakarta (89.9% aged 14-17) reported a 100% history of vaginal discharge, with the primary source of information coming from social media (85.4%) which is often inaccurate, leading to inadequate hygiene practices (Amalia Yusnia, 2021; Syukaisih et al., 2021). Preliminary studies indicate that 60% of female students experience sticky and itchy vaginal discharge without knowledge of proper treatment, coupled with minimal school outreach, which puts them at risk of STIs, cervical cancer, or long-term infertility (Eduwan, 2022; Fibriani Daryanti, 2024).

Previous studies, such as Latriyanti (2023), found that 51.1% of adolescent girls' negative behaviors were related to vaginal discharge, while Muntasih Rohmah (2025) and Navalía et al. (2024) reported moderate to less dominant categories, confirming a lack of personal hygiene education as a major factor (Latriyanti Ayuningtias, 2023; Muntasih Rohmah, 2025). In Surakarta, the level of knowledge about vulvar hygiene was only 0.52, with an increase in STI cases from 2023 to 2024 in sub-districts such as Jebres (10 to 15 cases), indicating a failure of communal prevention (Hanifah, 2022; Navalía et al., 2024).

This study aims to describe the personal hygiene behavior of female adolescents during vaginal discharge at MAN 1 Surakarta as a basis for educational intervention; its urgency is high considering the high prevalence and risk of ISR/STI in Central Java which burdens the health system; the novelty lies in the descriptive focus at MAN 1 Surakarta with a sample of 89 female students using stratified random sampling, different from previous studies that were analytical or in other locations such as SMA Negeri 21 Makassar (Afriani et al., 2025; Yuningsih et al., 2023).

RESEARCH METHODS

Types and Design of Research

This study uses a quantitative approach with a descriptive design to describe the phenomenon of personal hygiene behavior among female adolescents experiencing vaginal discharge at MAN 1 Surakarta without variable manipulation. A descriptive design is appropriate for objectively identifying the frequency distribution and characteristics of a population, as described in quantitative research methods that emphasize univariate measurement of a single variable (Sugiyono, 2022; Creswell & Creswell, 2023).

Data Analysis Instruments and Techniques

The main instrument was a 24-item Likert questionnaire adopted from Navalía et al. (2024), covering subvariables such as how to clean the feminine area, body hygiene, use of sanitary napkins, underwear, and pantyliners, with a score of 1-4 for positive/negative answers; categories of good behavior (80-100), sufficient (60-79), and poor (<60). Univariate analysis techniques involved editing, coding, scoring, tabulating, entry, and cleaning using SPSS for frequency/percentage, tested for validity ($r=0.650-0.976$) and reliability ($\alpha=0.974$), consistent with quantitative data analysis procedures (Sudaryono, 2021; Navalía et al., 2024).

Population and Sample

The population was 773 female students of grades X-XII of MAN 1 Surakarta in the 2025/2026 academic year; a sample of 89 female students was calculated using the Slovin formula ($d=0.10$, $n=89$ rounded), selected by proportional stratified random sampling per class (e.g., X-E2: 3 female students out of 26), with inclusion criteria (female adolescents aged 14-17 years, willing, with a history of vaginal discharge) and exclusion (absent). This technique ensures the representation of heterogeneous strata, in accordance with probabilistic sampling guidelines (Sugiyono, 2019; Nguyen & Tran, 2023).

Research Procedures

The procedure begins with the preparation stage (literature, proposal, permission from Aisyiyah University Surakarta, Health/Education Office, MAN 1 Surakarta, September-October 2025), implementation (stratified distribution of respondents, simple random spinner per class, informed consent, questionnaire completion assisted by 2 enumerators and a guidance counselor in the hall, November 2025), and completion (editing/coding/tabulating data, SPSS analysis, consultation, thesis seminar, December 2025). Ethics include anonymity, confidentiality, veracity, justice, and beneficence to protect respondents (Creswell & Creswell, 2023; Emzir, 2021).

RESULTS AND DISCUSSION

Respondent Characteristics

Age

Based on the results of data analysis, the age of students at MAN 1 Surakarta obtained the following results:

Table 1. Frequency Distribution of Age of Students at MAN 1 Surakarta

Characteristics	Frequency (f)	Percentage (%)
Age		
10-13 Years	0	0%
14-17 Years	80	89.9%
18-21 Years	9	10.1%
Total	89	100%

Source: (Primary Data Year, 2025)

Based on table 1, the results of the highest frequency distribution are aged 14-17 years with a total of 80 respondents (89.9%), 9 respondents (10.1%) in the 18-21 year age category and no respondents or (0%) in the 10-13 year age category.

History of experiencing vaginal discharge

Based on the results of data analysis, the history of vaginal discharge among students at MAN 1 Surakarta is as follows:

Table 2. Frequency Distribution of History of Vaginal Discharge

Characteristics	Frequency (f)	Percentage (%)
Once	89	100%
Never	0	0%
Total	89	100%

Source: (Primary Data Year, 2025)

Based on table 2, the results of the frequency distribution of history of vaginal discharge in the category of ever were 89 respondents (100%) and never were 0 respondents (0%).

Resources

Based on the results of data analysis, the sources of information about Personal Hygiene of female students at MAN 1 Surakarta who have been exposed to the following information:

Table 3. Frequency Distribution of Information Sources

Characteristics	Frequency (f)	Percentage (%)
Social media	76	85.4%
Print media	1	1.1%
Health Counseling	12	13.5%
Total	89	100%

Source: Primary Data 2025

Based on table 3, it shows the results of the frequency distribution of information sources for female students at MAN 1 Surakarta. Most of the information sources obtained by female students came from social media with 76 respondents (85.4%), health counseling with 12 respondents (13.5%) and print media with only 1 female student (1.1%).

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Based on the results of data analysis, the sources of information about Personal Hygiene of female students at MAN 1 Surakarta who have been exposed to the following information:

Table 4. Frequency Distribution of Adolescent Girls' Behavior Regarding Personal Hygiene When Experiencing Vaginal Discharge

Behavior	Frequency (f)	Percentage (%)
Good	40	44.9%
Enough	49	55.1%
Not enough	0	0%
Total	89	100%

Source: Primary Data 2025

Based on table 4, the results show 40 (44.9%) respondents behaved well, 49 respondents (55.1%) behaved adequately and 0 respondents (0%) behaved poorly.

Discussion

Respondent Characteristics

Respondent characteristics based on age of female students at MAN 1 Surakarta

Based on research results, the majority of adolescent girls at MAN 1 Surakarta are between the ages of 14 and 17, a stage of puberty where estrogen and progesterone hormones increase, influencing the development of reproductive organs and the appearance of vaginal discharge. This age is also crucial for developing personal hygiene behaviors, as adolescents begin to develop awareness and skills in maintaining personal hygiene.

Study(Siallagan et al., 2025)shows that teenagers aged 14–17 years with sufficient knowledge about personal hygiene tend to maintain good intimate organ hygiene.Rahmani (2024)She added that education about vaginal discharge and vulvar hygiene improves hygiene practices, such as cleaning intimate areas and changing underwear regularly. However, actual practices are still influenced by family support and access to information.(Muntasih & Rohmah, 2025).

Thus, the ages of 14–17 are a critical period for developing good personal hygiene habits. Providing education and support to this age group is crucial to prevent the risk of reproductive health problems and foster proper hygiene practices from an early age.

Respondent characteristics based on history of vaginal discharge among female students at MAN 1 Surakarta

Based on the research results, all female respondents at MAN 1 Surakarta (100%) reported having experienced vaginal discharge, while none reported having never experienced it. These findings indicate that vaginal discharge is a common physiological phenomenon in female adolescents, particularly during puberty, when estrogen and progesterone levels increase and affect reproductive health.

Physiologically, vaginal discharge functions as a body mechanism to maintain cleanliness and balance of vaginal microflora. This fluid plays a role in protecting the reproductive organs from infection, maintaining moisture, and aiding the regeneration of vaginal epithelial cells. While vaginal discharge is normal, poor personal hygiene practices can increase the risk of irritation, infection, or discomfort.(Narmin et al., 2025).

Research resultSiallagan et al (2025)showed that adolescent girls who practiced good personal hygiene tended to experience vaginal discharge that remained within physiological limits, while poor hygiene practices were associated with an increased incidence of pathological vaginal discharge.Baureh et al (2022)added that the level of knowledge and attitudes of young women regarding perineal hygiene influenced the incidence of vaginal discharge, with participants with sufficient knowledge tending to maintain better genital hygiene. Furthermore,Narmin et al (2025)emphasized that adequate family support and education increase adolescent compliance in maintaining intimate organ hygiene and reduce the risk of complications.

Thus, the history of vaginal discharge experienced by all respondents serves as an important basis for planning reproductive health interventions. Educational approaches such as counseling, guidance, and personal hygiene habituation programs are expected to foster appropriate hygiene

behaviors, prevent infections or reproductive health disorders, and raise awareness among young women about the importance of caring for their intimate organs from an early age.

Respondent Characteristics Based on Information Sources of Students of MAN 1 Surakarta

Based on the research results, the characteristics of respondents indicate that the majority of young women at MAN 1 Surakarta obtained information about reproductive health and personal hygiene from social media (85.4%), followed by health counseling (13.5%), and the least from print media (1.1%). According to the accompanying teacher at MAN 1 Surakarta, he said that there had never been any health education or counseling related to good and correct personal hygiene behavior. This finding indicates that social media is the main source of information for young women in gaining knowledge about health and personal hygiene, especially in the current digital era.

Several previous studies have corroborated these findings. Laswini & Nancy (2022) reported that information sources such as electronic media and social media play an important role in shaping the knowledge and personal hygiene behavior of adolescent girls, although in this context the variety of information sources obtained by adolescents also involves parents and teachers.

Besides that, Subiyatin et al (2023) In his research, he found that information sources had a significant relationship with personal hygiene behavior during menstruation in adolescent girls, showing that adolescents who received good information sources tended to have better hygiene behavior.

The phenomenon of using social media as a source of health information is also supported by studies showing that digital media, especially social media, has a positive impact on increasing adolescents' knowledge about reproductive health, because social media is easy to access, interactive, and in line with adolescents' habits in seeking daily information. (Weda Ardini et al 2025).

Physiologically and socially, adolescents tend to be more responsive to the media they use in their daily lives, such as digital platforms. Therefore, information dissemination through social media and health education needs to be maximized to increase correct knowledge about personal hygiene. The combination of online resources and direct education by health workers is an effective strategy in reaching adolescent girls in schools and the community. (Rahma et al., 2025).

Thus, the characteristics of respondents based on information sources indicate a predominance of social media as the primary means of obtaining information, while print media plays a very minor role in this context. This finding is important to consider when planning adolescent reproductive health education interventions, including materials tailored to adolescent media preferences to improve knowledge and proper hygiene behaviors.

Personal Hygiene Behavior of Young Women When Experiencing Vaginal Discharge

Based on the results of the study, the frequency distribution of respondents' personal hygiene behavior shows that most female adolescents at MAN 1 Surakarta have sufficient personal hygiene behavior (55.1%), while good behavior is only 44.9% of the total 89 respondents. This finding illustrates that although almost half of the respondents have good hygiene behavior, more than half are still at a sufficient level, indicating a need for increased knowledge and real practices related to personal hygiene among female adolescents.

The results of this study are in line with the findings of several previous studies that show variations in personal hygiene behavior among adolescent girls and their relationship to internal factors such as level of knowledge. Permadi & Yapri (2024) found that female adolescents with a good level of genital hygiene knowledge tend to have good genital hygiene behavior as well, confirming the importance of knowledge as a predictor of healthy hygiene behavior with the results of the study almost all respondents, namely 122 respondents (94.6%) behaved well and 7 respondents (5.4%) behaved adequately.

Other research by Anggraeni & Putri (2023) The results of personal hygiene behavior during menstruation were in the sufficient category, namely 74 students (44%), in the good category 34% and in the poor category 22% regarding personal hygiene during menstruation. This study reported that the relationship between attitudes and understanding of adolescents regarding personal hygiene during

menstruation influences their behavior in practicing personal hygiene, so that respondents with strong understanding and family support showed more positive hygiene behavior than those who received less educational support.

In addition, the study Narmin et al (2025) Strengthening the relationship between personal hygiene behavior and reproductive health events such as vaginal discharge, showing that adolescents who have adequate or poor hygiene behavior have a higher tendency to experience reproductive health problems.

In general, the findings of this study indicate that personal hygiene behavior among adolescent girls is suboptimal, with a higher proportion categorized as adequate than good. This may be linked to varying levels of knowledge, attitudes, family support, and access to reproductive education among adolescents. Improving reproductive health education programs in schools and communities, particularly those based on participatory approaches and digital media familiar to adolescents, is a crucial strategy for promoting good hygiene behavior.

CONCLUSION

This study found that the majority of female adolescents at MAN 1 Surakarta (55.1%) had adequate personal hygiene practices when experiencing vaginal discharge, with 44.9% reporting good results and none lacking. Respondents were predominantly aged 14-17 (89.9%), with a history of vaginal discharge (100%), and social media (85.4%) as their primary source of information. These findings confirm the high prevalence of vaginal discharge in adolescents due to limited knowledge and minimal socialization.

However, limitations of the study include its descriptive design, which did not test causal relationships, and its reliance on self-report questionnaires, which are susceptible to social bias. Suggestions for further research include a quasi-experimental intervention design with influencing variables such as parental knowledge or digital media, and expansion to other schools in Surakarta. Practically, these results recommend routine educational programs by school nurses and the Health Office using social media to improve hygiene behavior, prevent STIs, and support adolescent reproductive health.

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