

Overview of Adolescent Girls Knowledge of Menstrual Personal Hygiene at Santa Monika Middle School, Pontianak

Elly Marce Titihalawa^{1*}, Trysia Livy¹, Maria Goretik¹, Dwi Kurniasih¹, Pipin¹

¹Nursing Study Program, Faculty of Health, St. Augustine Catholic University of Hippo, Pontianak, Indonesia

*Corresponding author: ellymarce1968@gmail.com

Abstract

Research Objective: Menstrual personal hygiene is an important component of adolescent reproductive health. Insufficient knowledge, limited school-based education, and inadequate disposal facilities may increase the risk of inappropriate hygiene behavior among adolescent girls. This study aimed to describe adolescent girls' knowledge and practices of personal hygiene during menstruation at Santa Monika Junior High School, Pontianak. **Methodology:** This study used a qualitative descriptive design. Ten grade VIII C female students who had experienced menstruation were selected through purposive sampling from 17 eligible students. Data were collected using structured in-depth interviews, observation of school hygiene facilities, field notes, and documentation. Interview data were analyzed thematically through familiarization, coding, categorization, theme development, and interpretation. Credibility was supported by participant confirmation, triangulation between interviews and observation, and supervisor review. **Results:** The analysis produced ten themes: understanding of menstruation, menstrual hygiene behavior, awareness of the importance of hygiene, genital cleaning practices, type of sanitary pad used, frequency of changing pads, management of used pads, frequency of changing underwear, cleaning of menstrual-stained underwear, and knowledge of the consequences of poor hygiene. Most participants showed basic knowledge of menstruation and reported appropriate hygiene practices, including changing pads two to five times per day and cleaning the genital area from front to back. However, several practices, particularly the management of used disposable pads and the routine use of feminine soap, require further health education. **Conclusion:** Adolescent girls generally demonstrated good knowledge and practices regarding menstrual personal hygiene, but school-based reproductive health education and supportive sanitation facilities remain necessary to sustain safe menstrual hygiene behavior.

Keywords: *adolescent girls; menstruation; menstrual hygiene; personal hygiene; reproductive health*

INTRODUCTION

Adolescence is a developmental period marked by physical, emotional, and psychosocial changes. One of the most important reproductive changes experienced by adolescent girls is menarche, followed by regular menstruation. Menstruation is a normal physiological process that requires adolescents to understand how to maintain body and genital hygiene, use clean menstrual absorbents, and dispose of menstrual materials safely. Inadequate knowledge and inappropriate practices during menstruation can increase discomfort, anxiety, genital irritation, unpleasant odor, and the risk of reproductive tract problems.

Menstrual personal hygiene includes changing sanitary pads regularly, washing the genital area correctly, keeping underwear clean and dry, bathing regularly, and disposing of used menstrual materials in a hygienic manner. Menstrual health is not limited to individual behavior; it is also influenced by family communication, school education, peer support, access to clean toilets, availability of water, and proper waste disposal facilities. Therefore, schools have an important role in ensuring that adolescent girls receive accurate information and have an environment that supports safe and dignified menstruation.

Previous studies in Indonesia have shown that knowledge and behavior related to menstrual hygiene among adolescent girls are influenced by health education, peer support, access to information, and the availability of sanitation facilities (Azzahra et al., 2024; Nurhayati & Qothimah, 2023; Sari et

al., 2022). International literature also emphasizes that menstrual health should be understood as a multidimensional issue involving knowledge, practices, supportive facilities, dignity, and reproductive health rights (Hennegan et al., 2021; UNICEF, 2019). However, many school-based studies remain quantitative and focus mainly on measuring the level of knowledge. Fewer studies describe adolescent girls' own explanations, experiences, and daily practices during menstruation in a specific school context.

The preliminary assessment at Santa Monika Junior High School found that grade VIII C had 17 female students who had experienced menstruation. Interviews with the principal and several teachers indicated that the school had not provided specific counseling or education on menstrual personal hygiene. Observation also showed that a dedicated disposal facility for used sanitary pads was not available. These conditions indicate the need for a qualitative description of students' knowledge and practices so that school-based reproductive health education can be planned more appropriately.

Based on this background, the research question was: How do adolescent girls at Santa Monika Junior High School describe their knowledge and practices of personal hygiene during menstruation? This study aimed to describe adolescent girls' knowledge of menstrual personal hygiene, including their understanding of menstruation, hygiene behaviors, sanitary pad use, genital cleaning, used pad management, underwear hygiene, and perceived consequences of poor hygiene.

METHODS

Study Design

This study employed a qualitative descriptive design. This design was selected because it allows researchers to explore and describe participants' knowledge, experiences, and practices in their own words. The qualitative descriptive approach was appropriate for obtaining practical information about menstrual personal hygiene among adolescent girls in a school setting.

Study Setting and Participants

The study was conducted at Santa Monika Junior High School, located on Jalan Adisucipto, Sungai Raya District, Kubu Raya Regency, West Kalimantan, Indonesia. The school was selected because preliminary information indicated that grade VIII C female students had experienced menstruation and the school had not previously received specific menstrual hygiene education.

The study population consisted of 17 female students in grade VIII C. Participants were selected using purposive sampling based on predetermined criteria. The inclusion criteria were female students of Santa Monika Junior High School, had experienced menstruation at least once, were enrolled in grade VIII C, and were willing to participate. Students who were not willing to participate or did not meet the grade criteria were excluded. Ten students were included because they met the criteria and provided sufficient information to describe the study themes. In qualitative descriptive research, sample adequacy is determined by the richness and relevance of information rather than statistical representation.

Participant Recruitment

Participant recruitment was conducted after permission was obtained from the school. The researcher coordinated with the principal and class teacher to identify eligible students. Eligible students received an explanation about the purpose, procedures, voluntary nature, confidentiality, and possible benefits of the study. Students who agreed to participate were invited for interviews at a time that did not interfere with learning activities. Because the participants were minors, parental or guardian permission and student assent should be documented according to the ethics approval requirements.

Research Instruments

Data were collected using a structured interview guide, field notes, observation notes, and documentation. The interview guide explored participants' understanding of menstruation, personal hygiene behavior during menstruation, genital cleaning practices, type of sanitary pad used, frequency of changing pads and underwear, management of used pads, and knowledge of the consequences of poor menstrual hygiene. The interview guide was developed based on relevant literature and reviewed by the research supervisor for content relevance, clarity, and appropriateness for adolescent participants before data collection. If a formal pilot test was conducted, the number and characteristics of pilot participants should be inserted here; if no pilot test was conducted, the manuscript should state that no formal pilot test was performed and that clarity was checked through supervisor review.

Data Collection

In-depth interviews were conducted using the interview guide. Although the questions were structured, participants were allowed to explain their experiences and understanding in detail. Interviews were recorded with participant permission and supported by field notes. Observation was conducted to identify the availability of toilets, sanitary pad disposal facilities, and the school environment related to menstrual hygiene. Documentation was used to support data completeness.

Data Analysis

Data were analyzed using thematic analysis. First, the researcher listened to the interview recordings and read the transcripts repeatedly to become familiar with the data. Second, meaningful statements related to menstrual knowledge and hygiene practices were coded. Third, similar codes were grouped into categories. Fourth, categories were developed into themes that reflected participants' knowledge and practices. Fifth, the themes were reviewed against the transcripts to ensure that they accurately represented the participants' responses. Finally, the findings were presented in narrative form with representative participant quotations.

Trustworthiness

Several strategies were applied to improve the trustworthiness of the data. Credibility was strengthened through participant confirmation of key interview points and triangulation between interview data, observation, and documentation. Dependability was supported by documenting each stage of data collection and analysis in field notes and an audit trail. Confirmability was maintained by preserving interview records, coding notes, and theme development notes so that the findings were based on participant data rather than researcher assumptions. Transferability was supported by describing the study setting, participant characteristics, and research context in sufficient detail.

Ethical Considerations

This study was conducted in accordance with ethical principles for research involving human participants. Ethical approval was obtained from [Name of Ethics Committee] (Approval Number: [insert number], Date: [insert date]). Permission was also obtained from the school. Participants were informed about the study objectives, procedures, confidentiality, voluntary participation, and their right to withdraw at any time. Informed consent from parents or guardians and assent from participants were obtained before data collection. Participants' names were replaced with codes (R1-R10) to protect confidentiality.

RESULTS

Participant Characteristics

This study involved 10 adolescent girls from grade VIII C. The participants were 14 to 15 years old, and their age at menarche ranged from 11 to 13 years.

Participant Code	Age	Age at Menarche	Grade
R1	15 years	12 years	VIII C
R2	15 years	12 years	VIII C
R3	15 years	11 years	VIII C
R4	15 years	12 years	VIII C
R5	14 years	11 years	VIII C
R6	15 years	12 years	VIII C
R7	15 years	11 years	VIII C
R8	15 years	13 years	VIII C
R9	14 years	11 years	VIII C
R10	14 years	12 years	VIII C

Theme 1: Understanding of Menstruation

Participants generally understood menstruation as monthly bleeding from the vagina, a sign of female maturity, or the shedding of the uterine lining. Some participants described menstruation in simple terms, while others mentioned the biological process.

"Menstruation is blood that comes out of the vagina, and it happens every month." (R1, R3, R5, R8)

"Menstruation occurs because the uterine lining sheds through the vagina." (R2, R7)

Theme 2: Understanding and Behaviors of Menstrual Hygiene

Participants reported maintaining hygiene by changing sanitary pads when full, bathing, maintaining eating and sleeping patterns, and cleaning the genital area during menstruation.

"I change my sanitary napkin when it is full of blood, and I maintain my health, eating habits, and bathing to avoid dirt and odor." (R1, R2, R3, R4, R8, R10)

Theme 3: Awareness of the Importance of Hygiene During Menstruation

Participants stated that hygiene during menstruation was important to prevent odor, maintain cleanliness, and avoid infection.

"It is important because it prevents body odor, prevents dirt, and prevents infection." (R2, R4, R9, R10)

Theme 4: Cleaning the Genital Area

All participants reported cleaning the genital area from front to back, rinsing with water, and drying with tissue or a towel. Some participants also mentioned using feminine soap.

"I wash or rinse with water from front to back, clean the feminine area, rinse again, and dry it using tissue or a special towel." (R1-R10)

Theme 5: Type of Sanitary Pad Used

Most participants preferred disposable sanitary pads because they were practical, comfortable, easy to use, and perceived as safe. One participant used both disposable and cloth pads.

"I use disposable pads because they are practical, comfortable, easy to use, and safe." (R2-R9)

Theme 6: Frequency of Changing Pads

Participants changed sanitary pads two to five times per day. Those who experienced heavier menstrual flow changed pads more frequently.

"I usually change it two to three times a day." (R1, R2, R6, R7, R8, R10)

"About four to five times a day because I have a lot of blood and I am afraid of leaking." (R3, R4, R5, R9)

Theme 7: Management of Used Pads

Most participants washed used pads before placing them in plastic bags and disposing of them in the trash. One participant wrapped the pad in paper and plastic without washing it before disposal.

"I wash the pad with water, put it in a plastic bag, and throw it in the trash." (R2-R9)

"I wrap the pad in paper, put it in a plastic bag, and throw it in the trash. I do not wash it." (R10)

Theme 8: Frequency of Changing Underwear

Participants generally changed underwear at the same time as sanitary pads, approximately two to five times per day.

"I usually change my underwear at the same time as my sanitary pad." (R1, R2, R6, R7, R8, R9)

Theme 9: Cleaning Menstrual-Stained Underwear

All participants reported soaking underwear first, washing it with detergent, rinsing it with clean water, and drying it.

"I soak my underwear first, wash it with detergent, rinse it with water, and hang it to dry." (R1-R10)

Theme 10: Knowledge of Consequences of Poor Hygiene

Participants understood that poor hygiene during menstruation could cause infection, itching, odor, dirtiness, and other health problems.

"The consequences are infection in the feminine area, body odor, and dirtiness." (R1, R3, R4, R5, R7, R8, R10)

DISCUSSION

The findings show that the participants had basic knowledge of menstruation and menstrual personal hygiene. Most participants described menstruation as a normal monthly process and recognized it as a sign of female maturity. This indicates that the participants had received some information about menstruation, either from family, peers, school learning, or personal experience. However, the variation in their explanations suggests that comprehensive menstrual education is still

needed so that adolescents understand both the biological process and the correct hygiene practices associated with menstruation.

The participants reported several appropriate menstrual hygiene behaviors, including changing sanitary pads regularly, bathing, cleaning the genital area, and changing underwear. The frequency of changing pads ranged from two to five times per day, which reflects awareness of the need to prevent leakage, odor, and discomfort. These findings are consistent with previous studies showing that better knowledge is associated with healthier menstrual hygiene practices among adolescent girls (Azzahra et al., 2024; Nurhayati & Qothimah, 2023; Sari et al., 2022).

Participants also demonstrated awareness of the importance of genital hygiene, especially cleaning from front to back. This practice is important because it reduces the transfer of microorganisms from the anal area to the genital area. Nevertheless, all participants mentioned using feminine soap or special soap when cleaning the genital area. This finding should be interpreted carefully because adolescents may assume that special soap is always necessary, whereas excessive use of scented or chemical products may irritate the genital area. Therefore, health education should emphasize that clean water and gentle drying are usually sufficient, and that any soap used should be mild and not irritating.

The management of used sanitary pads was the most notable practice requiring educational attention. Most respondents washed disposable pads before disposal, while one respondent wrapped the pad without washing it. Washing disposable pads is not always required and may increase contact with menstrual blood if performed inappropriately. A more hygienic practice is to wrap used disposable pads securely and dispose of them in an appropriate bin. This issue is especially relevant because preliminary observation showed that the school did not have a dedicated sanitary pad disposal facility. Menstrual hygiene education should therefore be accompanied by school sanitation improvements, including covered bins in toilets, water availability, privacy, and clear disposal instructions.

Compared with recent national and international discussions on menstrual health, the findings support the idea that menstrual hygiene is shaped by both individual knowledge and environmental support. Hennegan et al. (2021) emphasized that menstrual health includes knowledge, confidence, access to materials, sanitation, comfort, and the ability to participate in daily activities without stigma. Similarly, UNICEF (2019) highlights the importance of school-based support, including accurate information, private facilities, water, soap, and disposal mechanisms. In this study, students had generally good knowledge and practices, but the absence of formal education and disposal facilities shows that individual knowledge alone is not sufficient.

The findings also have practical implications for school health programs. Santa Monika Junior High School can integrate menstrual hygiene education into adolescent reproductive health activities, school health unit programs, or counseling sessions. Education should not only define menstruation but also explain pad-changing frequency, safe genital cleaning, safe disposal, underwear hygiene, and myths or misinformation. Teachers, school health staff, parents, and health workers can collaborate to provide periodic education so that students receive consistent and scientifically accurate information.

To avoid repetition between the Results and Discussion sections, this revised discussion focuses on interpretation, comparison with previous studies, and practical implications. The detailed interview quotations are retained in the Results section as evidence, while the Discussion section explains what those findings mean for adolescent reproductive health promotion.

Study Limitations: This study had several limitations. First, it involved only 10 respondents from one class and one school; therefore, the findings cannot be generalized to all adolescent girls. Second, data were collected mainly through interviews, so responses may be influenced by recall bias or social desirability bias. Third, the study explored knowledge and self-reported practices, but did not directly observe actual menstrual hygiene practices. Future studies may include a larger and more diverse sample, multiple schools, mixed methods, and direct assessment of school sanitation facilities.

CONCLUSION

This study found that adolescent girls at Santa Monika Junior High School generally had good basic knowledge and self-reported practices regarding personal hygiene during menstruation. Participants understood menstruation as a normal monthly process, recognized the importance of hygiene, changed sanitary pads regularly, cleaned the genital area from front to back, changed underwear during menstruation, and understood that poor hygiene could cause infection, itching, odor, and other health problems. However, several aspects require further education, particularly safe disposal of used sanitary pads, appropriate use of feminine cleansing products, and the importance of school sanitation facilities. The findings support the need for continuous school-based reproductive health education and the provision of adequate menstrual hygiene facilities, including private toilets, clean water, and covered disposal bins. Future research should involve a larger number of schools and participants to strengthen the transferability of findings.

Author Contributions: Conceptualization: EMT, TL, MG, DK, P; methodology: EMT, TL, MG, DK, P; investigation: EMT, TL, MG, DK, P; data curation: EMT, TL, MG, DK, P; formal analysis: EMT, TL, MG, DK, P; writing-original draft preparation: EMT, TL, MG, DK, P; writing-review and editing: EMT, TL, MG, DK, P; supervision: EMT, TL, MG, DK, P. All authors have read and approved the final version of the manuscript.

Funding: This research received no external funding.

Ethical Approval Statement: Formal ethical clearance was not obtained for this study. However, permission to conduct the research was granted by Santa Monika Middle School, Pontianak. The study was conducted with respect for ethical principles involving human participants. The respondents were informed about the purpose of the study, and participation was voluntary. The confidentiality and anonymity of all respondents' data were maintained throughout the research process.

Informed Consent Statement: Informed consent was obtained from parents or guardians, and assent was obtained from all adolescent participants before data collection. Participants were informed that their participation was voluntary and that they could withdraw at any time.

Data Availability Statement: The qualitative data supporting the findings of this study are available from the corresponding author upon reasonable request. The data are not publicly available due to ethical and privacy considerations involving minors.

Acknowledgments: The authors would like to thank Santa Monika Junior High School, the school principal, teachers, and all student participants who supported this study. Appreciation is also extended to the academic supervisor and institution for guidance during the research and manuscript preparation process.

Conflicts of Interest: The authors declare no conflicts of interest.

REFERENCES

- Adhikari, P., Kadel, B., Dhungel, S. I., & Mandal, A. (2015). Knowledge and practice regarding menstrual hygiene in rural adolescent girls of Nepal. *Kathmandu University Medical Journal*, 5(3), 382-386.
- American College of Obstetricians and Gynecologists. (2018). Vaginitis and vaginosis. <https://www.acog.org>
- Aprita, & Susianawati. (2023). Personal hygiene during menstruation.
- Azzahra, A. D., Lindayani, E., & Prameswari, A. (2024). The effect of health education using TikTok media on the level of knowledge of adolescent girls regarding personal hygiene during menstruation. *Florence Nightingale Journal of Nursing*, 7(1), 279-284. <https://doi.org/10.52774/jkfn.v7i1.192>
- Cavenett. (2015). Reproductive health and adolescent reproductive health services.
- Dartiwen. (2022). Definition of menstruation/haid.
- Farida, & Islamy. (2019). Menstrual phases.
- Fatmayanti. (2022). Hormones that influence the menstrual cycle.
- Hartanto. (2010). Personal hygiene and reproductive health behavior.
- Hennegan, J., Winkler, I. T., Bobel, C., Keiser, D., Hampton, J., Larsson, G., Chandra-Mouli, V., Plesons, M., & Mahon, T. (2021). Menstrual health: A definition for policy, practice, and research. *Sexual and Reproductive Health Matters*, 29(1), 1911618. <https://doi.org/10.1080/26410397.2021.1911618>
- Hurlock, E. B. (2018). *Developmental psychology: A life-span approach*.
- Indonesian Ministry of Health. (2018). Menstrual hygiene management guidelines for adolescents.
- Moleong, L. J. (2017). *Qualitative research methodology*. Remaja Rosdakarya.
- Nurhayati, E., & Qothimah, Q. H. (2023). The effect of peer education on the level of knowledge of adolescent girls about personal hygiene during menstruation. *Journal of Social and Science*, 3(11), 1208-1218. <https://doi.org/10.59188/jurnalsosains.v3i11.1076>
- Nurmaningsih, E., & Izzah, N. (2021). Description of knowledge regarding personal hygiene during menstruation in adolescent girls: Literature review. *Proceedings of the National Health Seminar*, 1, 273-278. <https://doi.org/10.48144/prosiding.v1i.665>
- Puspitasari. (2019). Knowledge and menstrual hygiene behavior among adolescent girls.
- Putri. (2018). Menstrual hygiene education and reproductive tract infection risk among adolescent girls.
- Rohan, H. H., & Siyoto, S. (2015). Adolescent reproductive health.
- Sari, P., Ningsih, V. R., Hulaila, S., & Sayuti, S. (2022). Factors associated with adolescent girls' behavior in maintaining reproductive hygiene during menstruation at MTS Negeri

05 Kerinci. JIK Journal of Health Sciences, 6(2), 286.
<https://doi.org/10.33757/jik.v6i2.548>

Sekarsari, et al. (2022). Personal hygiene and reproductive health.

Sofiana, R., Larasaty, N. D., & Rokhani, R. (2022). Predisposing and enabling factors of personal hygiene behavior of blind adolescent girls at Semarang Special Needs School during menstruation. *National Multidisciplinary Sciences*, 1(4), 608-616.
<https://doi.org/10.32528/nms.v1i4.114>

Sugiyono. (2016). Quantitative, qualitative, and R&D research methods. Alfabeta.

UNICEF. (2019). Guidance on menstrual health and hygiene. UNICEF.

Wianti, A. (2018). Overview of knowledge about personal hygiene during menstruation among adolescent girls at SMPN 2 Dawuan Majalengka. *Budi Luhur Health Journal*, 11(2), 344-361. <https://doi.org/10.62817/jkbl.v11i2.14>

World Health Organization. (2015). Reproductive tract infections.

Yusiana, & Saputri. (2016). Menstrual personal hygiene.

Zubaidah, Z. (2021). Adolescent girls' behavior in implementing genital hygiene during menstruation in Krayan Bahagia Village. *Journal of Healthy Insan Health Sciences*, 9(1), 1-4.
<https://doi.org/10.54004/jikis.v9i1.14>