

## Factors Associated with Hygiene Practices in Menstrual Management

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### Abstract

*Menstrual hygiene management is a key indicator to reducing the vulnerability of girls and women to reproductive tract infections. The main aim of this study is to examine the menstrual hygiene practices, and management. This study is based on a quantitative research design with census method, utilizing a self-administered, questionnaire among all eligible adolescent girls (grade 6-10) across eight community schools in Kirtipur Municipality of Kathmandu district. The sample size was determined based on the availability of all eligible girls from selected community schools of grades six to ten of eight community schools of Kirtipur Municipality. This study reflects encouraging progress in menstrual hygiene practices. Most of the respondents (98 %) reported they were frequently changing their pads for maintaining menstrual hygiene management and preventing infections. Furthermore, the fact that 87 percent of respondents acknowledged receiving institutional support, such as free sanitary pads and related facilities. However, more than half percent (51%) respondents reported that an inadequate supply of clean water at schools undermines the ability to maintain proper hygiene, management particularly handwashing after changing pad, daily bathing.*

**Keywords:** Hygiene management, menstrual knowledge, reproductive tract infections, sanitary product, vulnerability

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### Background of the Study

Menstrual Hygiene refers to use of clean menstrual materials to absorb or collect menstrual blood, the ability to change these materials in privacy as often as needed, access to soap and clean water for washing the hand, and proper facilities for the safe disposal of used menstrual products. Menstrual Hygiene management requires proper facilities including availabilities of free sanitary pad, adequate WASH facilities and good hygiene to ensure optimal health (Alarcao & Pintassilgo, 2023). Menstrual hygiene management practices (MHM) indicate changing pad frequently, wash hand after changing pad, proper disposal used pad and daily bathing and cleaning genital part (Adhikari & Adhikari, 2023). Adequate menstrual facilities and accurate and timely knowledge and awareness play supportive role to remove socio-cultural taboo, stigma surrounding menstruation (Wardana, 2020).

So, effective MHM requires not only access to clean water and sanitation facilities but also adequate knowledge and awareness of menstrual health. Available to clean drinking water, sanitation, and hygiene (WASH) in schools is for preventing diseases, improving healthy behaviour, regular attendance, and enhancing academic qualification (Sharma et al., 2024). Proper menstrual hygiene management facilities including private place for changing pad, clean restrooms with locking system, and appropriate disposal systems is essential aspect for maintaining health and dignity during menstruation. (Upadhyia, 2024). Proper menstrual hygiene management practices such as using safe sanitary materials, washing reusable clothes pad with clean water and soap, drying them in sunlight, and re-used as well as proper disposal used sanitary pad, frequently

changing pad, frequently cleaning the perineal area, and maintaining personal hygiene are essential during menstruation. These kind of practices build confidence of adolescent girls while poor hygiene management practices increases the risk of reproductive health related issues (Heramo & Mathewos, 2021). Menstrual hygiene management practices of adolescent girls is a key indicator of ensuring menstrual dignity and schools' participation. Availability of free sanitary pads play supportive role to managing heavy bleeding and bathing daily to stay clean and fresh, cleaning the perineal area, and wearing cotton undergarments are essential. Many adolescent girls in low- and middle-income countries including Nepal face socio-cultural stigma and inadequate menstrual information, face challenges managing their menstrual blood hygienically (Plesons et al., 2021).

Menstrual hygiene management (MHM) refers to adolescent girls and women managing menstrual hygiene using clean menstrual pad to absorb or collect menstrual blood, using soap and water for personal hygiene and prevent from disease and having access to facilities for the safe disposal of used menstrual materials (Adhikari & Adhikari, 2023; Ubochi et al., 2023). Proper menstrual hygiene is crucial for long-term health, as poor practices can increase the risk of reproductive tract infections (RTIs) (Charan, 2017). Menstrual hygiene management practices is essential for maintaining the health, dignity, and overall well-being of menstruating girls (Adhikari, 2024). Similarly, Andargie and Tinuola (2025) explored that menstrual hygiene management (MHM) includes the hygienic management of menstruation by using suitable absorbent materials including sanitary pads, tampons, or reusable cloths, ensuring access to soap, and clean water for personal washing and cleaning of reusable products, and providing facilities for the safe and discreet disposal of used materials. Inadequate menstrual hygiene can lead to infections in the reproductive organs, such as pelvic inflammatory disease, which may cause pelvic pain, painful periods (dysmenorrhea), and even infertility. Therefore, using safe and effective menstrual products is crucial. Among these,

disposable pads are currently the most widely used (Alfiani et al., 2025). Although menstrual hygiene is often neglected in the WASH sector, leaving and challenges millions of adolescent girls and women in low-income countries without clean water, private spaces, or proper materials for managing their periods (Crofts, 2019). Girls in developing countries often face challenges in managing menstruation due to inadequate WASH (water, sanitation, and hygiene) facilities, limited access to accurate information, unsupportive environments, and insufficient social support, which collectively hinder their fundamental rights to education, health, and privacy. These challenges are largely rooted in poor menstrual knowledge, low awareness, and prevailing negative attitudes and practices surrounding menstruation and hygiene (Adhikari & Adhikari, 2024; Shah et al., 2023). In countries like Nepal, adolescent girls face significant challenges in managing menstruation in a hygienic, safe, and dignified manner. Cultural taboos and limited access to accurate information often prevent them from fully participating in daily life during their periods. Furthermore, the absence of proper toilets and sanitation facilities can make menstruation a distressing and undignified experience (Evans & Alvarez, 2019). Similarly (Gurung, 2023) also reported similar results, adolescent girls and women in Nepal also face significant risks to their health and overall well-being due to inadequate accurate and timely knowledge and awareness, socio-cultural taboo, religious restriction and inadequate personal hygiene management (Mahapatra, 2024). Unhygienic menstrual practices may increase the risk of reproductive tract infections, and cervical cancer, dysmenorrhea, and even infertility. Consequently, the use of safe, hygienic and effective, menstrual material is essential for protecting risk of reproductive tract infection (Alfiani et al., 2025). Supportive environment and access to menstrual hygiene materials are essential for menstrual hygiene management. Inadequate menstrual facilities including sanitary pads, clean water, soap, and private place, many menstruating individuals face challenges and make discomfort, which leads to absenteeism from school and limit participation in daily

activities, ultimately affecting their health and overall well-being. Ensuring access to menstrual hygiene products, along with education and emotional support, empowers menstruating individuals to manage their periods with dignity, confidence, and good health (Adhikari, 2025). So, maintaining proper hygiene during menstruation, including the use of sanitary pads and regular cleansing of the perineal area is crucial for overall health and well-being. Here is a clearer and more refined version of your paragraph. It is essential to promote education and awareness to improve menstrual health among Nepali women. The study suggest that necessary to provide accurate knowledge and information regarding menstrual hygiene management are highlighted as an effective way to reduces menstrual myths and socio-cultural taboos and restrictive practices (Gurung, 2023). So, it is essential access to safe and sufficient drinking water, sanitation, and good hygiene (WASH) facilities in schools plays a crucial role in preventing numerous neglected tropical diseases among students, improving the learning environment, and fostering resilient communities living in a healthy environment. The main aim of this study is to examine the menstrual hygiene practices, and management among adolescent girls in community schools.

### Research Design

This study is based on quantitative research design, utilizing census methods. The tools of this study was a self-administrated closed ended questionnaire. Population of this study were 565 menstruating girl students of grade vi to x from eight selected community schools in Kirtipur Municipality of Kathmandu district. A structured questionnaire used to collect data from the adolescent students. The questionnaire based on the research objective of this study covering areas such as socio-demographic characteristics, knowledge about menstrual hygiene, current menstrual hygiene practices, and the impact on education. The questionnaire includes closed-ended type, and it is pre-tested with a small group of same characteristics of respondents to check for clarity and effectiveness. Based on their feedback, we finalized the questionnaire. After that, we

visited selected schools and collected data from all menstruating respondents from grade 6-10. For the consistency and accuracy of information collection process. Initially, data was inputted into Epi Data 3.1 software for preliminary management and cleaning. After, the collected data utilized quantitative analysis using Statistical Package for the Social Sciences (SPSS) software version 20.0.

### Ethical Consideration

As a researcher, we ensured that all ethical standards were carefully followed before, during, and after the study. Before data collection, oral informed consent was obtained from all respondents aged 18 years and above. For respondents younger than 18 years, oral informed consent was obtained from the respective school Head Teachers, who act as legal guardians while students are at school. No monetary or other incentives were provided to any participants. All selected respondents were clearly informed about the aims of the study.

### Result and Discussion

Menstrual management is important aspect of girls and women. It is essential to change pad frequently during menstruation is necessary for promoting better health and well-being.

Table 1. explored the frequency of changing sanitary pads among respondents shows varied hygiene practices. The majority reported changing their pads three times a day (35.4%), followed closely by those who changed four times a day (33.6%). A smaller portion, (18.1%) respondents reported that they changed their pads only after they became wet, which may indicate inadequate menstrual hygiene management. Additionally, a small percent (12.9%) changed pads only twice a day.

Table 1 *Menstrual Management and Practices Regarding Frequency of Change Pad*

Frequency of change pad	N	Percent
Two times a day	73	12.9
Three times a day	200	35.4
Four times a day	190	33.6

After the pad wet	10 2	18.1
Total	56 5	100.0

Bathing and cleaning body is essential for maintaining personal hygiene for everyone. Particularly during menstruation, it is most important aspect to proper bathing is necessary. Table 2. indicates the menstrual management and practices of girls. In case of bathing frequency during menstruation also reflects differing levels of hygiene practices. The study shows that only 21.9

Table 2. Menstrual Hygiene Management and Practices Regarding Frequency of Bathing

Bathing	N	Percent
Daily	124	21.9
Two times during the period	268	47.4
One time during the period	173	30.6
Total	565	100.0

Different castes/ethnicities may have different beliefs and perceptions regarding menstrual practices. Some castes/ethnicities may have specific socio-cultural taboo and religious restriction. However, some may have different practices associated with menstruation that vary from one caste/ethnicity to another.

The table 3. highlights menstrual hygiene management practices among different caste/ethnicity of respondents. All of the respondents found to aware their genital hygiene practices properly during menstruation. Most of respondents (98%) above frequently changed pads. Similarly, all most respondent's proper disposal of used pads was also widely practiced, with rates

percent of respondents reported bathing daily during menstruation, which indicated poor menstrual hygiene management. Nearly half (47.4%) of respondents reported that hygiene management practices regarding bathed only twice during the entire menstruation period, while 30.6 percent of respondents said bathed just once. These findings suggest that poor menstruation hygiene management practices. Therefore, need for improved accurate knowledge and awareness and education on proper menstrual hygiene practices.

maximum (97%) and over of respondents indicating strong awareness of safe disposal methods. Genital hygiene practices properly. Universally reported across all groups, showing excellent hygiene awareness, maximum percent of respondents bathing frequently during menstruation, with compliance ranging from Dalit (81%), Madhesi (79%), Brahmin (77%), Janajati (78%) and Kshetri (73%). Additionally, practices involving the proper washing, drying, and reuse of cloth pads showed adherence rates between 75 percent and 81 percent. While overall hygiene management practices are commendable, areas like frequent bathing and proper care of reusable pads may benefit from further education and support.

Table 3. Menstruation Hygiene Management in Terms Caste/ethnicity

Hygiene Management Practice	Brahmin n (%)	Kshetri n (%)	Janajati n (%)	Dalit n (%)	Madhesi n (%)
Change pad frequently	70 (100.0)	163 (100.0)	252 (98.8)	48 (100.0)	29 (100.0)
Properly dispose used pad	68 (97.1)	160 (98.2)	253 (99.2)	48 (100.0)	29 (100.0)
Bath frequently	54 (77.1)	119 (73.0)	194 (76.1)	39 (81.2)	23 (79.3)
Cloth pads washed, dried, and reused properly	56 (80.0)	123 (75.5)	200 (78.4)	39 (81.2)	23 (79.3)

Menstruation is shaped by religious preceptive. Menstrual hygiene management

regarding menstruation is influenced by different religious beliefs, which shape practices, restrictions, and perceptions.

Table 4 shows hygiene management across different religious groups reveals the following insights: A total of 565 respondents reported that maintain their hygiene they used to washed their genital hygiene practices properly but in the other religion less practiced (21%). Almost all Hindu (99%) and the one fifth (21%) among those in the others religion include Islam, Kirant and Jain.

Similarly, all respondents indicated that proper disposal of used pads, faithfulness from Buddhists and Christians, while the others religion showed one fifth (21%) regarding the genital hygiene. Bathing frequency also showed most (76%) of respondents Hindus and 65 percent of Christians reporting regular bathing, while nearly one fifth (17%) from the "Others" group used to this practice. Lastly, washing, drying, and reusing cloth pads were Buddhists respondents showing the highest 83 percent.

Table 4 Menstruation Hygiene Management in Terms Religion

Hygiene Management Practice	Hindu n (%)	Buddhist n (%)	Christian n (%)	Others n (%)
Change pad frequently	446 (99.8)	57 (98.3)	42 (97.7)	17 (21.3)
Properly dispose used pad	440 (98.4)	58 (100.0)	43 (100.0)	17 (21.3)
Genital hygiene	447 (100.0)	58 (100.0)	43 (100.0)	17 (21.3)
Bath frequently	343 (76.7)	44 (75.9)	28 (65.1)	14 (17.5)
Cloth pads washed, dried, and reused properly	347 (77.6)	43 (74.1)	36 (83.7)	15 (18.8)

Supportive materials for menstrual blood management play central role for hygiene management, choices of menstrual materials play supportive role for respondents' regularity in schools and hygiene management.

Table 5 presents the preference of menstrual hygiene materials among respondents. Out of total students, almost all of them (99%) used sanitary pads during menstruation, more than one third (38%) used homemade pad. Likewise, very few respondents (3%) of respondents used menstrual cup and nominal (2%) used

tampon. These findings advocate that while sanitary pads are the most widely used and preferred option, there may be limited awareness or accessibility regarding alternative menstrual hygiene products like reusable homemade pad, menstrual cups and tampons. Used reusable homemade pads, which may be considered a more environmentally friendly option compared to disposable sanitary pads. To improve menstrual health education, schools could provide information on various products to ensure that students are aware of all available options.

Table 5 Menstrual Hygiene Management in Terms of Preference for Menstrual Hygiene Materials among Respondents

Menstrual Hygiene Materials	Yes n (%)	No n (%)	Total n (%)
Sanitary pad	560 (99.1)	5 (0.9)	565 (100.0)
Homemade pad	215 (38.1)	350 (61.9)	565 (100.0)
Tampon	16 (2.8)	549 (97.2)	565 (100.0)
Menstrual cup	18 (3.2)	547 (96.8)	565 (100.0)

Method of proper disposal practices and strategy play a vital role in keeping individuals and the environment free from disease and maintaining overall health.

The table 6 presents the methods of disposing the used pads. "The data on menstrual absorbent disposal methods reveals both good practices and areas for

improvement. Nearly all respondents (99.5%) reported disposing of used pads by placing them in a dustbin to be collected by a garbage truck, indicating a widely adopted and generally appropriate method. However, only 6.2% reported burying used pads in a pit, and an even smaller percentage (4.2%) used a burning kit for disposal.

Table 6 Menstrual Hygiene Management in terms of Methods of Dispose Used Pad

Methods of Disposal	Yes n (%)	No n (%)	Total n (%)
Bury in the pit	35 (6.2)	530 (93.8)	565 (100.0)
Cloth pads washed, dried, and reused properly	207 (36.0)	358 (63.4)	565 (100.0)
Put in dustbin and sent with garbage truck	562 (99.5)	3 (0.5)	565 (100.0)
Destroy in burning kit	24 (4.2)	541 (95.8)	565 (100.0)

Proper hygiene management including genital cleanness during the menstruation is essential for preventing reproductive tract infection and gynecological diseases other disease.

Table 7. indicates the frequency of proper washing and care of the genital hygiene practices during menstruation. "The frequency of menstrual hygiene maintenance activities per day varies among respondents. A significant portion (36.8%) reported performing hygiene practices four

or more times daily, reflecting strong menstrual hygiene behavior. This is followed by 25.1percent who reported doing so twice a day and 23 percent three times a day. However, 15 percent engaged in such practices only once a day, which may be insufficient for maintaining proper hygiene during menstruation. These figures highlight that while many adopt frequent hygiene routines, a portion of the population may still require education and support to improve their practices.

Table 7 Menstrual Hygiene Management in Terms of Genital Cleanliness

Time duration	N	Percent
Once a day	85	15.0
Two times a day	142	25.1
Three times a day	130	23.0
Four and above time	208	36.8
Total	565	100.0

Used to Materials to Washing their Genital Cleanliness during Menstruation

During the time of menstruation, it is essential to genital hygiene. It is important to maintain hygiene to use material such as clean water, soap and tissue paper. Such kind of practices play important role reducing the risk of infection.

water and tissue paper. Maximum (82%) of respondents used water to genital cleanliness during menstruation. Similarly, a smaller (13%) of respondents used water and soap, with nominal (4%) preferred tissue paper. This kind of situation indicate that the need for better menstrual hygiene education, improved access to soap and regular clean water in every school, and awareness

Table 8 presents that the materials used for genital hygiene. The table shows the materials used for their genital cleanliness, referred three options Water and soap, only

programs emphasizing the importance of proper menstrual hygiene.

Table 8 *Materials to Used their Genital hygiene*

Materials to use genital hygiene	Yes		No		Total	
	N	Percent	N	Percent	N	Percent
water and soap	76	13.5	489	86.5	565	100.0
Only water	467	82.7	98	17.3	565	100.0
Tissue paper	25	4.4	540	95.6	565	100.0

## Discussion

This study found that more than one-third (35%) of adolescent girls changed their sanitary pads three times a day during menstruation, indicated that moderate level of menstrual hygiene management awareness. This results is aligns closely with the study done by Ravichandran (2015), which reported that also one-third (34%) of adolescent girls changed their menstrual pads three to four times daily. The similarity suggests a similar pattern of hygiene behavior among adolescent girls across different settings.

While this is a positive sign, it also highlights that a significant portion of girls may still lack adequate knowledge or resources for proper menstrual hygiene. Continued efforts in menstrual health education and improved access to sanitary products and facilities are essential for promoting healthier practices and reducing infection risks. In this study, 47 percent of respondents reported bathing twice during menstruation, indicating moderate hygiene management practices. Similarly a study done by Heramo and Mathewos (2021) found that half percent (50%) of participants bathed less than twice during their menstrual period. This situation reflects improved awareness, better access to water, or stronger health education efforts in the present study context.

This study found that, all eligible respondents of selected community schools in Kathmandu, Nepal, reported using disposable sanitary pads during menstruation. This finding is similar to results from other low- and middle-income countries. For example, a study by Appiah-Agyekum et al. (2025) in Ghana also found

that 97 percent of participants used disposable pads. Similarly, in Vidhi and Shashwat (2022) reported that 96 percent of their respondents also used same practices in India. These results reflect a clear preference for disposable menstrual products, likely because they are easy to use, easily and more widely available. While this practice suggests better access to menstrual hygiene, it also raises concerns about waste management and the environment. Therefore, there is a need to give knowledge and raise awareness about reusable menstrual products and support menstrual education that helps students make informed choices.

Furthermore, this study found that most of the adolescent girls (82%) used only water to maintain hygiene practices during menstruation, while fewer respondents (13%) used both water and soap, very few (4%) used tissue paper. This shows inadequate menstrual hygiene practices.

Similar results were found by Jena and Mudi (2023), who reported that only 36.4 percent of girls used hygienic methods, while 63.6 percent used unhygienic ones. They also found that 57.1 percent used only water, and 41.2 percent used water and soap.

These findings highlight the need for better menstrual health education, improved access to WASH facilities in schools, that support the health and dignity and regularity of menstruating girls.

## Conclusion

Menstrual hygiene management is an essential aspect of all menstruating individuals, it is the most important for

reproductive health, dignity, education, and overall well-being. However, inadequate WASH facility in schools many adolescent girls face significant challenges.

The availability of a regular clean water supply emerges as a fundamental indicator, which directly supportive role to maintain proper menstrual hygiene. Without adequate access to clean water, face barriers to practicing effective hygiene, increasing their attendance in schools and risk of vulnerability to infections and discomfort. The study found that inadequate regular clean water supply and undermines menstruating girls hamper to healthy practices and regularity. Therefore, urgent need to creates girl's friendly environment in schools including WASH facilities. Maintaining girl's friendly environment play supportive role to prevent reproductive tract infection, ensure dignity and participation in schools, empowering, and overall quality of life. Furthermore, accurate and timely menstrual knowledge during menstruation also necessary to hygiene management and practices, which play significant role to decrease socio-cultural taboo, and traditional norms. For that, menstrual hygiene management demands a comprehensive strategy combining quality education, access to diverse menstrual products, and WASH facilities, including a regular clean water supply, free availabilities of diverse pads, and accurate knowledge and awareness to decrease socio-cultural taboo, stigma and discriminatory practices.

### Recommendations

Proper menstrual hygiene management requires ensuring a regular clean water supply in schools and communities to support safe menstrual hygiene practices. Additionally, providing accurate and timely menstrual knowledge and awareness on the use and management of different menstrual materials is essential to promote informed choices, improve hygiene, and enhance the dignity and well-being of adolescent girls.

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### References

- Adhikari, S. U. (2024). Menstrual hygiene and sanitation practices among female college students in Surkhet. *Pragyaratna*, 6. <https://doi.org/10.3126/pragyaratna.v6i2.70583>
- Adhikari, S. U. (2025). Menstrual health: Family support and household practices among bachelor level female students. *KMC Journal*, 7(1), 325\_340. <https://doi.org/10.3126/kmcj.v7i1.75158>
- Adhikari, S. U., & Adhikari, A. (2023). Menstruation hygiene practices among girl students in Kathmandu valley. *Pragyaratna*, 5(1), 89-98. <https://doi.org/10.3126/pragyaratna.v5i1.59275>
- Adhikari, S. U., & Adhikari, A. (2024). Effect of menstruation on education among bachelor-level female students in Kathmandu Valley. *Education Quarterly*, 5. <https://doi.org/10.3126/jeqtu.v5i1.76748>
- Alarcao, V., & Pintassilgo, S. (2023, 2023). Menstrual health: A health and human rights issue. *Human Health*, 11. <https://doi.org/10.3389/frym.2023.1112945>
- Alfiani, F., Fauzia, Y. F. H., & Azkya, F. N. (2025). A study on the knowledge and attitudes of indonesian women regarding menstrual cups as environmentally friendly menstrual products. *Medical Sains: Jurnal Ilmiah Kefarmasian*, 10(1).
- Andargie, F. A., & Tinuola, F. R. (2025). Effects of school menstrual hygiene management, water, sanitation, and hygiene interventions on girls' empowerment, health, and educational outcomes: Lasta district, Amhara regional state, Ethiopia. 20(4).
- Appiah-Agyekum, N. N., Nyamekye, M. A., Agbenu, I. A., & Otoo, D. (2025). Menstrual hygiene knowledge and practices among female senior high

- school students in the new Juaben North municipality of Ghana: a cross-sectional study. <https://doi.org/10.1186/s12889-025-22836-8>
- Charan, A. (2017). A study to assess the effectiveness of structured teaching programme on knowledge and attitude of adolescent girls regarding menstrual hygiene management. 3(2), 1\_6. <https://d1wqtxts1xzle7.cloudfront.net/67684147/658fc9902fb930474253da6584804bf9bd57-libre.pdf>
- Crofts, T. (2019). Menstrual hygiene in Ugandan schools: An investigation of low-cost sanitary pads. *Journal of Water, Sanitation and Hygiene for Development*, 2(1). <https://doi.org/10.2166/washdev.2012.067>
- Evans, R., & Alvarez, V. B. (2019). Nepal's menstrual movement: How 'menstruaction' is making life better for girls and women in Nepal month after month. GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit). <https://www.giz.de/en/downloads/giz2019-en-nepals-menstrual-movement.pdf>
- Gurung, I. (2023). Menstruation stigma: A qualitative exploratory study of the lived experiences of Nepali women [University of Louisville]. <https://doi.org/10.18297/etd/4105>
- Heramo, T. A., & Mathewos, O. E. (2021). Menstrual hygiene management Practice and associated factors among adolescent girls in high Schools of damboya district, kembata tembaro zone, south Ethiopia. 5. [https://www.researchgate.net/publication/360498547\\_Menstrual\\_Hygiene\\_Management\\_Practice\\_and\\_Associated\\_Factors\\_among\\_Adolescent\\_Girls\\_in\\_High\\_Schools\\_of\\_Damboya\\_District](https://www.researchgate.net/publication/360498547_Menstrual_Hygiene_Management_Practice_and_Associated_Factors_among_Adolescent_Girls_in_High_Schools_of_Damboya_District)
- Jena, S., & Mudi, P. (2023, 01/04). Practices and awareness of menstrual hygiene among adolescent girl in bastar. *International Journal of Scientific Research*, 10. <https://doi.org/10.36106/ijs>
- Mahapatra, T. (2024). Menstrual health and status of tribal adolescent girls of Balasore, Odisha. 12(2). <https://doi.org/10.30574/ijsra.2023.8.1.067>
- Plesons, M., Patkar, A., Babb, J., Balapitiya, A., Carson, F., Caruso, B., Franco, M., Hansen, M. M., Haver, J., Jahangir, A., Kabiru, C. W., Kisangala, E., Phillips-Howard, P., Sharma, A., Sommer, M., & Chandra-Mouli, V. (2021). The state of adolescent menstrual health in low- and middle-income countries and suggestions for future action and research. 18(31), 2\_13. <https://doi.org/10.1186/s12978-021-01082-2>
- Ravichandran, L. (2015). Knowledge and Practice of Menstrual Hygiene among Adolescent Girls. 2(3). <https://www.researchgate.net/publication/303288379>
- Shah, S. F., Punjan, i. S., Rizvi, S. N., Sheikh, S. S., & Jan, R. (2023). Knowledge, attitudes, and practices regarding menstrual hygiene among girls in Ghizer, Gilgit, Pakistan. *International Journal of Environmental Research and Public Health*, 20(6424). <https://doi.org/10.3390/ijerph20146424>
- Sharma, M. K., Adhikari, R., Khanal, S. P., Acharya, D., & Teijlingen, E. V. (2024). Do school water, sanitation, and hygiene facilities affect students' health status, attendance, and educational achievements? A qualitative study in Nepal. <https://doi.org/10.1002/hsr2.2293>
- Ubochi, N. E., Chinweuba, U. A., Iheanacho, N. P., Osuchukwu, C., Nwodo, C. O., Nnamani, A. J., Ogbonnaya, N. P., & Ubochi, V. N. (2023). Menstruation behaviour influencer model: a grounded theory of menstrual experiences of shame, embarrassment, stigma and absenteeism among pubescent girls in semi-urban and rural secondary schools in Enugu State, Nigeria. 45(47). <https://doi.org/10.11604/pamj.2023.45.47.39675>
- Upadhya, S. (2024). Parental behaviors during menstruation among female students. *Pragya Ratna*, 6(1), 167\_176. [https://nepjol.info/index.php/pragya\\_ratna/article/view/64549/48938](https://nepjol.info/index.php/pragya_ratna/article/view/64549/48938)
- Vidhi, P., & Shashwat, N. (2022). Menstrual hygiene among adolescent girls studying in a university of Gujarat. 11(7), 3607-3612.

[https://doi.org/10.4103/jfmpc.jfmpc\\_2303\\_21](https://doi.org/10.4103/jfmpc.jfmpc_2303_21)

Wardana, K. A. (2020). Human rights framework on menstrual health and hygiene. *Advances in economics, business and management research*, 140, 140\_146. [file:///C:/Users/Hp/Downloads/125940493%20\(1\).pdf](file:///C:/Users/Hp/Downloads/125940493%20(1).pdf)