

Menstrual Hygiene Awareness , Practices Adopted By Adolescent Girls And the Factors Associated With School Absenteeism

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ABSTRACT

Background

Safe practices during menstruation can not only be instrumental in promoting reproductive health but also help in utilizing education to its full potential by reducing drop outs from school.

Aims And Objectives

To estimate awareness, practices related to menstrual hygiene and associated factors linked to school absenteeism.

Methodology

A cross – sectional study was conducted among 200 school going girls in 10th standard and information regarding practices observed during menstruation and restrictive practices along with factors linked to school absenteeism was obtained via questionnaire and interview.

Results- 72.5 % respondents were aware that menstruation is a physiological process, and majority (72%) felt comfortable to discuss it with their mothers.67 % were using sanitary napkins and 55.8 % reported pain and fatigue as main reason for school absenteeism when they were menstruating. The most common restriction imposed was attending religious functions or rituals (67.5%) followed by not attending marriages (61%).

Conclusion- Health education of adolescent girls along with their mothers and other caregivers can help improving menstrual health, dissolving myths and removing stigma attached to it.

Key words: Menstruation, Hygiene , Restrictions , Absenteeism GJMEDPH 2023; Vol. 12, issue 4 | OPEN ACCESS

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INTRODUCTION

Every woman is bestowed with the precious gift of mothering for which she physiologically gets prepared after the onset of first menstrual period "menarche". Menarche sets in during adolescent period which itself is crucial from physiological, psychological and nutritional standpoint. It's a fundamental right of every woman to have access to safe and dignified menstruation.⁽¹⁾ To utilize education also to full potential and reduce dropouts from school, "menstrual hygiene management" is imperative. The vision of UNICEF is to create a comforting world enabling every girl to learn, play, safeguard her health manage her menstruation hygienically without experiencing any shame or barrier while managing her menstruation.⁽¹⁾

Menstruation among school-going girls is still an unaddressed issue. To manage menstruation hygienically, the role of regular menstrual supplies (pads, soaps, access to clean water, pain relief measures) is crucial.⁽²⁾ Along with this the role of WASH facilities can't be underestimated where in schools there are gender segregated toilet facilities for girls keeping in mind their privacy and physiology which is also a part of Swachh Vidhayala.⁽³⁾This would enable girls to utilize education to full potential reducing school absenteeism to some extent.

Menstruators face myriad of problems, impacting their quality of life.⁽⁴⁾Awareness regarding existing menstrual care products, their proper usage and hygienic disposal can enable girls to prevent physical discomfort and leakages durina menstruation.⁽⁵⁾ There are variety of absorbents that girls use during menstruation, both reusable and non reusable made up of cloth and cellulose combined with plastic respectively.⁽⁶⁾ Reusable absorbents need to be washed often and dried properly in sunlight preceding next usage whereas the non reusable sanitary pads are made up of cellulose and plastic . These are user friendly but are expensive and they are nonbiodegradable. (6)

Unhygienic practices during menstruation, unsafe absorbent usage can predispose girls to urinary tract infections, life threatening reproductive tract infections conditions like cervical cancer, foetal wastage, ectopic pregnancy and toxic shock syndrome.^(7,8) Menstruation in India is mostly an interplay of taboos, myths and beliefs leading to social exclusion from prayers , holy places and family functions. Restrictions are imposed for this period where menstruators are prohibited from touching food or entering kitchen, not engaging in home chores $^{(6,9)}$.

The topic of menstruation is inseparably associated with shame and stigma, girls grow up with misconceptions and myths. Health education at school level by teachers can give a new thrust to manage menstruation with dignity, improve school attendance, thereby reducing school drop outs. With this back drop, the study was undertaken in order to elicit menstrual hygiene practices adopted by adolescent girls and exploring reasons for school absenteeism during menstruation.

AIMS AND OBJECTIVES

To estimate awareness, practices related to menstrual hygiene and associated factors linked to school absenteeism.

Methodology

Study design – Study design was cross –sectional study, conducted among 200 girls studying in 10th standard in schools falling in drainage area of Urban Health and Training Centre, Basti Sheikh attached to Department of Community Medicine, PIMS, Jalandhar.

Study Population- Since there were 4 senior secondary schools falling in drainage area of Urban Centre, Basti Sheikh with 55 girls studying in 10th standard in each school, so estimated sample size was 220 girls. Girls studying in 10th standard were purposively approached, assuming, majority would have attained menarche. The study spanned over a period of 6 months from July 2019 to December 2019. The participation of the menstruators was on voluntary basis, excluding those were unwilling to participate and were absent on the day of the study.

Study tools-A self-designed semi structured questionnaire was utilized for the purpose of the study. The data collection technique employed was via interaction for a brief period. Sensitization of students and school teachers was done, followed by administration of questionnaire to study participants. After seeking approval from the school authorities, a rapport building was done

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with teachers and students to make them comfortable followed by obtaining consent from the girls. The purpose and nature of the study was explained to both participants and school teachers in local language. The questionnaire administered to school girls included different sections related to familiarity about menstruation, source of information, hygienic practices followed while menstruating and restrictive practices adopted. Post session, the girl students were asked to return their questionnaire. An attempt was made by the research worker to address the common myths and queries in a satisfactory manner.

Ethics Consideration- After seeking approval from Institutional ethics Committee, the study was conducted. Participants consenting to be a part of the study were included, ensuring anonymity and confidentiality.

Data Analysis- The data was compiled, tabulated, analyzed via percentages and proportions. The Data analysis was done by SPSS version 21(IBM Chicago).

RESULTS

In the current study 220 adolescent girls were approached and responses from 200 girls could be obtained as 8 girls were absent and 12 had not attained menarche.

Table no.1 represents:- baseline characteristics of the respondents. Study participants between age group of 15-17 were in majority (80.5%). Most common religious affiliation was Hinduism (72%). 60.5% respondents mothers were home makers. Majority of the mothers (32%) were illiterate.

Age	N(%)		
15-17	161(80.5%)		
>17	39(19.5%)		
Religious Affiliation			
Hindu	144(72%)		
Sikh	42(21%)		
Muslim	4(2%)		
Other	10(5%)		
Type of Family			
Joint	54(27%)		
Nuclear	146(73%)		
Occupation of Mother			
Home maker	121(60.5%)		
Working 79(39.5%)			
Education of Mother			
Illiterate	64(32%)		
Primary	48(24%)		
Secondary	60(30%)		
Higher Secondary	20 (10%)		
Graduate and above	8(4%)		

Table 1: Baseline characteristics of the respondents

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Table no. 2 represents respondents level of awareness, source of information and comfort level in discussing menstrual health. A large number of respondents (72.5%) were aware of menstruation being a physiological process. 39%

Yes

No

Mother

Friends

School

Source of Information

TV/Internet and social media

Organ from which menstrual bleeding originates

Sisters and aunts

girls mentioned mothers as the first informant in relation to menstruation and majority of the respondents (72%) were comfortable discussing menstrual issues with their mothers

78 (39%)

122 (61%)

78 (39%)

6 (3%)

38(19%)

12 (6%)

66 (33%)

Knowledge regarding cause of bleeding	N (%)
Menstruation is a physiological process	145 (72.5%)
God given	51 (25.5%)
Curse	4 (2%)
Awareness prior to onset of menarche	

Table a. Decreandente l	loval of oworonocc on	l cource of information	rearding monstruction
I dule 2: Respondents i	level of awarefiess and	a source of information	regarding menstruation

Bladder	20(10%)
Uterus	77 (38.5%)
Don't know	103(51.5%)
You are comfortable discussing about menstrual issues with	
Mothers	144(72%)
Sisters	24(12%)
Friends	20(10%)
Teachers	4(2%)
Not comfortable	8(4%)

Table no. 3 depicts- hygiene practices adopted by respondents. Sanitary napkins were used by large number of participants (67%). 33% used new cloth piece or reused cloth piece during their menstrual cycles. The most common reason (56%) explored in the study for not using sanitary pads was lack of

privacy and facilities at school to change pads. Practice of taking bath during menstruation and washing hands was followed by majority of the respondents 82.5% and 84.5% respectively.



Table 3: Menstrual hygiene management practices of the respondents

Practices	N (%)		
Type of absorbent used during menstrual cycles			
New cloth piece	40(20%)		
Sanitary napkin	134(67%)		
Reused cloth piece	26(13%)		
Frequency of pads changed per day	·		
Once a day 14(7%)			
1-2 times	75(37.5%)		
2-3 times	59(29.5%)		
>3 times	52 (26%)		
Reasons for not using sanitary napkins	·		
Expensive	20 (30%)		
No knowledge of pads	9 (13.6%)		
Lack of privacy and facilities at school to change	37(56%)		
and dispose off pads			
For those using cloth piece , any problems faced	during washing or drying of cloth due to lack of		
space , privacy and water			
Yes	41(62.5%)		
No	25(37.8%)		
Do you take bath daily during your menstrual cyc	les		
Yes	165 (82.5%)		
No	35 (17.5%)		
Do you wash hands every time after changing page	ds /cloth		
Yes	169 (84.5%)		
No	31 (15.5%)		
Do you wash your private parts after urinating during menstruation			
	The strouton		
Yes	164(82%)		
Yes No			
	164(82%)		
No	164(82%)		
No Method of disposal of absorbent used	164(82%) 36 (18%)		
No Method of disposal of absorbent used Wrapped in newspaper and burnt	164(82%) 36 (18%) 20 (10%)		



Table no. 4 represents restrictions observed by the study participants during menstruation. The most common restriction imposed was attending religious functions or rituals (67.5%) followed by not attending marriage (61%). 60 % girls were not allowed to enter kitchen and 59 % were not attending school. 57% and 54.5 % did not go to temple and enter prayer room respectively.

During menstruation , are you allowed to	Responses	
	Yes	No
	N (%)	N (%)
Enter a prayer room	97(48.5%)	103(54.5%)
Attend religious functions	65(32.5%)	135(67.5%)
Go to temple	86(43%)	114(57%)
Sleep on your regular bed	132(66%)	68 (34%)
Go to school	82(41%)	118(59%)
Enter kitchen / touch or store food and pickles	80(40%)	120(60%)
Attend marriage / social gatherings	78(39%)	122(61%)

Table 4: Restrictive	Practices of re	spondents du	ring menstruation
	1 10000000110	sponaciics aoi	

Figure no. 1 Depicts factors related to school absenteeism during menstruation. Pain and fatigue was commonest (55.8%) response for

missing out school, followed by afraid of staining clothes (27.9%). 12.7 % girls commented lack of privacy to change and wash.





Adolescent girls are prospective mothers and providing them with a supportive environment, helping them manage their menstruation hygienically will boost their dignity and will go long way in protecting reproductive health and helping them to utilize education to full potential. In the current study majority of the respondents (72.5%) agreed that menstruation is a physiological process. Dasgupta A and Sarkar M (2008) documented similar findings in West Bengal where, 86.2% girls believed it is a physiological process.⁽¹⁰⁾ A large number of study participants (39%) mentioned mother as the first informant regarding menstruation. Majority of the respondents (72%) were comfortable discussing menstrual issues with their mothers. These findings are in consonance with study conducted by Kumar D et al (2015) in Chandigarh in which most common response (54.4%) identified was preference to discuss menstrual health issues with mothers.⁽¹¹⁾Ramath et al (2013) in Manipal also reported that mothers were the preferred discussant regarding menstrual issues.⁽¹²⁾ In the current study 61 % respondents had no knowledge regarding menstruation prior to onset of menarche and only 38.5% mentioned uterus as the main organ from which menstrual bleeding originates. These findings are consistent with study conducted by Deshpande et al (2018) in Maharashtra where 76% girls were unaware about menstruation prior to menarche.(13) Similarly in Nigeria Fehintola et al (2017) also documented that only 22.7% girls commented uterus as the main organ of menstrual bleeding.⁽¹⁴⁾ Since mothers in this study were the preferred discussant regarding menstrual issues and majority of them (32%) were illiterate, this could attribute to ignorance of the girls regarding menarche. These findings are in consonance with observations of Deshpande et al (2018) in Maharashtra, in which 47 % mothers were illiterate were the first informant and were closest confidant teachers in 84 % of the cases regarding menstruation. (13)

Hygienic management of menstruation is instrumental in protecting and promoting reproductive health. The type of absorbent preferred by girls whether a sanitary napkin or cloth piece (new or reused), menstrual cups or tampons, depends on availability, procurement cost, facilities to change in privacy and their own comfort.⁽¹⁾Current study revealed that girls using sanitary pads as absorbent were in majority (67%), 20 % and 13 % were using new cloth piece and reused cloth piece as absorbent respectively ... These observations corroborate in a study conducted at Jammu and Kashmir by Kapoor G and Kumar D (2017) in which 59.09 % girls were using sanitary napkins and 27.2% were using new cloth piece as absorbent and 13.6% used old washed cloth piece.⁽¹⁵⁾Among those using cloth or reused cloth girls washing and drying cloth in adequate space and privacy was a problem faced by 62.5% girls. These findings are similar to Yasmin S et al (2013) in West Bengal in which 15.7% used old washed cloth and 70% of them faced problems in washing and drying in privacy.⁽¹⁶⁾

Provision of adequate water supply and sanitation with hygienically disposal facilities safe mechanism of menstrual material in school premises can help girls manage their menstruation in privacy and with dignity.⁽¹⁷⁾56 % girls in this study commented that reasons for not using pads was that the school lacked facilities to change pads in privacy coupled with difficulty to dispose them off, followed by high cost (30%). This was in accordance to findings of Ramnath R et al (2013) in Udupi Taluk in Manipalwhere majority (72.6%) responded that they were uncomfortable to change in school coupled with insufficient disposal facilities as commented by 24.2 % respondents. (12)82.5% girls in the current study took bath during menstruation and 82% washed their private parts before using a fresh pad or cloth piece which is a good practice. These findings are similar to observations reported by Yaliwalet al(2020) in which 92.8% urban girls and 94.8% rural girls took bath during menstruation.⁽⁶⁾Cleaning of genitals regularly after urinating prevents foul smell and accumulation of excess blood between skin and labia or crust around vaginal opening.⁽¹⁸⁾In the current study respondents who clean genitals after urinating during menstruation were in majority (82%). These findings are similar to observations in Ghana in a study conducted by Ameade E P K and Garti H A in which 69.3 % girls cleaned their genitals after urinating.⁽¹⁸⁾Indiscriminate waste

disposal could be an environmental hazard, in this study majority (65%) wrapped and disposed off the absorbent in bins which is in consonance with findings of Nautiyal H et al (2021) from Uttrakhand where 61.5 % girls disposed off absorbent in dust bins.⁽¹⁹⁾

In India menarche is considered as the maturity of the girl coupled with her preparedness for marriage and child bearing. Different taboos and myths come into play with a perception that menstruating girl is no more sacred and should not be touching idols or God.⁽²⁰⁾Restrictive practices followed in the current study were explored and the most common restriction imposed was attending religious functions or rituals (67.5%) followed by not attending marriage (61%) . 60 % girls were not allowed to enter kitchen and 59 % were not attending school. 57% and 54.5% did not go to temple and enter prayer room respectively. These findings corroborate with Parikh V and Nagar S (2022) in Gujrat where 74.8% study participants avoided visiting places of worship and 44 % avoided attending marriages or other rituals. The underlying basis is traditional beliefs and impurities associated with menstruation.⁽²¹⁾

Regular absenteeism adversely affect learning, scope for further education, leading to school drop outs resulting in early marriage, high fertility and teenage pregnancy.⁽²²⁾ In current study out of 200 respondents, 118 (59%) missed out their school during menstruation. Pain, fatigue and menstrual cramping were commonly reported reasons (55.08%) for school absenteeism.27.9% missed

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out school due to fear of staining clothes. These findings corroborate with Mohammed S *et al* (2020) in Ghana, in which 40.4 % missed out school during menstruation.⁽¹⁷⁾Vashist A et al (2018) in Delhi also explored pain and discomfort as the most common reason commented by 76.3% for missing out school and 28 % had fear of leakage or staining.⁽²³⁾

CONCLUSION

Safe practices during menstruation can be instrumental in protecting and promoting reproductive health. Since mothers were the preferred discussant in this study regarding menstrual health, caregivers can play a vital role in better understanding of menstruation, delinking myths and taboos. The role of WASH facilities can't be under estimated. A friendly environment coupled with gender segregated facilities can improve school attendance of girls.

RECOMMENDATION

Girls need access to correct information and menstrual supplies which can enable them to cope with psychological stress linked υp to menstruation. There is a need to give thrust to school health by roping in primary health care workers who can educate school teachers and create a receptive environment in order to break myths address factors linked to school absenteeism by providing pain relief material, disseminate information regarding therapies like hot fermentation, remedies like herbal tea and light stretching exercises.

REFERENCES

1) United nation Children's Fund –Guide to Menstrual hygiene materials (2019). https://www.unicef.org/media/91346/file/UNICEF-Guidemenstrual-hygiene-materials-2019.Accessed on July 10th,2023.

2) National Health Mission. Government of India. Operational Guidelines for Menstrual Hygiene Promotion among Adolescent Girls (10–19 Years) in Rural Areas. Government of India; New Delhi, India: 2011. Available from URL :httpnhm. gov.in /images /pdf / programmes/arsh/guidelines/MHS-operationalguidelines.pdf. Accessed on August 4th 2023.

3) Subhashree N, Naik PR, Nirgude A S (2020). Swachh Bharat Swachh Vidyalaya Campaign: Situation analysis of select schools in Karnataka State, India. *Indian J Community Health.32* (2):-432-437. DOI:10.47203/IJCH.2020.V32i02.023.

4) Kumar D, Goel NK, Puri S, Gupta N (2015).Restrictions during menstruation: What unmarried girls in UT Chandigarh think?. *Sch. J. App. Med. Sci*, *3*(2):595-601. DOI: 10.36347/sjams.2015.v03i02.013.

5) UNESCO-Puberty Education And Menstrual Hygiene Management.2014. Available From URL: https://unesdoc.unesco.org/ark:/48223/pf0000226792.

6) Yaliwal RG, Birader AM, Kori SS, Madanur SR, Pujeri SU, Shahnawaz M (2020). Menstrual morbidities, menstrual hygiene, cultural practices during menstruation, and WASH practices at schools in adolescent girls of north Karnatka, India: A cross – sectional prospective study. *Obstet Gynecol Int.* DOI: Org /10. 1155 /2020/6238193.

7) Shingade PP, Suryavanshi J, Kazi Y (2016). Menstrual hygiene among married women: A hospital based crosssectional study in an urban slum of Mumbai, India. *Int J Community Med Public Health*, 3:57-61. DOI:.org/10.18203/2394-6040.ijcmph20151218.

8) Basu M, Mathiyalagen P, Peramasamy B, Vasudevan K, Cherian J, Sundar B (2017). A descriptive crosssectional study on menstrual hygiene and perceived reproductive morbidity among adolescent girls in a union territory, India. *J Family Med Prim Care*,6:360-5. DOI: 10.4103/2249-4863.220031.

9) Borkar SK, Borkar A, Sheikh MK, Mendhe H, Ambad R, Joshi A (2022). Study of menstrual hygiene practices among adolescent girls in a tribal area of central India.*Cureus*, 14(10). DOI: 10.7759/cureus.30247. eCollection 2022 Oct.

10) Dasgupta A and Sarkar M (2008). Menstrual hygiene: How hygienic is the adolescent girl? *Indian J Community Medicine*, 33(2):77–80. DOI: 10.4103/0970-0218.40872

11) Kumar D, Goel NK, Puri S, Gupta N (2015). Restrictions during menstruation: What unmarried girls in UT Chandigarh think?. *Sch. J. App. Med. Sci.*3 (2):595-601. DOI: 10.36347/sjams.2015.v03i02.013.

12) Ramanth R, Ghosh D, Lena A, Chandrasekaran V (2013). A study on knowledge and practices regarding

menstrual hygiene among rural and urban adolescents girls in Udupi Taluk, Manipal, India. *Glob J Med public Health*, 2(4):1-9.

13) Deshpande TN, Patil SS, Gharai SB, Patil SR, Durgawale PM (2018). Menstrual hygiene among adolescent girls – A study from urban slum area. *J Family Med Prim Care*,7:1439-4. DOI:10.4103/jfmpc.jfmpc_80_18.

14) Fehintola FO, Fehintola AO, Aremu AO, Idowu A, Ogunlaja OA, Ogunlaja IP(2017). Assessment of knowledge, attitude and practice about menstruation and menstrual hygiene among secondary high school girls in Ogbomoso, Oyo state, Nigeria. *Int J Reprod Contracept Obstet Gynecol*, 6(5):1726-1732. DOI: doi.org/10.18203/2320-1770.ijrc0g20171932.

15) Kapoor G and Kumar D (2017). Menstrual hygiene: knowledge and practice among adolescent schoolgirls in rural settings. *Int J Reprod Contracept Obstet Gynecol*, 6(3):959-962. DOI:10.18203/2320-1770.ijrcog20170564.

16) Yasmin S, Manna N, Malik S, Ahmed A, Paria B (2013). Menstrual hygiene among adolescent school students: An in depth cross- sectional study in an urban community of West Bengal , *Ind J Dent Med Sci*,5(6):22-6. DOI:10.9790/0853-0562226.

17) Mohammed S, Reindorf REL, Awal I (2020). Menstrual hygiene management and school absenteeism among adolescents in Ghana: Results from a school-based cross-sectional study in a rural community. *Int J Reprod Med*, (4):1-9. DOI:10.1155/2020/6872491.

18) Ameade EPK, Garti HA (2016). Relationship between female university students' knowledge on menstruation and their menstrual hygiene practices: A study in Tamale, Ghana. *Advances in Preventive Medicine*. DOI:.org/10.1155/2016/1056235.

19) Nautiyal H, Kumari A, Ranjana K, Singh S (2021). Knowledge, attitude and practice towards menstrual hygiene among adolescent girls: A case study from Dehradun, Uttarakhand. *Himalayan J. Soc. Sci. & Humanities*, 16(1):35-48.DOI: org/10.51220/hjssh.v16i1.3.

20) Kokiwar PR, Ramesh B, Reddy PS, Vindhaya P, Nischala R.H, Koma Lps (2018). Menstrual hygeine among school going adolescent girls: A comparative Study among Government and Private schools. *Indian Journal of Preventive Medicine*,6(1). DOI:10.21088/ijpm.2321.5917.6118.10.

21) Parikh V, Nagar S (2022). Menstrual hygiene among adolescent girls studying in a university of Gujarat. *J Family Med Prim Care*, *11*(7):-3607-12. DOI: 10.4103/jfmpc_jfmpc_2303_21.

22) Shah V , Nabwera H, Sonko B, Bajo F, Faal F,Saidykhan M,, Jallow Y, Keita O,Schmidt W P, Torondel B (2022). Effects of menstrual health and hygiene on school absenteeism and drop-out among adolescent girls in Rural Gambia. *Int. J. Environ. Res. Public Health*, 19(6):1-23. DOI:.org/10.3390/ijerph19063337.



23) Vashisht A, Pathak R, Aggarwalla R, Patavegar B N, Panda M (2018).School absenteeism during menstruation amongst adolescent girls in Delhi, India. *J Family*

.

Community Med, 25(3):-163-168. DOI: 10.4103/jfcm.JFCM_161_17