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Original Research Article

Menstrual hygiene among the undergraduate medical college students in Churachandpur Medical College, Manipur, North Eastern state of India

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ABSTRACT

Background: Menstruation is very important monthly event in the life of adolescent. Educating girls and women about menstrual hygiene is vital to break taboos, promote health, and empower them to manage their periods hygienically and confidently. For this knowing the awareness and practices and prevalence menstruation related health issue are also important.

Methods: The study is a cross-sectional observational study done on all undergraduate's female medical graduates of Churachandpur medical college (Imphal Campus) Manipur. from May 15th, 2024 to June 15th, 2024.

Results: In the current study, it is noted that 100% of participants have menstrual related health issues and dysmenorrhea was the commonest among the menstrual related health issues. And a huge number of students did not receive treatment for the menstrual related health issues. Less than 50% of students have accessibility to separate toilet. And 55% have restriction during menstrual cycle.

Conclusions: It is noted from the current study that there are numerous problems regarding menstrual hygiene that need to be address. So, providing more accessible menstrual clinics is crucial.

Keywords: Menstrual hygiene, Awareness, Adolescent, Northeastern India, Manipur

INTRODUCTION

Menstruation marks the beginning of reproductive life and it's a very important milestone in a girls' life. Many girls have scanty knowledge about menstruation as its not frequently spoken in the society, specially at homes.¹

The healthcare needs and requirements of women during menstruation is called menstrual hygiene. Menstrual hygiene is crucial for women's health and well-being. It refers to the practices and measures taken during menstruation to ensure cleanliness, comfort, and overall health. Proper menstrual hygiene includes using clean and absorbent materials like sanitary pads or tampons,

changing them regularly, and maintaining personal hygiene by washing hands and genital areas with clean water and soap. Educating girls and women about menstrual hygiene is vital to break taboos, promote health, and empower them to manage their periods hygienically and confidently.

Menstrual hygiene management is important issue the world health organization (WHO) and UNICEF is addressing to ensure healthy and dignified menstruation.²

The most vulnerable time for developing any kind of reproductive tract infections, urinary tract infections, and various sexually transmitted diseases is the menstruation.³

Several health adverse outcomes may be associated due to several perceptions and practices within the community which are practiced during menstruation.⁴

Adolescent women are often inexperienced in menstrual hygiene management.⁵⁻⁷

Particularly in developing countries like ours, girls and women face substantial barriers to achieving adequate menstrual management.⁸

Poor menstrual hygiene management can also compromise women's educational and economic opportunities achieved. Without ensuring safe and dignified menstruation in all women several sustainable development goals (SDGs) such as SDG 3 (healthy lives and well-being for all), SDG 4 (inclusive and equitable education), SDG 5 (gender equality), and SDG 8 (equal economic opportunities) cannot be achieved.^{9,10} Study at Churachandpur medical college (Imphal campus) will help in knowing prevalence of menstrual problems and health issues, perceptions and practices during menstruation within community of medical undergraduates.

Aim

The aim of the present study is to evaluate the prevalence of menstrual problems and health issues and perceptions and practices during menstruation within the community of female medical undergraduates of Churachandpur medical college (Imphal Campus) Manipur.

Objectives

Objectives of the study were to evaluate the prevalence of menstrual problems, to study the perceptions and practices during menstruation and menstrual hygiene.

METHODS

The study is a cross-sectional observational study done on all undergraduate's female medical graduates both phase 1 and phase 2, who are currently studying in Churachandpur medical college (Imphal Campus) Manipur. The study was conducted at Churachandpur medical college, Manipur, which is a newly established rural government medical college located in a rural area of Manipur state for duration of 1 month from May 15th, 2024, to June 15th, 2024.

Inclusion criteria

Consenting female students of phase one and phase two undergraduate medical students studying in Churachandpur medical college were included.

Exclusion criteria

Students who didn't give consent for the study and students who do not response to all the questionnaires were excluded.

Data collection

After informing all the stakeholders, department faculties and students about the project plan, approval was taken from the IEC (institutional ethics committee of JNIMS). Data collection tool in the form of questionnaire was designed. Validation of the data collection tool was done and depending on the feedback the data collection tool was modified.

Study was done only after taking consent from the participating students and the identity anonymity were maintained for all the participating students.

Before the data collection students were given a brief talk about the project and how the result of the project will help the faculties and the college to understand the students' problems regarding menstruation and to implement the necessary changes for good menstrual hygiene among the female students.

The validated data collection tool in form of validated questionnaire was administer to the students to determine the level of menstrual hygiene practice, menstrual problems and the health issues as well as their perceptions and practices during menstruation. The predesigned questionnaire was prepared using various studies related to the topic and was double validated. The questionnaire was of two parts-first part was of demographic characteristics while the second part will be of menstruation practices and hygiene. The components included: Health issues related to menstruation, ideas regarding the sanitary items used, restrictions and practices during menstruation and accessibility to toilet.

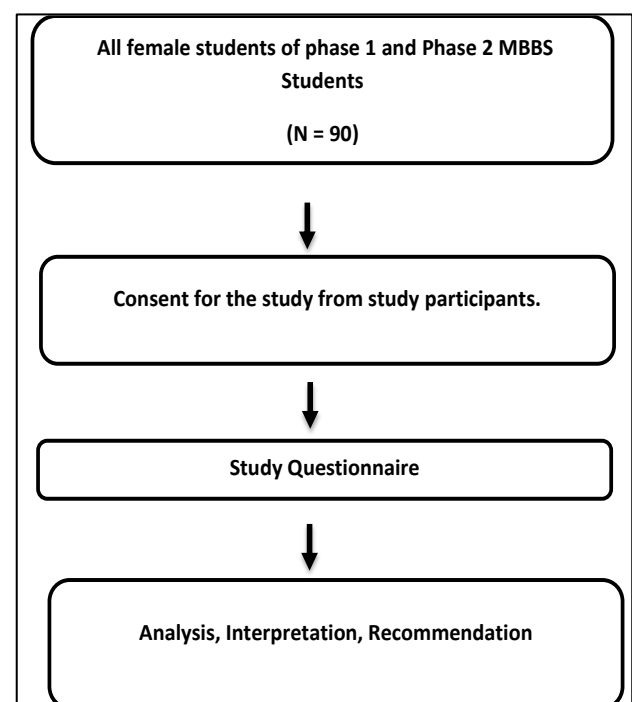


Figure 1: Flow chart showing research process.

Statistical analysis

All data was kept confidential. It was entered into an excel spreadsheet and analysed.

Prevalence was calculated as percentage and 95% confidence interval. $P < 0.05$ was taken as significant.

RESULTS

In the present study 84 (93%) students out of 90 females participated in the study (Figure 2) and the average age range of the participants was 20-23 years (Figure 3).

Most of the participants (48%) belongs to Hindu religion. The 71% of the participants were from nuclear family. Only 6% have illiterate mothers.

The average age of menarche was 12.7 years.

The 100% of participants have menstrual related health issues and dysmenorrhea (79%) was the commonest among the menstrual related health issues. And a huge number of students 47 students (56 %) did not receive treatment for the menstrual related health issues (Figure 4). Most of the students (77%) had awareness of menstruation before menarche. While 100% knows that menstruation is from the reproductive tract only 64% have known uterus as source of bleeding (Figure 5).

Only 55% have restrictions during menstruation. The 44% (37 out of 84 students) had restriction in religious activities (Figure 6), 99% (83 out of 84) students used sanitary pads (Figure 7) and 93% (78 out of 84) students disposed the pads in dustbin by wrapping in newspaper (Figure 8). The 55% (46 out of 84) students change pads 2 to 4 times per day and 82% (69 out of 84) students washes the genitals more than 2 times per day. The 80% of students having continuous water supply and over 50% using commercially available vaginal solutions. 52% of students uses public toilet (Figure 9).

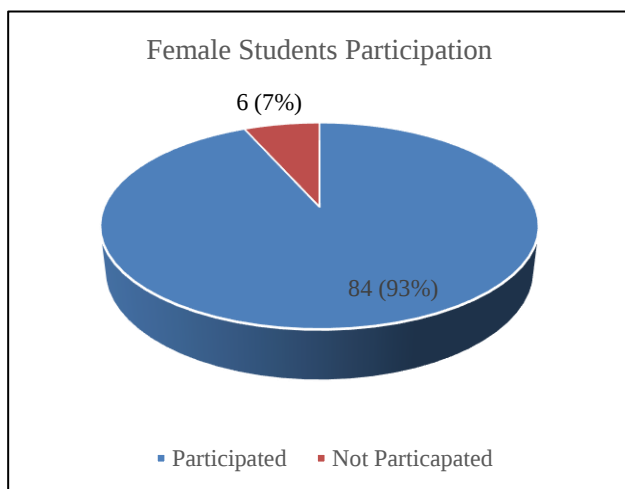


Figure 2: Female students' participation.

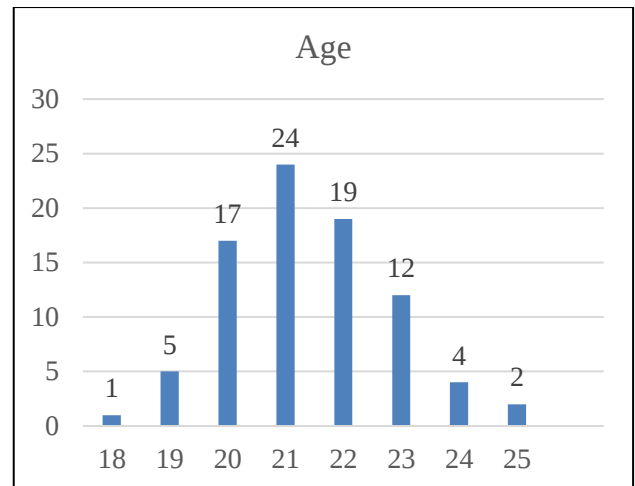


Figure 3: Average age range of the participants.

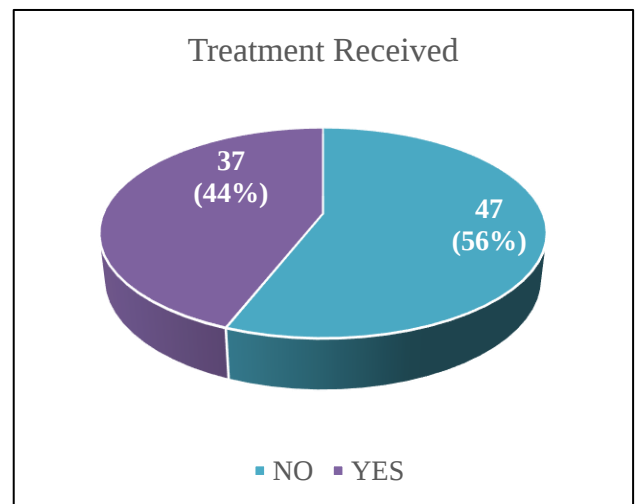


Figure 4: Treatment taken by the participants for menstrual related health issues.

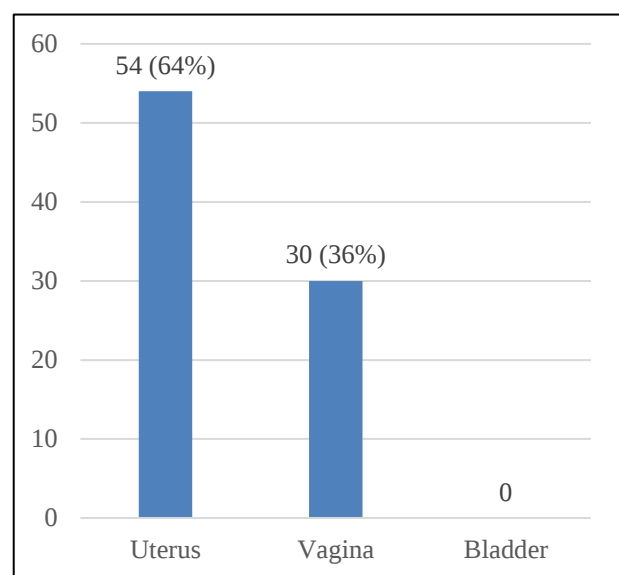


Figure 5: Knowledge of source of bleeding.

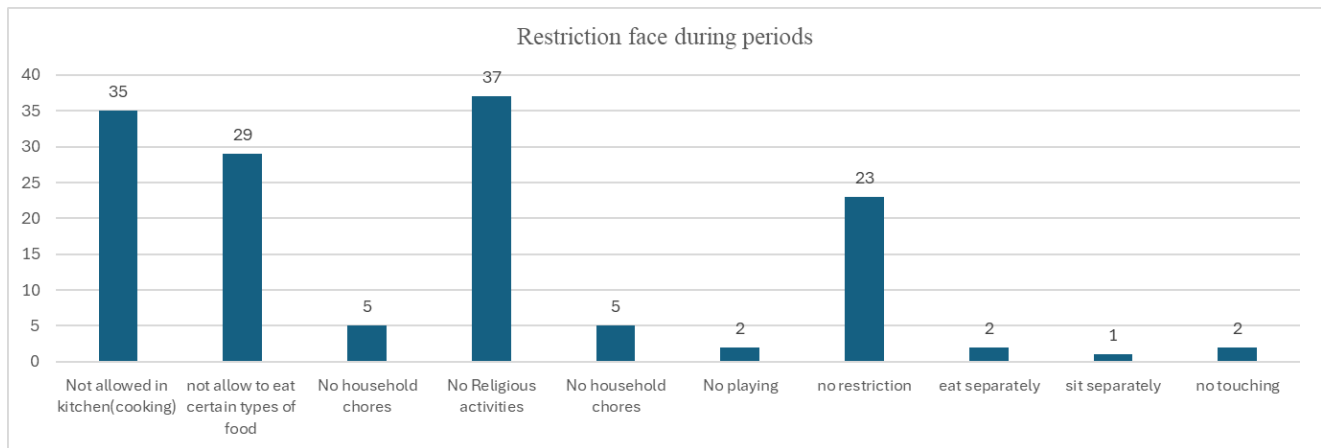


Figure 6: Restrictions the study participants have during the menstrual cycle.

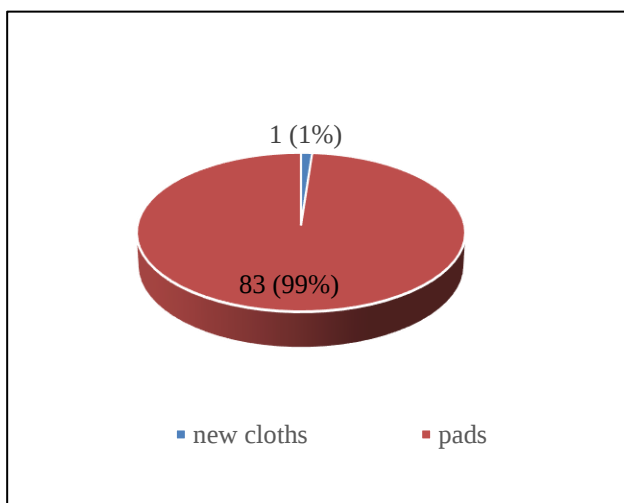


Figure 7: Absorbent used during menstruation.

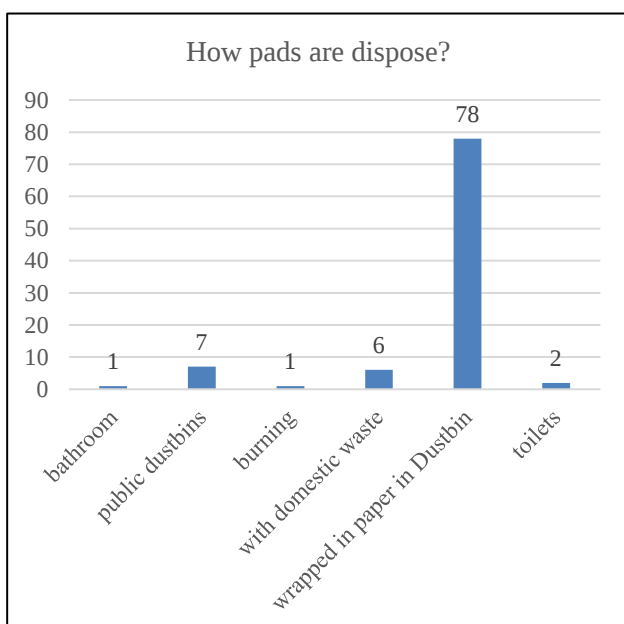


Figure 8: Ways of disposing the pads.

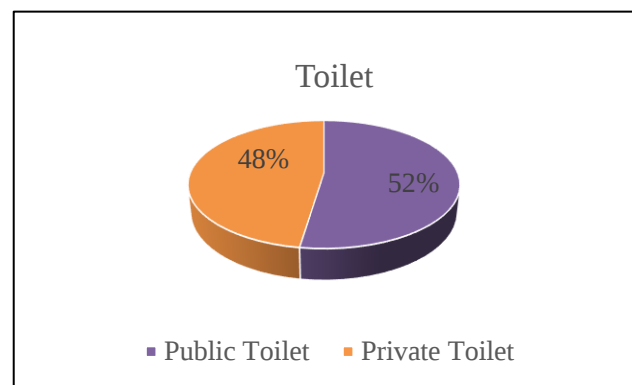


Figure 9: Types of toilets the participants use.

DISCUSSION

In the present study, age range of maximum participants was 20-23 years which is almost the same as in the study done among medical students by Kochubovski et al but the age range is different from the study done by Jain et al in community where the age range was 14 -16 years.^{11,12} The mean age of menarche is 12.7 which is almost same as 12.2 years in study done by Omiduar et al.¹³

In our current study 100% of the students have menstruation related health issues and complain of dysmenorrhea was seen in 79% which is much higher than the study done by Sharanya et al (61%).¹⁴

In our study 77% of the students were aware of menstruation before menarche which is much higher than the study of Dudeja et al (56%).¹⁵

In our study 99% of the students uses sanitary pads which is much higher than the study done by Behera et al where the use of sanitary pads was found to be only 39.8%.¹⁶

In our study 93% of the students disposed-off the used pads by wrapping in newspaper in the dustbin while in the study done by Behera et al 41.4% disposed the used pads in water bodies.¹⁷

Only 55% of the students have restrictions during menstruation as contrast to 77% in study of Rokade et al.¹⁸ Religious activity restriction were the most common restriction faced by the students (44%).

In contrast to study of Yasmin et al where only 19% uses public toilet in our study its 52%.⁴

Limitations

The current study was done only on female medical students of Churachandpur medical college which included only a small sample size. It represents only a small portion of the community, and the result of the study doesn't represent the non-medical community so, there is need of large-scale study.

CONCLUSION

It is very interesting that all the students have menstrual health issues, yet only 44% of students receive treatment for menstrual ailments. So, providing more accessible menstrual clinics is crucial. Despite 80% of students having continuous water supply and over 50% using commercially available vaginal solutions, only 47% have access to separate washrooms. So, there is a clear indication to emphasize toilet hygiene.

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Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

- Patle RA, Kubde SS. Comparative study on menstrual hygiene in rural and urban adolescent. *Int J Med Sci Public Health*. 2014;3(4):129-32.
- Roeckel S, Cabrera-Clerget A, Yamakoshi B. Guide to menstrual hygiene materials: UNICEF. 2019;6-36. Available at: <https://www.unicef.org/media/91346/file/UNICEF-Guide-menstrual-hygiene-materials2019.pdf>. Accessed on 14 April 2024.
- Barathalakshmi J, Govindarajan PK, Ethirajan N, Felix AJ. Knowledge and practice of menstrual hygiene among school going adolescent girls. *Natl J Res Commun Med*. 2014;3:138-42.
- Yasmin S, Manna N, Mallik S, Ahmed A, Paria B. Menstrual hygiene among adolescent school students: An in-depth cross-sectional study in an urban community of West Bengal, India. *J Dent Med Sci*. 2013;5(6):22-6.
- Kyilleh JM, Tabong PT, Konlaan BB. Adolescents' reproductive health knowledge, choices and factors affecting reproductive health choices: a qualitative study in the west Gonja District in northern region, Ghana. *BMC Int Health Hum Rights*. 2018;18(1):6.
- Rani PS. Knowledge and practices of menstrual hygiene among married adolescents and young women in Chittoor District of Andra Pradesh: India. *IOSR J Nurs Heal Sci*. 2014;3(2):6-15.
- Kansal S, Singh S, Kumar A. Menstrual hygiene practices in context of schooling: a community study among rural adolescent girls in Varanasi. *Indian J Community Med*. 2016;41(1):39-44.
- Kuhlmann AS, Henry K, Wall LL. Menstrual hygiene management in resource-poor countries. *Obstet Gynecol Surv*. 2017;72(6):356-76.
- Geertz A, Iyer L, Kasen P, Mazzolar F, Peterson K. Menstrual health in India: an update. 2016.
- Guterres A. The Sustainable Development Goals Report 2020: United Nations publication issued by the Department of Economic and Social Affairs. 2020.
- Kochubovski M, Petrova A, Memeti S, Bukovec D. Menstrual hygiene among medical female students. *Acta Sci Women's Health*. 2021;3(10):11-4.
- Jain R, Anand P, Dhyani A, Bansai D. Knowledge and awareness regarding menstruation and HIV/AIDS among schoolgoing adolescent girls. *J Family Med Prim Care*. 2017;6(1):47-51.
- Omidvar S, Begum K. Menstrual pattern among unmarried women from south India. *J Nat Sci Biology Med*. 2011;2(2):174.
- Sharanya T. Reproductive health status and life skills of adolescent girls dwelling in slums in Chennai, India. *Natl Med J India*. 2014;27(6):305-10.
- Dudeja P, Sindhu A, Shankar P, Gadekar T. A cross-sectional study to assess awareness about menstruation in adolescent girls of an urban slum in western Maharashtra. *Int J Adolescent Med Health*. 2016.
- Behera MR, Parida S, Pradhan HS, Priyabadini S, Dehury RK, Mishra B. Household sanitation and menstrual hygiene management among women: Evidence from household survey under Swachh Bharat (Clean India) Mission in rural Odisha, India. *J Family Med Prim Care*. 2022;11(3):1100-8.
- Behera D, Mohanta N, Behera MR, Tripathy S, Kumar A. Examining toilet use and menstrual hygiene practices among beneficiary households of Swachh Bharat Abhiyaan (Clean India Mission) in rural areas of Mayurbhanj district of Odisha, India. *J Family Med Prim Care*. 2024;13(3):971-6.
- Rokade HG, Kumavat AP. Study of menstrual pattern and menstrual hygiene practices among adolescent girls. *Natl J Community Med*. 2016;7(05):398-403.

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APPENDIX

Data collection tool-Questionnaire (study Performa)

1. Name-
2. Age-
3. Religion-
4. Type of family-Join/Nuclear
5. Education level-
6. Education of mother-
 - Illiterate
 - <10th std
 - 10+2
 - Graduate
 - Postgraduate
7. Education of father-
8. Household income-
9. Age of menarche (1st period)-
10. Do you have menstrual related symptoms-pain abdomen/headache/nausea/vomiting/weakness/breast pain/itching around genitalia/difficulty urination/difficulty passing stool
11. Treatment received- Yes/No
12. Do you know about period before you have periods-Yes/No
13. Do you know from where bleeding occurs-uterus/vagina/ bladder
14. How frequently you change pads-frequently/infrequently
 - Once a day/twice a day (or)
 - 2-4 times per day (or)
 - 5-6 times per day (or)
15. What do you use during menstruation-pads/new cloths/old clothes?
16. How do you dispose pads-open/bathroom /toilets/public dustbins/with domestic waste/burning/wrapped in paper and in dustbin
17. Do you have restrictions during periods-Yes/No
 - Not allowed in kitchen(cooking) (or)
 - Not allow to eat certain types of food (or)
 - Sit separately/no touching/no restriction (or)
 - Playing/going to college (or)
 - Household chores (or)
 - Eat separately (or)
 - Religious activities.
18. Do you have water supply-continuous/intermittent
19. Do you have toilet-common public/separate
20. Agents used for cleaning genitals-water/water soap/water and other vaginal solutions
21. Frequency of washing genitals-<2 times per day/>2 times per day