A descriptive study of menstrual hygiene practices among women at the rural area of Haryana

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Abstract Context: Menstruation is physiological phenomenon for women demonstrating her ability for reproduction. In developing country, such as India, menstrual hygiene management (MHM) is a significant issue for women because of poor water supply and sanitation, privacy and security, and inappropriate puberty education. Lack of hygienic MHM items (absorbents) also cause women to perceive menstruation as a burden.

Aims: This study aimed to assess the practices of women regarding menstrual hygiene.

Setting and Design: The present, descriptive analytical study was conducted in three rural provinces of Ambala district in Haryana, India (from October 2017 to October 2018).

Materials and Methods: The quantitative research approach with descriptive survey design was used to assess the practices of 800 women residing in the rural areas of Ambala District, Haryana by using the convenience sampling technique. Women under the reproductive age group of 14–49 years who attained the menarche were included in the study.

Statistical Analysis Used: The data were collected by using the structured practices questionnaire. Descriptive analysis was done using percentage and frequency.

Results: Majority (56%) of women was in the age group of 14–25 years and most (92%) of them were eager to know more about menstrual hygiene. Majority (79.87%) of women assumed menstruation as a biological process, whereas only 11.09% assumed the menstruation blood as a normal blood. Nearly two-third (70.50%) preferred to use cloth as absorbent and most (88.37%) of women dispose used absorbent in dustbin. About 34.72% were facing religious limitations as a problem during menstruation.

Conclusion: Practices regarding menstrual hygiene is still not adequate, whereas many of the socio-cultural restriction persist among women. There is a need of appropriate education to abolishing the myths related to menstruation.

Keywords: Menstrual hygiene practices, Menstruation, Women

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INTRODUCTION

Menstruation is a physiological phenomenon among women during adolescence.^[1] Despite the fact menstruation is a natural process, it is still viewed as something impure or dirty in Indian culture and society. Furthermore, it is related with myths, taboos, and cultural restrictions.^[2] Practices associated to menstrual hygiene are one of the major concern as it has health impact and if left neglected may lead to reproductive tract infections, toxic shock syndrome, etc., and can elevate the sexual health problems.^[3-5]

Worldwide, WASH (water, sanitation, and hygiene) enlighten the issue related to menstrual hygiene management (MHM) and their impact on the outcome of human development. World Bank reported the lack of adequate privacy, education, limited access to absorbent, and poor sanitation for women during menstruation among countries such as Nigeria^[6] (25%), Bangladesh^[6] (6%), and Kenya^[7] (32.5%) results in short attendance of girls, i.e., missed at least one day of school.

In India, the UNICEF (2016) report highlighted that in Tamil Nadu (79%), UP (66%), Rajasthan (56%), and West Bengal (51%) women were unaware of menstrual hygiene practices.^[8] In rural India, girls hardly come up with problems associated to menstruation and don't feel comfortable talking about it because of culture silence, taboos, and beliefs. A systematic review and meta-analysis reported that, among rural girls commercial pads are not common also girls experience religious restrictions and about quarter of population missed their school during periods.^[9] Another study conducted in Haryana reported that among rural girls only 9.2% follow healthy practice.^[10] Furthermore, culture of silence prevailed from deep-rooted sociocultural taboos and beliefs associated with menstruation.^[11]

Various studies had enlightened the need of strengthening the MHM programmes in India due to poor individual knowledge regarding physiological process, improper disposal, pain management, material used as absorbent and social taboos or myths like restriction to religious place and food items.^[9,10,12] The problem is wide spread and multifactorial and need to follow strategic approach in dealing with it. This current study aimed to assess menstruation hygiene practices among women at the rural area of Haryana, India.

MATERIALS AND METHODS

The present study was conducted on 800 women residing in three rural provinces of Ambala District, Haryana, from October 2017 to 2018. During 1-year period, three rural province, i.e., Barara Village, Adhoya Village, and Holy village were surveyed, and data were collected on the basis of one to one interview technique.

Sample size and sampling technique

The sample included women under the reproductive age group of 14–49 years who attained the menarche, understand Hindi or English and willing to participate in the study. Sample size was estimated considering 32.70% practice of using sanitary pad during menstruation as reported by Bachloo *et al.*,^[13] design effect 2.3, and relative precision (d) at 95% confidence interval and absolute error of 5%.

The formula used is, $n = 2.3* z\alpha^2 p (1-p)/d^2$

Applying value in formula, $n = 2.3 \times (1.96)^2 \times 0.327 \times 0.673 / (0.05)^2 = 777.79 - 800$

Thus, minimum estimated sample size was 800 for the study. Data were collected by the convenience sampling technique.

Tool and method of data collection

The tool consists of two parts, Part A is a demographic profile, including age, educational status and religion, and Part B consists of 15 questionnaires in regard to perception and practice regarding menstrual hygiene. It was prepared with the inputs of seven experts from the field of community, gynecology, and nursing to enhance the validity of the instrument. Reliability of the perception and practice questionnaire was assessed by the test-retest method on the gap of 15 days, and it came out to be 0.76 which is considered reliable. Data were collected by one to one interview, and it took an average of 10–12 min to conduct one interview.

Data analysis

The data were analyzed using MS excel and spreadsheet. The frequency percentage distribution was used to analyze the practices.

Ethical consideration

This study was ethically approved in the Institutional Ethical Committee of Maharishi Markandeshwar Deemed to be University (IEC/MMU/1308). Written informed consent was obtained from the participants regarding willingness to participate and confidentiality was maintained.

RESULTS

Total data from 800 women data were analyzed. The socio-demographic characteristics of participants are shown

in Table 1. Majorities (56%) of the women were in the age group of 14–25 years, and more than three-fourth (88.75%) followed Hindu religion. Majority (41%) women had education up to of senior school. Most (92%) of the women were eager to know more about menstrual hygiene, whereas 48% had information of menstrual hygiene from newspaper and magazine as a source of information. Majority (88.12%) women considered menstrual blood as dirty, impure, and dangerous. Majority (79.87%) of the women perceives menstruation as a biological process.

Table 2 shows majority (70.5%) of women used cloth as absorbent during menses, whereas 24.25% use sanitary napkin. Majority (95.25%) wrap the soiled absorbent before disposing, out of which 70.47% women wrap the soiled absorbent in newspaper or paper and then dispose it in dustbin (88.37%). More than half (59.62%) used soap and water to clean or wash external genitalia and changes undergarments daily (60.37%). About 36.12% women were facing religious limitations as a problem with menstruation also majority (60.12%) faces restriction during menstruation such as avoid visiting religious place, social gathering, cooking food, and touching food items and avoid hair wash, and restrictions imposed by parents (43.50%).

Further it depicts, 58.87% women choose their pad as per their choice. About 41% women got feared at the time of menarche and 45% thought society should talk openly and see menstruation as normal phenomenon. Majority 59.12% of the women had never thought of asking any another women regarding absorbent used during menstruation.

DISCUSSION

Our study results depict that 79.87% of the participants observed menstruation as biological process, whereas 20.12% observed as a curse and disease, consistent to the findings of Gupta Das^[14] (86.25%) and Sarkar^[12] (97%) where girls

Variable	Frequency, n (%)
Age (years)	
14-25	448 (56.0)
26-37	269 (33.6)
38-49	83 (10.3)
Educational status	
Illiterate	71 (8.87)
Primary school	123 (15.37)
Secondary school	328 (41)
Senior secondary	172 (21.5)
Graduated	106 (13.25)
Religion	
Hindu	710 (88.75)
Sikh	66 (08.25)
Muslim	20 (02.5)
Buddhist	4 (00.5)

 Table 2: Frequency and percentage distribution of women

 regarding menstrual hygiene practices (n=800)

regarding mensuluar hygiene practices (11-000)	
Practice of menstrual hygiene	Frequency (%
Material used as an absorbent	
Sanitary napkin	194 (24.25)
Cloth	564 (70.5)
Both sanitary napkin and cloth	12 (1.5)
Paper roll/tissue	30 (3.75)
Before disposing, do you wrap the soiled absorbent Yes	762 (05 25)
No	762 (95.25) 38 (4.75)
lf yes	00 (1.7 0)
Newspaper or paper	537 (70.47)
Plastic bag	38 (4.98)
Both newspaper or paper and plastic bag	187 (24.54)
Used absorbent disposed in	
Dustbin	667 (88.37)
Burned	72 (09)
Dumping Open field	50 (6.30) 11 (1.40)
Use of external genitalia cleaning item	11 (1.40)
Soap and water	477 (59.62)
Only water	297 (37.12)
Tissue paper	14 (1.75)
Intimate wash	12 (1.50)
Frequency of changing undergarments during	
menstruation	400 ((0.07)
Daily Twice a day	483 (60.37)
Twice a day Alternate day	236 (29.50) 22 (2.75)
After soiled	59 (7.37)
Problem dealing with menses	07 (7.07)
Nonavailability of absorbent	72 (09)
Disposal	212 (26.5)
Religious limitations	289 (36.12)
Restrictions from family	30 (3.75)
All the above	197 (24.62)
Restrictions during menses	216 (27)
Avoid visiting religious places Avoid attending marriages or social functions	216 (27) 63 (7.87)
Cannot work in the kitchen and touch food item	12 (1.50)
like pickle	()
Cannot wash hair	28 (3.50)
All the above	481 (60.12)
Restriction done by	
Parents	348 (43.50)
Elderly people	327 (40.87)
Significant male member Significant female member	31 (03.87) 94 (11.75)
Feeling while buying sanitary pad	94 (11.7 J)
Shy and tell the shopkeeper to wrap and give	191 (23.87)
I choose it as per my choice, don't care about	471 (58.87)
others	()
Do not buy myself	138 (17.25)
Reaction on attainment of menarche	
No reaction	180 (22.50)
Embarrassed	210 (26.25)
Anxious/fear	328 (41)
Guilty Things you want regarding menstruation	82 (10.25)
Society/people should talk openly and see as	360 (45)
normal phenomenon	000 (10)
Good sanitation facility to prevent school dropout	124 (15.50)
Abolish the myths related to it	168 (21)
New generation should not face what same as me	148 (18.50)
Did you ask any another women regarding material	
used during menstruation	207 (40.00)
Yes No, never thought about it	327 (40.90) 473 (59.12)
	+/0(0/.12)

believed menstruation as normal physiological process, whereas, in contrast study conducted by Khanna *et al.*,^[3] nearly 70% thought menstruation as an abnormal process.

Most of the women (88.12%) considered menstrual blood as impure and dirty, whereas only 11.87% consider as normal biological phenomenon which is same as found by Sharma^[15] where 74.4% observe menstruation as time of impurity. The above observation could be due to literacy level or educational status of the older adults, mother, and absence of health education programme in community.

In the present study, 70.5% of participants preferred to use cloth as a material of absorbent which was same as reported by Bachloo^[13] (55.5%) and Kansal^[16] (69%). This could be because of nonavailability of the sanitary pad, high cost of disposal pad, and ignorance among selected rural women who refrain from using hygienic material during menstruation.

Like other study results Hinaben^[17] (71.94%) and Kavitha^[18] (71.7%), our study participants use dustbin (88.37%) to dispose the used absorbent and 70.50% of women wrap the soiled absorbent before disposing in newspaper and paper. This might be because of taboos and shame related to see the soiled absorbent in open which make them embarrassed of it.

Furthermore, current study participant use soap and water (59.62%) to clean the external genitalia during menstruation which is similar to the findings of Subhash^[19] (56.16%) and Sarkar^[11] (63.20%) and Hinaben^[17] (68.18%). This can be due to the awareness of the study participants about the morbidities related to unhygienic practices during menstruation.

Further study results showed, 60.37% women reported to change their undergarments on daily basis which is more than reported by Kavitha (8.71%).^[18] Furthermore, 60.12% faced restrictions such as religious limitation, can't wash hair, touch pickle or food item, cannot attend the social functions imposed by parents (43.50%) which is consistent with other studies conducted by Pallavi,^[15] Sarkar,^[11] Sridhar^[20] Neeraj,^[21] and Kamath.^[22] This can be because of the cultural practices and myths related to menstruation which is pass onto from one generation to another from the older adults.

Kamath^[22] found that 52.9% women become fearful at attainment of menarche which is similar to the present study (41%). The reason can be the lack of awareness and knowledge regarding the menarche. Nearly half (45%)

of women wanted that people should talk openly and see menstruation as normal phenomenon. Review reports have shown that household level men never discusses menstrual issues with their wives and daughters.^[23] Parents do not allow boys to discuss such topics as they were not important for their future and attached to shame. Due to unwillingness, myths, prejudices, and misconceptions, it is difficult to talk about menstruation with men and boys. However, by encouraging men and boys into group discussions and regular community meetings, their perception can be changed. Recent Hindi movie "Padman" worked as an initial step in that direction.

CONCLUSION

There is a need of appropriate education regarding safe and hygienic practices also, to make appropriate choices to lead healthy reproductive life and lower risk of RTI's. Male sensitization at community level to increase their understanding and thereby foster supportive attitude will have stronger effect in removing discriminatory practices faced by women. Involvement of key cultural influencers such as social and religious leaders will help in countering the myths and misconceptions at societal level. Decentralized models for the production of low cost sanitary napkins by community-based organizations/ self-help groups can be promoted to provide affordable, environment-friendly menstrual absorbents.

Conflicts of interest

There are no conflicts of interest.

Authors' contribution

PS did conceptualization, data collection, data presentation, writing and reviewing. SK helped in data collection and analysis. HL helped in data collection, interpretation and analysis. JS did study consultation and project administration. The manuscript has been approved by all authors to represent honest work.

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