Abstract

Background: Government schemes for the promotion of Menstrual Hygiene Management (MHM) among adolescent girls in India are underpinned by crucial implementation efforts from the frontline health workers, community health workers, and school teachers. Aim: The aim of the study is to identify the perspectives on menstrual health and hygiene management with regard to government schemes for sanitary pad distribution to adolescent girls among the frontline workers and the government school teachers located in urban resettlement colonies in Delhi. Methods: In-depth interviews were conducted with 30 accredited social health activists, 30 Anganwadi Workers (AWW), and 30 auxiliary nurse midwives (ANMs) and five focus group discussions among 28 government school teachers from the middle, high, and secondary standard. Results: Most participants recognized the phenomenon of menstruation-related problems in adolescent girls and were aware of some of the common sociocultural, religious, and hygiene-related menstrual restrictions prevalent in their communities. All the participants believed that the pad distribution scheme was highly beneficial. However, in spite of inclusion of menstrual health promotion in the school curriculum, teachers often lacked self-efficacy in discussing challenges and health concerns related to MHM with their students. Conclusions: Despite their potential as community resources for adolescent girls, FHWs, ANMs, and school teachers often fail to impart crucial menstrual hygiene information and skills-building needed toward achieving effective, safe, and optimal MHM.

Keywords: Community health workers, India, menstrual hygiene management, school teachers

INTRODUCTION

Suboptimal Menstrual Hygiene Management (MHM) persists as a major public health challenge among girls and women in developing lower and middle-income countries.[1] In poor households, adolescent girls frequently lack access to affordable absorbent items, with inadequate access to water, sanitation, and hygiene facilities, contributing to poor MHM.[2,3] Cultural and societal taboos also impose restrictions on the ability of girls to participate in routine activities such as bathing and washing, while perceptions of bodily shame and being unclean during the menstrual period can lower self-esteem.[4,5] Menstruation is also associated with reduced school and college participation and may inversely affect learning outcomes, although the evidence in this regard is mixed.[6,7]

The improvement of social and reproductive health outcomes in adolescent girls, especially those belonging to a lower socioeconomic status, is emerging as a prioritized action area for health policy in India.[8] A promising focused intervention for promoting healthy Menstrual Health Promotion (MHP) in adolescent girls is improving their access to menstrual sanitary pads. In Delhi, under a Directorate of Education scheme, school girls from Class VI onward who are enrolled in government-run schools are provided a pack of six menstrual pads each month, free of cost with distribution handled by the school teachers. School dropout girls through the “UDAAN” scheme are eligible to receive six menstrual pads each month.

Address for correspondence: Dr. Yamini Marimuthu, Department of Community Medicine, Maulana Azad Medical College, New Delhi, India.
E-mail: yaminivaishnavidevi@gmail.com

How to cite this article: Garg S, Singh MM, Basu S, Bhatnagar N, Dabi Y, Azmi F, et al. Perceptions of frontline workers, female health workers, and school teachers in menstrual hygiene promotion among adolescent girls of Delhi, India: A qualitative study. Indian J Community Med 2021;46:201-5.
at highly subsidized prices with the distribution conducted by the accredited social health activists (ASHAs). Auxiliary nurse midwives (ANMs) are responsible for logistic and administrative tasks related to the project. AWWs are involved in providing the list of available beneficiaries, sharing space of Anganwadi, and supporting ASHA workers in pad distribution usually conducted on Wednesdays of every week.[9] Menstrual hygiene promotion is also an established part of the school curriculum in India beginning from standard VII.[10] It is, therefore, essential to recognize how these stakeholders perceive the menstruation-related problems in adolescent girls.

Our research questions were: What do frontline workers, ANMs, and school teachers feel about menstrual problems and their relation with the health of adolescent girls? What are the existing beliefs and practices regarding menstruation that are prevalent in their community which is known to them? What advice to these stakeholders provide to the girls for MHM? What is their opinion regarding the free and subsidized sanitary pad distribution by the government?

**METHODS**

**Aim and context**

We conducted a qualitative study in Delhi (India) to identify the perspectives on MHM and government schemes for sanitary pad distribution to adolescent girls, among the local frontline and peripheral health workers and the government school teachers. The present study was part of a larger project using quantitative methods to understand menstruation-related beliefs and practices among adolescent girls residing in urban resettlement colonies (URCs).

The study was conducted from April to December 2019, and the participants were selected using a multistage random sampling method. The national capital territory of Delhi has 11 districts from which four districts in the first stage and four URCs (one from each district) in the second stage were selected through the simple random sampling (SRS) method. Subsequently, in the third stage, a total of 30 ASHAs, 30 AWWs, and 30 ANMs were selected from the 125 ASHAs, 203 AWWs, and 36 ANMs working in the selected areas through SRS. A total of five focused group discussions were also conducted with 28 government school teachers of the middle, high, and secondary standards. We selected five government schools purposively of which two were co-educational and three only for girls, with each having classes from VI to XI standard.

The interview team was entirely female, consisting of two field workers, one research associate, and two public health specialists. The participants were interviewed in-depth using an interview guide prepared from a review of the literature, findings of preexisting studies conducted by the study team, and enlisting of expert opinions. The interviews lasted for 15 min on average and were transcribed into English, while nonverbal cues were recorded by a note-taker. The interviews were scheduled on the day of pad distribution in the community.

**Analysis**

Thematic analysis was applied for the evaluation of the findings. There were four “a priori” themes including (a) beliefs and myths on menstruation prevalent in the local communities, (b) recognition of menstrual problems as a significant health problem in adolescent girls, (c) menstrual hygiene practices and the extent of acceptance of sanitary pads in adolescent girls, and (d) school absenteeism during menses in adolescent girls and its impact on their academic performance.

Two members of the study team reviewed the transcripts. The narratives were coded and then merged into a coding frame, and from this coding frame, the broad themes and subthemes that emerged were described. A narrative was woven by placing the coded content, including quotes under the appropriate themes.

**Ethics**

The study was approved by the Institutional Ethics Committee of the Maulana Azad Medical College and Associated Hospitals. The participants were interviewed after taking their consent and necessary permissions from relevant authorities.

**Results**

A total of 30 ASHAs, 30 AWWs, and 30 ANMs were interviewed in-depth. Twenty-seven (90%) ASHAs were participating in the UDAAN scheme for distribution of free pads. However, only 8 (26.6%) were aware of the availability of adolescent friend health services in their nearby primary care facilities. There were 24 (80%) AWWs who reported counseling adolescent girls regarding menstruation-related problems, while 20 (66.6%) AWWs were also conducting pad distribution.

The results were organized into the following main themes; “Menstrual problems as a health problem of adolescent girls,” “Beliefs and myths on menstruation prevalent in the local communities,” “Advice regarding menstrual problems,” “Accessibility and affordability of pads,” “Adolescent male view of menstruation in girls,” and “Barriers in interacting with adolescent girls.” The following subthemes emerged within these main themes; “social isolation during menstruation,” “dietary restriction during menstruation,” “religious restriction during menstruation,” and “school absenteeism during menses” [Table 1].

Menstrual problems as a health problem of adolescent girls: ASHAs, AWWs, and ANMSs reported the occurrence of symptoms such as white discharge, irregular and painful menses, weakness, heavy bleeding, longer duration, scanty blood flow, and amenorrhea in adolescent girls. These symptoms signified a medical problem and needed referral and evaluation by a trained medical practitioner.

Beliefs and myths on menstruation prevalent in the local communities

- Social isolation: “Girls should not go out,” not engage in fun and restrict outdoor games and activities such as “running,” “jumping,” and “playing” outdoors; “they
Table 1: Key themes on challenges in menstrual hygiene management among adolescent girls in Delhi reported by frontline health workers, peripheral health workers, and school teachers

| Menstrual problems as a health problem of adolescent girls | Symptoms like irregular menses, heavy bleeding and amenorrhea signifying medical problems needing referral to health facility (AWW, n=12/30; ASHA, n=28/30; ANM, n=22/30) |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Local beliefs and myths on menstruation and MHM          |                                                                                                                                                                                                 |
| Social isolation                                         | Avoid venturing outdoors; avoid outdoor games/activities (ASHA, n=3/30; AWW, n=4/30)                                                                                                                |
| Dietary restriction                                       | Do not serve food to male family members (ASHA, n=12/30)                                                                                                                                               |
|                                                                                                                                                                                                 |
| Religious restriction                                     | Avoid contact with recuperating patients (ANM, n=1/30)                                                                                                                                                   |
|                                                                                                           | Do not enter the kitchen (ASHA, n=12/30; AWW, n=13/30; ANM, n=6/30)                                                                                                                                   |
|                                                                                                           | Avoid hot or cold items (ASHA, n=6/30; AWW, n=9/30)                                                                                                                                                     |
| Poor personal hygiene                                     | Avoid participation in religious activities (ASHA, n=11/30; AWW, n=13/30; ANM, n=16/30)                                                                                                               |
| Misconceptions related to pads                           | Avoid bathing and washing their hair (ASHA, n=10/30; AWW, n=4/30; ANM, n=13/30; ST)                                                                                                                  |
|                                                                                                           | Using pads can cause cancer (ASHA)                                                                                                                                                                       |
|                                                                                                           | Pads do not need to be changed until completely soaked (ASHA)                                                                                                                                           |
|                                                                                                           | The use of pads causes more bleeding (ASHA)                                                                                                                                                                |
| Sanitary pad distribution program:                                                                                                                                   |
| Implementation challenges                                 |                                                                                                                                                                                                 |
| Pad quality                                               | Pad quality needed improvement in terms of size (all) and absorption (ST). Also some girls develop rashes (ANM)                                                                                         |
| Pad affordability under UDAAN                             | Reduced affordability in girls of very low SES (ASHA)                                                                                                                                                   |
| Early menarche (upper-primary)                           | Girls with onset of early menarche in primary school level are not eligible for free-pads (ST)                                                                                                          |
| Counseling on MHM; barriers and challenges                |                                                                                                                                                                                                 |
| Counseling for MHM                                        | Correct frequency of change of pads (AWW, ASHA, ANM)                                                                                                                                                    |
|                                                                                                           | Switch to pad instead of cloth (ASHA)                                                                                                                                                                     |
|                                                                                                           | Seek treatment from government health facilities for irregular, heavy or prolonged menstrual periods (AWW, ASHA)                                                                                         |
| Barriers in counseling girls on MHM                      | Male teachers felt socially inhibited (ST)                                                                                                                                                               |
|                                                                                                           | Lack of awareness on menstrual problems (ST)                                                                                                                                                             |
|                                                                                                           | Absence of training on MHM counseling (ST, ANM)                                                                                                                                                           |
|                                                                                                           | Perception that girls preferred not to disclose menstrual problems to their teachers, and instead preferred peer support (ASHA, n=9/30; AWW, n=7/30; ANM, n=15/30; ST) |
|                                                                                                           | Parents may prohibit interaction of their daughters with health workers (ASHA, n=4/30; AWW, n=5/30; ANM)                                                                                                |
| Male classmates attitudes on MHM and pad distribution     | Growing sensitization to the practice of pad distribution in the school classrooms (ST)                                                                                                                    |

AWW: Anganwadi worker, ASHA: Accredited social health activist, ANM: Auxiliary nurse midwife, MHM: Menstrual hygiene management, UDAAN: Ude Desh ka Aamith, ST: School teacher

...should not enter the kitchen or serve food to male members of the family”

b. Dietary restrictions: Girls abstain from “rice and curd” and avoid “hot” and “cold” foods believed to render the body hot or cold

c. Religious restriction: Religious restrictions were reported to be prevalent in the community, and there were acceptance and normalization of the phenomenon in most girls. Such activities include inhibition in touching the sacred Tulsi (Basil) plant during the menstrual period. However, occasionally, girls could resist the imposition of these dominant patriarchal norms such as during certain festivals. A teacher narrated an incident involving an adolescent girl; “During menstruation, I was not allowed to sit in the Pooja (a Hindu mode of worship) with other girls in her own house during Navratra (festival of nine nights dedicated to the mother goddess Durga). So, she angrily asked her mother then why she is not allowed to sit in the Pooja, isn’t she a Kanya (young unmarried girl) anymore. The goddess herself ordains this menstruation, then why can’t I be involved in her worship then?”

d. Poor personal hygiene: The FHWs reported that some girls do not take a bath and some girls do not wash their hair during menses

e. Concern over adverse effects of using sanitary pads: The ASHAs mentioned that some girls of the community identified sanitary pad use as responsible for prolonged bleeding during menses: “Some girls use cloth as they believe that using pads can cause cancer.” Moreover, according to an AWW, “Most girls changed pads only if they were soaked completely” which increased the risk of infection.

Dissatisfaction with the pad quality was also reported by both ASHAs and school teachers. A teacher explained from her own
experience – “The quality of the pads should be better. I have used them myself one or two times, they are not at all, their quality must be improved.” Another teacher perceived that the girls were “somewhat happy” since they were getting the pads for free but also “somewhat unhappy” since the pad quality was inconsistent and did not always meet their expectations. However, the overall acceptability of the pads was considered as good by all stakeholders, and they all reported sustained demand for the product.

Counseling for MHM and associated menstrual problems: The FHWs reported encouraging adolescent girls to replace cloth with pads as absorbent material during menses and to change them frequently, and instructed them regarding the appropriate health seeking behavior for menstrual health problems. If the girls insisted on using cloths, they were advised to change it frequently and dry it under the sun before use. However, school teachers occasionally dealt inappropriately with reproductive health complaints of their female students; “A girl once came to me and told me that she is getting a foul-smelling white discharge. I suggested her to drink more water.” Similarly, while most teachers correctly reported that the pad was a single-use product, they frequently omitted important details regarding their proper use, frequency of change, and appropriate disposal.

Accessibility, affordability, and quality of pads: The FHWs reported the problem of pad affordability and believed that free distribution of adequate pads should be further encouraged through government schemes. An ASHA informed us that, “Girls from poor families who are not going to school are unwilling to spend any money on pads, even at this (low) price. Pads should be distributed completely free of cost to (promote their acceptance) these girls.” They further reported that girls from poor families often switched to cloth if they could not afford sanitary napkins. Teachers reported that a fixed number of sanitary pads were being provided to school-going girls, which were often shared with other female members of the family, including their mothers.

Adolescent male view of menstruation in girls: Teachers reported an increasing sensitization of male students toward pad distribution and MHM in co-educational schools; “Boys have also become very normal with the distribution of the pads and they are aware of it and do not make fun (of the girls having menses).…. Yes, they all know. Everything is normal, the boys are normal about it and they are also aware about it, when we ask them to go out, they go out, earlier they used to laugh.” However, in the other co-ed school, pads were distributed to girls after the boys had left after school. A teacher also reported inserting the pads in the bags of the girl students in a clandestine manner, a practice that associated MHM with embarrassment and shame.

Barriers in interacting with adolescent girls

Most stakeholders perceived the adolescent girls as being shy – “They feel alright in discussing these issues with their friends only. They do not agree with our views or those of their parents.” Some teachers, especially of male gender, also expressed inhibitions in conversing with their adolescent female students on MHM and mostly lacked any specific training on promoting MHM.

Most teachers reported the occurrence of school absenteeism in adolescent girls during menses to a varying extent but struggle to quantify the magnitude of the problem. A teacher attributed absenteeism to social causes as “girls feel uncomfortable in walking around during menses.” However, facilities for washing and running water in the school toilets were available in all the school sites inspected in the study.

**Discussion**

In this study, only one in ten adolescent girls in India identifies FHWs or peripheral health workers and their school teachers as a reliable source of accurate health information for their menstrual health queries.[7] FHWs and to an extent school teachers were aware of menstruation-related problems in adolescent girls. However, the pad distribution in the schools was not accompanied with learning and actions toward dispelling harmful myths and misconceptions associated with MHM in India.[10] Nevertheless, teachers in co-educational institutions did not perceive significant barriers in the distribution of sanitary pads to female students in the presence of their male classmates. There is emerging evidence of increasing sensitization of adolescent Indian schoolboys toward their understanding of menstruation as a biological phenomenon among their sisters and female classmates.[11]

**Conclusion and Recommendations**

Despite their potential as community resources for adolescent girls, FHWs, ANMs, and school teachers often fail to impart crucial menstrual hygiene information and skills building needed toward achieving effective, safe, and optimal MHM. There is dire need for developing a structured modality for distribution of sanitary pads in schoolrooms, from fifth standard onwards since early menarche is becoming increasingly more common, while building an environment that is conducive toward improving awareness and dispelling myths and taboos related to menstruation in a culturally sensitive manner.[12] High-quality, evidence-based training of school teachers is a necessary prerequisite in this regard. Policy analysts should consider the feasibility and cost-effectiveness of free pad distribution in the community, as girls and women from the poorest households, who are most vulnerable to RTIs due to poor MHM,[13] are frequently deprived of the benefits. Misconceptions regarding adverse effects caused by pad use that inhibit their adoption by new users need to be debunked through information, educational interventions, and social marketing of new and safe sanitary products.

**Study limitations**

The study was conducted in urban areas and cannot be generalized to rural settings. Moreover, private (public) schools
were also not part of the study. Finally, the mothers of the girls, who are usually the first informants of MHM for their daughters, were not included in this study.\cite{14}

**Financial support and sponsorship**

Delhi State Health Mission supported the study.

**Conflicts of interest**

There are no conflicts of interest.

**REFERENCES**

1. Sommer M, Sahin M. Overcoming the taboo: Advancing the global agenda for menstrual hygiene management for schoolgirls. Am J Public Health 2013;103:1556-9.
2. Mahon T, Fernandes M. Menstrual hygiene in South Asia: A neglected issue for WASH (water, sanitation and hygiene) programmes. Gend Dev 2010;18:99-113.
3. Sommer M, Caruso BA, Sahin M, Calderon T, Cavill S, Mahon T, et al. A time for global action: Addressing girls’ menstrual hygiene management needs in schools. PLoS Med 2016;13:e1001962.
4. Garg S, Anand T. Menstruation related myths in India: Strategies for combating it. J Family Med Prim Care 2015;4:184-6.
5. Varghese M, James S, Ravichandran L, Sivaprakasam E, Palaniyandi A, Balaji S. Religious restrictions and cultural taboos related to menstruation in adolescent girls: A school-based cross-sectional observational study. Indian J Child Health 2015;2:161-4.
6. Thakur H, Aronsson A, Bansode S, Stalsby Lundborg C, Dalvie S, Faselid E. Knowledge, practices, and restrictions related to menstruation among young women from low socioeconomic community in Mumbai, India. Front Public Health 2014:2:72.
7. van Eijk AM, Sivakami M, Thakkar MB, Bauman A, Laserson KF, Coates S, et al. Menstrual hygiene management among adolescent girls in India: A systematic review and meta-analysis. BMJ Open 2016;6:e010290.
8. National Rural Health Mission, Ministry of Health and Family Welfare, Government of India. Operational Guidelines: Promotion of Menstrual Hygiene among Adolescent Girls (10 – 19 Years) in Rural Areas. New Delhi, India: National Rural Health Mission; 2010.
9. Continuing Providing Sanitary Napkins Free of Cost: High Court. Available from: https://www.business-standard.com/article/pti-stories/continue-providing-sanitary-napkins-free-of-cost-to-girls-in-school-and-drop-outs-hc-to-authorities-119120600991_1.html. [Last accessed on 2020 Oct 08].
10. NCERT. Syllabus on Health and Physical Education (Classes I-X). Available from: https://ncert.nic.in/pdf/syllabus/Microsoft%20Word%20-%20Final_Syllabus_on_H___P_I-X_for_Website.pdf. [Last accessed on 2020 Oct 08].
11. Mason L, Sivakami M, Thakur H, Kakade N, Beauman A, Alexander KT, et al. “We do not know”: A qualitative study exploring boys perceptions of menstruation in India. Reprod Health 2017;14:174.
12. Pathak PK, Tripathi N, Subramanian SV. Secular trends in menarcheal age in India-evidence from the Indian human development survey. PLoS One 2014;9:e111027.
13. Anand E, Singh J, Unisa S. Menstrual hygiene practices and its association with reproductive tract infections and abnormal vaginal discharge among women in India. Sex Reprod Healthc 2015;6:249-54.
14. Chandra-Mouli V, Patel SV. Mapping the knowledge and understanding of menarche, menstrual hygiene and menstrual health among adolescent girls in low- and middle-income countries. Reprod Health 2017;14:30.