

WASH FACILITIES AND MENSTRUAL HYGIENE MANAGEMENT AT SCHOOLS OF RURAL BIHAR: A MIXED-METHODS STUDY OF ADOLESCENT GIRLS

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INTRODUCTION:

According to Unicef, over 1.8 billion people in the world menstruate every month. Menarche is a phase that brings new vulnerabilities in the lives of adolescents. However, during the menstrual period, many adolescent girls endure this with stigma, harassment, and social exclusion (Goel & Kundan, 2011). Several factors can contribute to unmet menstrual health and hygiene needs, including gender inequality, bias in social norms, poverty, cultural restrictions, and lack of basic services such as toilets and sanitary products. Adequate menstrual hygiene practices are essential for girls' dignity, well-being, and education (Unicef, 2019). According to the World Bank (2022), a study in India found that as many as 1 in 5 girls drop out of school after they get their period. According to the National Family and Health Survey, only (58.8%) of menstruating women in Bihar use hygienic protection methods during their menstrual cycle (Sopam, 2021). According to a report from Times of India, almost (90%) of the girls have not received any government-supplied napkins recently. Another news article reveals that menstrual hygiene is still an obstacle for girls who want to attend school in Bihar (Priyadarshani, 2023).

Hence, it becomes crucial to address menstrual hygiene as it is closely tied to achieving sustainable development goals, particularly concerning gender equality and female empowerment. Cultural beliefs, socio-economic conditions, and environmental constraints contribute to poor menstrual hygiene (Chakravarthy et al., 2019; Aggarwal et al., 2021). Globally, inadequate MHM services in schools lead to absenteeism, with girls missing several days of school each month due to their inability to manage menstruation properly (Unicef, 2019). While the Government of India has launched several initiatives to address menstrual hygiene, such as the Swachh Bharat Abhiyan (Clean India Mission) and Menstrual Hygiene Scheme (2011), implementing these programs in rural areas is inadequate. MHM services are so essential that in the absence of these services, girls are forced to stay at home during their periods, missing valuable school days and ultimately compromising

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their educational outcomes.

Rural India lacks sanitation infrastructure, and menstrual hygiene products are either unavailable or unaffordable. The fourth National Family Health Survey findings reported that only (48%) of rural Indian schools have separate toilets for girls, a significant barrier to girls' education. Consequently, many adolescent girls miss school or drop out entirely once they reach puberty. Considering all these observations, the present study focuses on the existing MHM practices and WASH services in the schools of Khudabandpur block of Begusarai district of Bihar. It reflects upon the knowledge and practices of menstrual hygiene management and the cultural restrictions faced by girls during menstruation.

Objective

The main aim of this paper is to study the knowledge and practices of menstrual hygiene among adolescent girls and its management in schools. For this, the study explores availability of WASH facilities and MHM services at schools. The paper also reveals how menstrual hygiene management, which is also surrounded by social taboos, adversely affects girl child education.

Methodology

The research was conducted in the Khudabandpur Block in Begusarai District, Bihar. The study of 279 adolescent girls from four selected schools of Khudabandpur Block. WASH and MHM services are crucial for education of adolescent girls; therefore, the present study includes adolescent girls aged 12-19 years, selected through random sampling. In addition, teachers, school guards, representatives of school administration and a few members of the local community from the villages near these schools have been thoroughly interviewed to understand the role and influence of school administration and government in providing menstrual hygiene services in girls' education. As the present study is mixed methods research, the quantitative data collected was analysed using descriptive statistics to identify patterns in menstrual hygiene practices, school attendance, and the cultural taboos surrounding menstruation. The qualitative data from interviews captured the lived experiences of adolescent girls.

RESULT

Knowledge and Practices of Menstrual Hygiene

Knowledge about menstruation plays a crucial role in attaining proper hygiene (Dasgupta, 2008), and improves the self-confidence of females in several ways. The study found that the girls in Khudabandpur Block had limited knowledge about menstruation, and around majority (87%) of girls were unaware of basic menstrual hygiene practices before their menarche (the first menstrual period) and even after menarche, they were unaware of good and healthy hygiene practices. This lack of awareness often led to confusion and fear

during their first menstrual experience i.e. menarche as many girls reported feeling scared or embarrassed. The girls reached out to different people to seek information and help at menarche. The girls learned about menstruation from their mothers (34.4%), sisters (30.1%), and friends (30%) who were female. Some girls experienced their first menstrual period in school (3.5%) and obtained help from teachers. Regarding menstrual hygiene practices, 61.2% of girls used sanitary napkins, while 36.5% continued to use old clothes. The use of old clothes, which is unhygienic, poses serious health risks, including infections and reproductive health issues. The data also revealed that many girls were completely unaware of alternative menstrual hygiene products such as tampons or menstrual cups. So, there is a need to create awareness about using modern hygiene methods and including MHM in the educational framework. Female respondents mentioned several reasons for not using sanitary napkins, such as lack of awareness (36.5%) and lack of affordability (55%) due to high cost. The students were also not aware of benefits of using sanitary pads. For instance- "A girl aged 17 said she did not know why she used sanitary napkins. She was not aware about the available sanitary napkin brands; she did not know which one was good for her vaginal health, for what duration, and she did not know anything regarding menstrual health. However, she used sanitary napkins because she saw an advertisement related to them on television."

Cultural Restrictions (Taboos)

Menstruation has long been shrouded in cultural taboos and stigmas. The term 'taboo' originates from the Polynesian word 'tabu', which was used in the English language by James Cook. In his book 'Totem and Taboo', The term 'taboo' was frequently used by Sigmund Freud, which refers to anything forbidden to define debarments like 'incest taboo' (Freud, S., 2012). Further, menstruation is considered a polluting cause in Hinduism because it contains the flow of blood, and this notion of impurity is distinct and thereby seen as a social taboo (Dumont, 1980). Therefore, menstruation is regarded as impure, and girls and women are often subjected to various restrictions during their menstrual periods. These cultural norms contribute to the alienation of girls during menstruation, making it difficult for them to manage their hygiene and attend school regularly. These cultural taboos related to menstruation are deeply rooted in patriarchal structures, which perpetuate gender inequality (Rajagopal & Mathur, 2017; Caruso et al., 2017; Gundi & Subramanyam, 2020).

Table 1.1

Practice of Cultural Restrictions (Taboos)

Restrictions	No. of Respondents	Percentage (%)
Do not attend religious events	274	98.2
Do not touch religious plants	277	99.2
Do not enter religious premises	279	100
Do not touch religious books or things	276	98.9
Do not go to school	121	43.3
Do not play	160	57.3
Do not cook or enter the kitchen	86	30.8
Do not Touch Pickles	235	84.2
Do not touch males or hide period news from males	254	91
Sleep separately	10	3.5

Total no. of Respondents (n)= 279

The study found that cultural taboos surrounding menstruation were pervasive in Khudabandpur Block. All 279 girls studied reported facing some form of restriction during their periods. These included not being allowed to enter the kitchen (30.8%), touching sacred plants (99.2%) like Tulsi, Pipal, etc., and many religious things used in worship (fruits, sweets, Roli, Chandan, etc.), or attending religious ceremonies. In Hinduism, girls are not allowed to go to temples and prayer rooms or touch holy books. Likewise, Islam follows similar restrictions; girls are not allowed to touch religious books including 'Quran', and they are also restricted from masjid and fasting (ROZA). Girls are not even allowed to touch pickles (84.2%) or certain food items because people think menstruating girls are impure and the food may get spoiled. They do not touch men, do not sit near men and are even not allowed to share their period's news with men (91%) as it is considered "shameful". Therefore, the belief system, which has resulted in various taboos surrounding menstruation, has led to shyness, silence, and secrecy, which adversely impacts hygiene management among girls and women. For instance, the respondents mentioned that;

"Some girls said they felt too shy to buy sanitary napkins, so they did not buy them themselves. Their mothers buy it for them. If their mother is unaware or not allowed to go out, they write a sanitary napkin's name on a piece of paper and give it to her mother, and the mother gives it to their husband to buy. They cannot directly ask her father to buy it." The concept of pollution is strongly associated with menstruation (Garg & Anand, 2015) Such attitude affect not only girls' self-esteem but also their willingness and ability to

engage in day-to-day routine, including educational activities, during menstruation.

"A girl said we are ritually impure during menstruation, and anyone or anything they touch becomes impure as well. It is usually the mothers who enforce these restrictions."

"Another girl reported that during winter, she was not provided with sufficient warm clothes during menstruation due to the 'polluting touch', as the clothes would also become polluted."

"Another girl reported that she was prohibited from touching her mother. Her mother was observing a fast on the occasion of Chhath Puja, and she was not allowed to participate in or touch anything related to puja, not even her mother. She could only watch her mother while she was performing puja from a distance."

Such incidents of separation reinforce the belief system or taboos among young girls. The observations from the study articulate the need for serious efforts to raise awareness against these taboos through community-based programs that involve equally women and men. Engaging the male population in conversations about menstruation is crucial for breaking the cycle of silence and stigma that surrounds the issue.

Menstruation and Education

In the existing cultural context, Menstrual Hygiene Management (MHM) is a neglected issue and lack of services in schools severely affect and, at times, determine girls' access to education.

Table 1.2

Availability of MHM and WASH facilities at school

MHM & WASH facilities	Yes (%)	No (%)
Menstrual hygiene kit (menstrual products including napkins, cramp relief roll-on, stain remover, and sanitary disposal bags)	00	100
Sanitary napkin distribution	00	100
Government campaigns on MHM	00	100
Menstrual hygiene education sessions conducted	00	100
Changing Rooms	00	100
Separate washrooms for girls and boys	00	100
Washrooms with locking facility	49.9	50.1
Water available in the toilet	00	100
Hand washing facilities (Soap, water)	42.7	57.3
Sanitary napkin disposal bins	00	100

Total no of Respondents (n)= 279

The responses of sample female students highlight that the MHM and WASH facilities are unavailable in selected schools. This absence of sanitation and hygiene-related basic facilities in the school made it difficult for girls to manage their menstrual hygiene, leading to discomfort and embarrassment. The study found that the girls had access to toilets only during challenging or emergency situations, often lacking adequate privacy at school, highlighting the difficulties they faced due to inadequate facilities.

A girl aged 16 said, "In our school, there is no water facility in the toilet. It is so difficult sometimes that I have to miss school. The water supply is outside the bathroom. There is only one hand pump. We have to carry water to the toilet. We must fill a bucket with water from the hand pump and take it to the washroom. So, we avoid going to the washroom in school."

Another girl aged 15 said, "Some days, when there is heavy bleeding, we need to change at least two or three times during school hours. There is no place to change and dispose of cloth or sanitary napkin, so we just bunk classes. Alternatively, we go home, change napkins, and return to school. Even sometimes, when we cannot go home, we have to wrap the used napkin in paper and carry the dirty napkin with us in our bag until we find the time to dispose it of. Therefore, we use only one pad a day, which is very uncomfortable for us."

Table 1.3

Missing School During Menstruation

Missing School During Menstruation	No. of Respondents	Percentage (%)
Yes	120	43
No	159	56.9

Total no of Respondents (n)= 279

The study found that 43% of adolescent girls missed school during their periods due to inadequate facilities. Lack of privacy for washing and cleaning was the main reason, along with other important factors, such as the lack of a water supply and disposal system affecting girls' attendance. Most of them reported that the fear of staining clothes also gives them stress. Although more than half of the total respondents (56.9%) were found to be attending school, the critical reason attributed to attendance pertains to a government rule which makes attendance compulsory. Bihar board has strictly regulated student attendance requirements for various classes.

Table 1.4

Reasons for missing school

Reasons for missing school	Yes (%)	No (%)
Discomfort due to lack of MHM & WASH facilities	92.4	7.6
Feeling Shame	57.4	42.6
Fear of Stain	69.7	30.3
Menstrual Health Problems	68.9	31.1

Total no of Respondents (n)= 120

The study found that (92.4%) of girls are uncomfortable at school during menstruation, (57.4%) feel shame, (69.7%) have fear of stains, and (68.9%) suffer from menstrual health problems due to which they miss school. Their experiences highlight the severity of the problem. In focus-group discussions, many girls revealed instances such as;

An 18-year-old girl said "I have some health issue related to menstruation; due to that reason, I was not able to concentrate and sit properly for a full day at school, that's why I missed school for one or two days during menstruation."

Another girl shared, "I also missed school during menstruation because I do not use sanitary napkins. I use cotton clothes, so I do feel uncomfortable in school because I always have a fear of stains."

Looking at the MHM challenges faced by girls, there is a strong need to meet the sanitation requirements to promote girls' education, as even when girls are not entirely withdrawn from school, menstruation affects attendance for many. The study also argues that there is no severe concern about menstrual hygiene education, indicating the critical need for its introduction in schools. These schools do not provide menstrual education or arrange awareness programs or sessions related to menstrual hygiene. While the students were unaware of MHM services, only two female teachers knew about 'Menstrual Hygiene Management' in these four schools. Therefore, it can be argued that lack of education and awareness related to menstrual hygiene is a big issue that affects girls' education. The schools must implement comprehensive menstrual hygiene education and management programs that include information about menstrual cycle, proper hygiene practices, sanitary products and ensure the availability of menstrual hygiene kits and other required facilities. There have been several government initiatives to address the issue through schemes and campaigns related to menstruation. For example, the Menstrual Hygiene Scheme (2011) and Rastriya Kishor Swasthya Karyakram (2014) have been launched to promote menstrual hygiene among adolescent girls aged 10 to 19 along with the Sanitary Napkin Scheme in

2018 to provide free and subsidised sanitary napkins to females from economically disadvantaged backgrounds. Similarly, in Bihar, the state-run Mukhyamantri Kishori Swasthya Yojana scheme provides an annual transfer of ₹300 to school-going girls for menstrual support.

"Regarding this, the teachers informed that the school authority offered money for the students' sanitary napkins."

However, during the discussion with the school girls, it appeared that most were unaware of these schemes. Further, in the case of money transfers, there is no data to evaluate whether households are utilising this money to buy pads. Therefore, the state government must ensure that schools in rural areas know about the schemes. Additionally, schools' WASH facilities and Menstrual Hygiene Schemes should be regularly monitored to ensure they meet the required standards.

Discussion

The study provides critical insights into the adolescent girl's challenges in managing menstrual hygiene and its impact on education in rural Bihar. The study highlights that only a small proportion of girls had prior knowledge of menstruation before menarche, leading to confusion and fear. A significant number of girls rely on unhygienic methods, such as old clothes, due to limited awareness, affordability issues, and lack of access to sanitary products. Cultural taboos exacerbate the situation, subjecting girls to restrictions like avoiding religious functions, cooking, or attending school during menstruation. The absence of Menstrual Hygiene Management (MHM) and WASH services in schools, such as separate latrines, changing rooms, or proper water supply, has led to high absenteeism, with (43%) of girls missing school during menstruation. The study also underscores that while government initiatives exist, their implementation in rural areas remains inadequate. The findings emphasise the urgent need for comprehensive interventions, including education on menstrual hygiene, improved infrastructure, and community engagement to challenge cultural stigmas. Addressing these issues is crucial to ensuring better health, dignity, and uninterrupted education for adolescent girls.

Conclusion

The study reveals grossly inadequate menstrual hygiene services in their schools in study area. In this region, socio-economic and cultural restrictions exacerbate the challenges. Girls face numerous challenges, including a lack of access to sanitary products, insufficient WASH infrastructure, and deeply ingrained cultural restrictions that stigmatise menstruation. Further challenges highlighted by the study include lack of access to affordable menstrual hygiene products, inadequate sanitation facilities, and deeply entrenched cultural taboos prevent girls from attending school regularly during menstruation. Only a small

percentage of adolescent girls were aware of menstrual hygiene at menarche, and many continued to use unhygienic methods such as old clothes. The absence of separate toilets and proper disposal facilities further amplify the issue, leading to discomfort, absenteeism, and poor academic performance.

Taboos, such as restrictions on entering kitchens, attending religious functions, and interacting with males, perpetuate the stigma around menstruation and hinder girls' ability to manage their periods with dignity. Addressing cultural stigmas through community engagement and including male population in menstrual health discussions is crucial for breaking the silence around menstruation. Comprehensive efforts from the government, schools, and communities are required to provide the necessary infrastructure, education, and support systems that enable girls to manage their menstruation and attend school without interruption.

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