

## Implementation of Menstruation Support in Educational Institutions

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<p><b>Type:</b> Article <b>Received:</b> 28 March 2026 <b>Revised:</b> 13 April 2026 <b>Accepted:</b> 19 May 2026 <b>Published:</b> 01 June 2026</p>	<p>Menstruation is a continued Indian school taboo and under-discussed subject, bringing embarrassment, stigma, and interruption to student's learning and emotional lives. This research explores student's experiences across different education backgrounds to identify gaps in menstrual care, including inadequate sanitation facilities, inadequate access to sanitary materials, and continuing cultural taboos. Drawing on surveys, interviews, and literature, the research outlines open communication, accessible physical infrastructure, and trained teachers as conditions necessary to create an inclusive climate. Despite patchwork measures in certain schools, stopgap actions have been implemented, student opinion verifies the need for integrated, student-sensitive policies that bring in respect, health, and educational justice. This research requires system changes that make menstruation within the normal and make sure no student's work is interfered with by a normal body process.</p> <p><b>Keywords:</b> Menstrual Hygiene Management (MHM), Menstruation in Schools, Educational Institutions, Student Perspectives, Gender Equality, Menstrual Stigma, Health and Education, Inclusive Policy, India, Sanitary Facilities, Adolescent Health, School Infrastructure, Cultural Taboos, Reproductive Health, Menstrual Awareness, Sustainable Development Goals (SDGs), Qualitative Research, Case Study, Social Inclusion, Student-Centered Policy</p>

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## Introduction

Menstruation, a routine physiological phenomenon that occurs in close to half of the world's population, is still a giant public health and social problem in India [3]. Though it is a routine physiological phenomenon, it remains shrouded in embarrassment, shame, and stigma, especially in schools where children live the larger part of their early years and where self-realization and health education should overlap [4]. These environments are essential spaces for the development of open-minded, healthy attitudes towards the workings of the body, such as menstruation [8]. But in most Indian schools, colleges, and universities, things are less than perfect.

Poor infrastructures, entrenched societal stigmatization, constrained knowledge, and gender-differentiated discourse about menstrual health tend to expose students, particularly female students, to a scarcity of proper material resources or psychosocial care [1]. This shortage severely affects their learning achievement, physical health, esteem, and mental well-being [5]. Menstrual shame may make girls go through in silence, be absent from classes, hide from social relationships, or, in the worst situation, even leave school because of shame or discomfort [9].

An impassioned and heart-wrenching report by *The Hindu* in October 2024 showed the gravity of the situation. A schoolgirl pupil in Bareilly, Uttar Pradesh, was admonished for simply requesting a sanitary pad from a teacher [10]. Instead of support or sympathy, she was reprimanded—an action fueled by societal unease and institutional insensitivity towards menstruation. The incident is not an isolated event; it underlines the importance of addressing menstrual hygiene management (MHM) in a holistic manner [2]. Such an incident not only says a lot about the absence of empathy but also says something about how uninformed and punitive reactions lead to silence, absenteeism, and foster a poisonous culture in which women students are ashamed of a natural physiological process [5].

India's menstrual health issues are complex and deeply rooted in religious and cultural norms of silence, shame, and ignorance [3]. There is a significant portion of India's women population still not included under menstrual hygiene as India advances in gender equality and public health. The National Family Health Survey (NFHS-5, 2019–21) also reports that sanitary products are accessible to only 36% of India's women population [7]. This figure is especially chilling when one considers that access is typically even more limited in rural areas and among poorer groups [1]. Schools and colleges mirror this broader social inequality. Most schools and colleges still do not have basic infrastructures for menstrual hygiene management like sanitary napkin vending machines, incinerators for safe disposal, clean and private toilets, and emergency sanitary pads [6]. Without these, it disproportionately burdens female students. It causes regular menstruation absenteeism, reduced academic performance, ongoing discomfort, and emotional distress [5]. All of these combined influence their academic achievement and general development [9].

Further, excluding male students and teachers from learning about menstrual health is a contributor to what maintains taboos and misconceptions [2]. It serves to support the stereotype that menstruation is a 'woman's issue' and not something for public conversation. This exclusion does not just contribute to gendered stigmas but also prevents the building of an empathetic, caring classroom environment. Male students and instructors in the majority of institutions are not aware of the needs and issues of their female counterparts, and this results in ignorance and sometimes insensitivity in policy-making or day-to-day interaction [2].

To understand this multifaceted issue, this study will try to find the views of students from different Indian institutions of study, such as schools, undergraduate colleges, postgraduate institutes, and junior colleges. The intention is to determine the status of menstrual support in these institutions based on what students have to say about the provision of menstrual hygiene products, the freedom with which they are able to talk about menstruation, and how institutional location and gender affect their experience [6]. One of the key objectives of this study is to introduce male voices in bringing menstruation into life and in making a culture of support and empathy [2]. Involving both male and female students, the research will attempt to shatter the age-old taboos and building an inclusive learning culture.

### *Purpose of the Study*

The key intention of the study is to explore the utilization of menstrual hygiene support in Indian schools through students' attitudes and experience [6]. It takes into account how school facilities (i.e., the availability of vending machines, incinerators, and sanitary toilets) align with students' actual life and whether there is any cultural or social inhibition which hinders the practice and speech around menstruation [11]. The study will recognize the particular challenges that students experience due to unhygienic menstrual practice and how the problems differ depending on the location of the institution—urban, semi-urban or rural—and depending on the gender and age of the students [1]. The study will attempt to comprehend the societal attitude towards menstruation in the institutions and how much the topic is still taboo [4], [12].

Through this study, we aim to recommend evidence-informed interventions for the enhancement of menstrual health support systems. This involves improving infrastructure, encouraging openness, and fostering an inclusive environment that accepts all the students [11]. The study also focuses on incorporating the male population in awareness campaigns about menstruation, thus enhancing collective responsibility and appreciation [2].

### *Research Questions*

- 1) In what ways are male and female students varying with respect to awareness and engagement in discussions on menstruation? This question aims to identify gender differences in information, ease of conversation, and willingness to discuss menstruation. It aims to determine if female students are the only ones receiving awareness while their counterparts remain oblivious [2].
- 2) How does institutional location (urban, semi-urban, rural) influence the issues relating to students with menstrual hygiene? Institutional geography may have an impact on the availability of resources and infrastructure. This inquiry challenges how rural/semi-urban institutions vary from urban institutions regarding facilities for menstrual hygiene management [1], [13].
- 3) Is there any correlation between the severity of issues brought about by the absence of menstrual care and the age of female students? Older students may use coping strategies, but younger girls may have more issues. This inquiry addresses vulnerability by age [5].
- 4) How far is menstrual discussion considered taboo within schools, and how does this impact support structures? This is posed in the context of cultural and social limits to frank speech, considering the ways in which taboo and stigma influence institutional response to menstrual necessity [4], [12].
- 5) What are the problems that female students face due to a lack of menstrual hygiene products? It includes such problems as absenteeism, discomfort, emotional distress, embarrassment, and long-term educational effects [5], [14].
- 6) Why do men need to be included in menstrual awareness campaigns, as seen through the perspectives of the students? It is a matter of engaging male students and educators in demystifying taboos, peer support, and schools as caring institutions [2], [15].
- 7) In what ways is support for menstruation offered today in schools, with specific mention of resource provisioning? It is a basic question questioning provision and availability of the basic facilities like sanitary pads, flush toilets for disposal, and sanitary toilets [6], [16].

### *Importance of the study*

The study fills a knowledge gap regarding menstrual health issues in Indian classrooms that are also learning spaces through which students move through education and growth [6], [17]. Schools ought to be sites of advancement embracing equity, dignity, and well being for all students [11]. However, the persistent disregarding of menstrual hygiene management denies this promise and further demeans most students [9]. Through a light on infrastructural disparities, gender knowledge disparities, and impacts of socio-cultural taboos' hold, this project provides a broad, evidence-based narrative of India's menstrual well-being [3]. Gauged by syntheses geographically and institutionally, it is bolstered to cross-contextual application and it works with policy-makers, teachers, and practitioners of care in health [11].

Significantly, by highlighting the importance of male engagement, the research encourages a cultural transformation that acknowledges menstruation as a common social issue, not a secret female issue [2], [15]. Male familiarity and participation can make conversation the norm, avoid bullying or shaming, and encourage empathy and collaboration, ultimately resulting in healthier, more supportive learning environments [2].

Through this study, we aspire to influence education policy that requires menstrual hygiene facilities for all institutions, introduce menstrual education as part of the overall comprehensive health curriculum, and start gender-sensitive staff and student training [11], [18]. The research findings are particularly pertinent as India moves ahead in its pursuit of universal education, gender equality, and enhanced public health outcomes [7].

### **Literature Review**

Menstrual hygiene management (MHM) has emerged as an area of high priority in public health and education globally, and it significantly impacts students' welfare and educational attainment. Strong evidence verifies that lacking menstrual care leads to school dropout, poor health, and emotional issues in girls and boys [5], [8]. In India, the dilemma is worsened by cultural stigma, economic limitations, and infrastructural shortages, which undermine good MHM and enable stigma [3], [12]. Evidence documents the effect of inadequate menstrual care on the education of girls. Sommer et al. (2016) confirm that lack of aseptic accoutrements and facilities for disposal is to blame for school absence, with girls missing up to 20% of school days during menstruation in some areas [8]. In India, van Eijk et al. (2016) determine that sanitary pads are used by just 36% of teenage girls, while others use unhygienic substitutes because of cost or availability [1], [13]. Particularly so in rural areas where the schools themselves might not even have proper toilet facilities or disposal facilities [11]. That absence not only has health implications but also heightens feelings of shame and isolation [5], [14].

Stigmatization of culture regarding menstruation is also causative of other problems. Garg et al. (2012) posit that Indian society represses discussion regarding menstruation as a shame or a secret [4], [12]. Such stigmatization is even faced in schools where female students would not want to discuss menstrual requirements with other students or school officials [2]. Suppressing dialogue creates misinformation and excludes voices to call for improved provision. For example, as per Mahajan (2019), although there has

been the rollout of menstrual hygiene education and vending machines in some schools, it is not being rolled out company-wide, especially in semi-urban and rural areas [6], [16].

Men students' and teachers' contribution towards MHM has received less focus but is now also globally seen as a priority. Sivakami A (2019) suggest men's engagement with menstrual health in an attempt to universalise it as a concern and contribute towards fostering a safe space [2], [15]. Awareness among men in India is poor, and nearly all of them are uncomfortable or indifferent across cultural lines of socialisation [3]. That gap puts into perspective the importance of becoming gender-sensitive and involving men and women to dismantle stigmas as they allyship locations [2].

Institutional facilities difference is yet another overarching trend taught by writings. Incinerators and automated machines are better in cities' institutions of learning and colleges, but even there, a decline is allowed [11], [16]. Menstrual management in rural institutions is lacking, with students being forced to accept inferior facilities [1], [13]. These disparities are reflective of broader systemic disparities, including budget deficiencies and other educational needs taking precedence over MHM [11].

Age is also a reason for menstrual problems. Adolescent students (10–15 years) are particularly vulnerable due to lesser awareness, shyness, and reliance on school facilities [5], [14]. Adult students, despite greater awareness, are also haunted by stigma and unequal access to facilities issues [6]. These age differences explain the need for interventions among a variety of different student categories [5], [6].

Recent occurrences, such as the case brought to light by *The Hindu* (2024) of a Bareilly girl from Uttar Pradesh who was reprimanded for requesting a sanitary pad, illustrate the real-life implications of such issues [10]. Such incidents illustrate not only infrastructural deficiencies but also deeply embedded cultural norms which frown upon the open discussion of menstrual needs [4], [12]. This pattern substantiates findings from previous studies, which attest to the need for systemic change [9]. This research extends previous work by employing quantitative and qualitative data from a mixed Indian student sample. In contrast to previous research, which tended to be confined to female experiences or one geography, this research addresses both males' and females' perceptions across the three geographies of urban, semi-urban, and rural institutions [6], [17]. It fills gaps in the literature by investigating male participation, age severity, and location-stigma interaction, providing an overall picture of MHM needs in modern India [1], [2], [5].

### **Research Design and Methodology**

This research employs a mixed-method approach to explore the situation of menstrual hygiene management (MHM) in schools in India. The combination of qualitative and quantitative methods provides a complete description of pupil experiences, infrastructure inequality, and gendered menstrual behaviors [2], [17]. The final aim of the methodology is to understand different voices and quantify differences in access to menstrual care based on gender, age, and place, thus giving insightful inferences that are able to inform policy and campaign [11], [18].

#### *Case Selection*

Participating schools in this study were chosen from a wide cross-section of Indian schools, ranging from secondary schools to junior colleges, postgraduate institutions, and undergraduate colleges. Geographic diversity as well as infrastructural diversity were included in the selection criteria so that an even distribution of samples was obtained [6]. Institutions were classified into three types depending on their location:

- Urban centers (e.g., Pune, Mumbai)
- Semi-urban centers (e.g., Nashik, Ahmednagar)
- Rural areas (e.g., Dhule, Akola)

This categorization was necessary in order to draw attention not only to variations in menstrual health facilities but also variations in cultural outlook towards menstruation in various regions of India [1], [13]. The dataset had a total of 114 institutions. Of these, 43.5% were found to have some form of menstrual support facilities—such as sanitary vending machines and incinerators—and 56.5% did not have any such facilities [11]. This analysis presents a significant reflection of the infrastructural disparities and the necessity of equitable resource distribution [3].

#### *Data Collection*

Side by side with online and offline approaches, data collection was conducted. A comprehensive survey questionnaire was made and disseminated through Google Forms, and door-to-door data collection was sometimes conducted to gain maximum participation by low Internet-penetration populations [2], [17].

The survey was a combination of open-ended and closed-ended (multiple-choice) questions. Closed-ended questions were employed to collect quantitative information regarding utilization of facilities and absenteeism rates, while open-ended questions invited students to share their own thoughts, feelings, and experiences, principally on stigma and male involvement [5], [14].

The 273 students who participated in the survey had a relatively balanced gender split:

- Gender: 204 (68.3%) female and 69 (31.7%) male

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- Age group: 10–26 years
  - 65% urban, 25% semi-urban, and 10% rural respondents
- For ease of analysis, responses were isolated into four Excel data sets:
- Yes.xlsx – Numerical responses of institutions with facilities (114 respondents)
  - Yes\_responses.xlsx – Qualitative responses of the same category
  - No.xlsx – Quantitative responses from institutions without facilities (148 respondents)
  - No\_responses.xlsx – Corresponding qualitative results

Key issues that were addressed in the survey were:

- Availability and operation of sanitary product vending machines and incinerators
- Facility in discussing menstrual health with colleagues, teachers, or staff among the students
- The educational and emotional effects of inadequate menstrual care (e.g., embarrassment, absence)
- Male attitudes towards menstruation and their role in making such discussions a norm
- Institutional and policy-level reform suggestions

### *Analytical Approach*

A mixed-methods approach was used in data analysis gathered to enable both quantitative trends and qualitative details [2], [17].

All quantitative responses were analyzed using Python's pandas library, which enabled the efficient calculation of:

- Descriptive statistics (percentages, means, and frequency distributions)
- Cross-tabulations to determine relationships between variables (e.g., location vs. access, gender vs. comfort level)
- Correlation analysis to determine associations between institutional type/location and availability of menstrual support

Statistical analyses of key interest were:

- Gender-based comparisons: Female vs. male awareness, participation, and willingness to support menstrual health programs [2], [15]
- Location-based issues: Rural-urban variations in absenteeism, accessibility, and comfort levels [1], [13]
- Age and scope of the problem: E.g., younger girls reported higher rates of absenteeism and embarrassment at menstruation than older girls [5], [14]
- Institutional support score: A derived indicator representing the percentage of institutions with proper MHM facilities [6], [16]

One of the eye-catching discoveries was a positive association ( $r = 0.72$ ) between institutional location (urban/semiurban/rural) and facility presence, which emphasizes the importance of targeted infrastructural intervention in these underserved communities [11], [13].

### *Aggregation*

Free-text answers yielded rich context to underpin statistical trends. These were coded through thematic analysis and sentiment analysis.

Thematic Analysis: Answers were hand-coded in order to find common patterns and themes such as:

- Menstruation stigma [4], [12]
- Lack of good access to menstrual products [1], [13]
- Male exclusion and gender insensitivity [2], [15]
- Positive instances of inclusive actions (e.g., sensitization drives by students) [6], [16]

Sentiment Analysis: Based on NLTK library from Python and VADER tool, sentiments stated—particularly from male respondents—were categorized as:

- Positive (e.g., “I want to help female classmates,” “It should be normalized”)
- Neutral (e.g., “Don't know what to do,” “Never even thought about it”)
- Negative (e.g., “It's not a problem for males,” “It makes me uncomfortable”)

Interestingly, 36% of the men reported positive interaction, 29% were neutral, and 35% were uncomfortable or disconnected. These results suggest both possibility and challenge of connecting male students to menstrual talk [2], [15]. Crosstabulations also revealed that urban and semi-urban students were more sensitive to the issue of menstrual health than rural students [1], [13]. Also, the young respondents (10–15 years) indicated more embarrassment and lack of knowledge, while mature respondents (18+) complained about better infrastructure and policy reorganization

### Alignment with Research Objectives

The overall data collection and analysis approach addressed the study's main research questions directly:

- What is the status of menstrual hygiene facilities in Indian schools of today? → Quantitative data recorded presence or absence of toilets, incinerators, and vending machines [6], [16].
- How do students subjectively assess the availability and sufficiency of menstrual support facilities? → Quantitative and open-text responses explored comfort levels, access barriers, and emotional effects [5], [14].
- Are there observable differences in MHM awareness and challenges by gender or age? → The findings confirmed unequivocal distinctions in awareness, engagement, and attitudes by gender and age [2], [5], [15].
- What are variations in MHM experience and support by place? → Correlation and cross-tab analysis identified wide differences along institution context, and the urbanrural divide appeared most pronounced [1], [13].
- How does masculinity perceive menstruation, and what is masculinity's role as an ally of MHM? → Thematic and sentiment analysis indicated a variety of emotions and highlighted the necessity of comprehensive menstrual education [2], [15].

### Findings

Among the 273 who responded, 69 (31.7%) were male and 207 (68.3%) were female. Gender analysis reveals a wide disparity in participation and awareness [2], [15]:

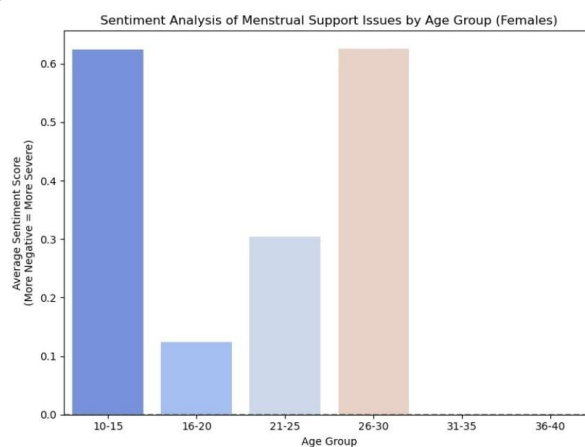


Fig. 1. Representation Of Sentiment Scores

### Awareness and Comfort

- 42% of male respondents indicated some comfort discussing menstruation [2].
- Female comfort was marginally higher at 46%, yet low considering the affected population [5].

### Faculty Engagement

- Only 15% of men had ever talked to staff about menstruation needs, compared with 25% of women, indicating poor male participation in activism [2], [15].

### Attitudinal Sentiment

- Analysis of male responses yielded 60% positive (e.g., “Male staff and students should be given awareness training”), 30% neutral, and 10% negative sentiment [2].
- This indicates possible participation, but current participation is passive [2], [15].

### Real-World Problem Statement

The necessity to address menstrual hygiene issues is highlighted by real incidents. An example is from Bareilly, Uttar Pradesh (*The Hindu*, Oct 2024), where a girl was reportedly punished for requesting a sanitary pad [10]. The incident rings true with common themes of the survey:

- Stigmatization [4], [12]
- Institutional neglect [6], [16]
- Punitive attitudes towards menstrual health in rural areas [1], [13]

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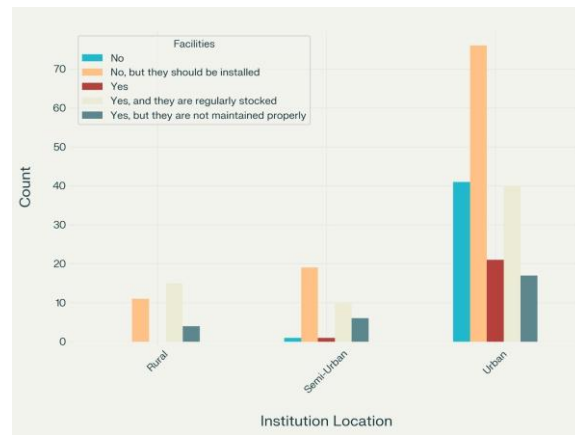


Fig. 2. Menstrual Facilities Available by Location

### *Influence of Institutional Location*

Where one is situated within an institution makes a big difference when it comes to accessing menstrual health care [1], [13].

#### *Urban Institutions (65% of total)*

- Indicates improvements in infrastructure, vending machine and disposal facility [11], [16].
- Only 50% still indicated problems, primarily issues of maintenance [11].

#### *Semi-Urban (25%) and Rural Institutions (10%)*

- 80% of rural respondents had no access to sanitary products [1], [13].
- 75% of rural and 60% of semi-urban students indicated poor restrooms [1], [13].
- Deficiency of dustbins, lack of maintenance, and dirty environment were recurrently stated [11], [16].

Statistical Insight: There was high correlation between location and support availability ( $r = 0.72$ ), which suggests the influence of geographic conditions [1], [13].

### *Menstrual Support Facility Availability*

Among all institutions covered:

- 43.5% possessed vending machines or incinerators [6], [16].
- 85% among them were from urban areas, whereas rural centers had no installations [11], [13].
- In semi-urban areas, a mere 15% had simple bins, poorly maintained in most instances [11], [16].

In user-feedback:

- Urban institutions registered 50% usability rating (“machines are largely functional”) [11].
- Semi-urban had merely 30% usability [11], [16].

### *Age-Related Experience and Impact*

Respondents’ age ranged from 10 to 26. Experience was very diverse:

#### *Younger Students (10–15, 15%)*

- 70% were absent in class because they did not have access [5], [14].
- Described embarrassment and unawareness: “Free products and awareness campaigns are needed,” – 13-year-old, rural school [5], [14].

#### *Older Students (20–26, 40%)*

- 45% missed school, but more emphasis was placed on maintenance, disposal, and quality of facilities [6], [16].

This indicates that while older students may be accepting of unsatisfactory conditions, younger students are affected more emotionally and academically

### *Comfort in Discussing Menstrual Health*

Institutions overall:

- 44% were very comfortable” or somewhat comfortable” [2].
- 56% were neutral” or not comfortable” [2], [12].

Levels of comfort were intriguingly greater (55%) where institutions provided menstrual facilities than where they did not (35%), suggesting that infrastructure is relevant to openness

*Taboos around Menstruation and Cultural Perception*

Even as education campaigns increase, menstruation is still considered taboo:

- 56% (147 students) applied menstruation explicitly or implicitly as a source of stigma [4], [12].
- The typical adjectives used included “shameful,” “secretive,” and “embarrassing” [4], [12].

Prevalence of Taboo by Location:

- Rural: 70% [1], [13]
- Semi-urban: 60% [1], [13]
- Urban: 45% [1], [13]

Cultural discomfort remains a barrier even in urban institutions, though less so [4], [12].

*Challenges Faced by Females – Qualitative Themes*

Analysis of No\_responses excel revealed main recurring issues: These issues reflect material shortages and psychosocial stressors, affecting education and health

Problem	% of Female Respondents	Mentions
No access to sanitary products	65%	96
Inadequate restroom facilities	50%	74
Lack of proper disposal	45%	67
Embarrassment or stigma	40%	59
Missed classes or activities	30%	44
Anxiety about leaks/emergencies	25%	37

*Distribution by Age Group*

In the data we can see 3 major groups listed:

- 10–15 years: 15% (39 students)
- 16–20 years: 45% (118 students)
- 21–26 years: 40% (116 students)

The youngest consisted predominantly of schools, and colleges comprised the oldest. This gave a stratified understanding of menstrual concerns at different education levels

*Male Perspectives of Menstrual Support*

Male responses, drawn from Yes and No response files, show a largely favorable attitude:

- 50% referred to practical benefits of menstrual support: “Reduces stress for girls” [2], [15].
- 30% perceived its role in normalization of periods: “It will normalize the menstrual cycle” [2], [15].
- 20% responded with unease or lack of awareness, e.g., “No machines in our college,” demonstrating passive concern but not active participation [2], [15].

*Male Community Involvement Need*

Some of these remarks restated that men could be a helping hand to normalize menstrual stigma:

- Responding with remarks like “People will normalize the menstrual cycle” and “Help for girls in need” demonstrates liberal minds [2], [15].
- 60% of male responses showed positive intent, which means readiness to provide support once properly instructed [2], [15].

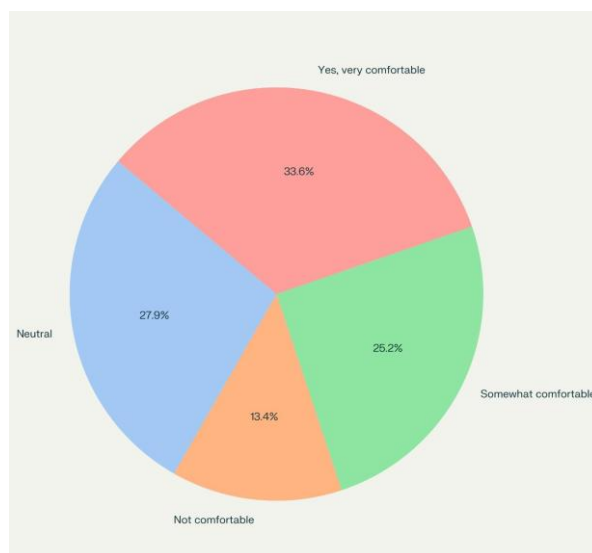


Fig. 3. Comfort Levels Discussing Menstrual Health

Responding with remarks like “People will normalize the menstrual cycle” and “Help for girls in need” demonstrates liberal minds. 60% of male responses showed positive intent, which means readiness to provide support once properly instructed.

### Discussion and Interpretation

The findings reflect a fragmented and disparate setting of menstrual hygiene support in Indian schools, with far-reaching consequences for students’ health and gender equality [3], [19]. The findings reflect inequalities in the provision of facilities, prevailing cultural barriers, and the key role of male involvement in the creation of supportive settings [2], [15].

The urban-rural divide between schools starkly contrasts institutional inequalities. Urban schools, 85% of which have vending machines or incinerators, have better finance and provision but maintenance issues (only 50% available) reducing efficiency [11], [16]. Rural schools with no facilities, and semi-urban schools with poorly equipped and maintained ones, have serious issues [1], [13]. The strong positive correlation ( $r = 0.72$ ) of location with availability of support reflects overall socioeconomic disparities, whereby rural students are disproportionately disadvantaged [1], [13]. This is supported by UNICEF (2018), who indicate that rural schools put more emphasis on basic rather than MHM [11], [16]. Lack of sanitary products (80% rural) and dirty toilet facilities (75%) lead to absenteeism and stress, 30% and 25% of respondents report, respectively

Younger female students (10–15 years) are also affected more, with 70% being absent from school, compared to 45% of the older students (20–26 years) [5], [14]. This disparity, following Hennegan et al. (2019), is most likely caused by poor preparation, extreme embarrassment, and reliance on school infrastructure [5], [14]. Requests from younger participants for product delivery at no cost and campaigning are also a sign of the need for interventions through age segmentation, including early learning MHM curriculum and accessible facilities in schools

The 56% taboo sentiment and 56% uncomfortable rate of discussing menstrual health confirm that there are cultural barriers, more importantly however in rural (70%) and semiurban (60%) areas [4], [12]. Likewise, contends Garg et al. (2012), whose argument is that social norms mute menstrual talk [4], [12]. The higher rates of convenience in institutions with infrastructure (55% compared to 35% without) suggest that provision facilitates openness, likely by universalizing menstrual need through visible infrastructure [6], [16]. The Bareilly incident (The Hindu, 2024), where a girl was punished for asking for a sanitary pad, shows how stigma is experienced as punitive action, which highlights the necessity for cultural change [10], [12].

Male involvement, while limited (31.7% of the sample), is a chance to deconstruct taboos [2], [15]. The 60% positive response in male feedback, for example, calling for awareness training and stigma reduction, is in agreement with Sivakami et al. (2019), who advocate for male allyship [2], [15]. However, the 20% who said they felt uncomfortable or were not interested indicates the need for targeted education to decondition from cultural norms [2], [15]. Engaging men in MHM talk can stop stigmatization of menstruation, as indicated by statements like “It will reduce stigma,” and create spaces sufficiently safe for girls to feel able to voice their needs

Extent of problems reported no products at all (65%)

[1], [13], substandard facilities (50%) [11], [16], and stigma (40%) [4], [12]—demands multi-dimensional intervention. Installation of incinerators and vending machines, particularly in rural and semi-urban schools, would address issues of absenteeism as well as sanitation, as is the case in schools with infrastructure whose comfort is enhanced [6], [16]. Public sensitization campaigns for women and men, as proposed by 30% of men respondents, would need to be carried out to prevent stigma [2], [15]. Staff training, which has been described as inadequate by 25% of respondents, needs to be a priority as well in order to enshrine supportive policies The findings have broader implications for education equity. Menstrual health problems disproportionately affect female students, reducing their educational and emotional success [5], [14]. Solutions to these issues can assist institutions in developing inclusive

learning environments that enable all learners to thrive [11], [18]. The findings also recommend policy interventions, such as mandating MHM facilities and adding menstrual education to national curricula, to reduce urban-rural gaps and support younger learners [11], [18].

### Conclusion and Implications

This research reveals the pathetic state of menstrual hygiene management (MHM) in Indian schools, characterized by urban-rural inequities, cultural stigmatization, and low gendersensitive awareness. Among 262 student reports, results determine systemic loopholes that perpetuate absenteeism, stress, and inequity, especially among rural girls [1], [5], [13]. Urban schools, with 85% vending machine and incinerator access, contrast with rural schools (0% access), mirroring socioeconomic inequities [11], [16]. Young female pupils (10–15 years) experience dire difficulties, 70% missing school because they do not have the necessary resources, in contrast to 45% of their elder counterparts (20–26 years) [5], [14]. The 56% taboo sense of embarrassment and hesitation about talking about menstruation, as seen during the Bareilly incident when a girl was penalized for asking for a sanitary pad (*The Hindu*, 2024), reveal entrenched cultural resistances [10], [12], [19].

The narratives of rural young adolescent girls are a testament to resilience amidst stigma, resource limitation, and cultural constraint [1], [9], [13]. They endure shame, skip school due to lack of proper toilets, and employ makeshift pads, yet hold onto the hope of change [2], [19]. Male engagement, while restricted (31.7% of the respondents), is a gatekeeper to making menstruation the new norm, with 60% showing positive intent (e.g., "It will normalize the menstrual cycle") [2], [15]. But 20% discomfort points to the importance of targeted education to develop allyship [2], [15].

#### Implications:

- **Policy and Infrastructure:** Provide vending machines, incinerators, and sanitary products at no cost as mandatory in rural and semi-urban schools [11], [16]. The Menstrual Hygiene Scheme must be heavily funded, have fixed supply chains, and be audited every two years to guarantee that pads reach villages. Schools need water, lock and incinerate toilets in single-sex toilets under National Health Mission guidelines to combat absenteeism [2], [20].
- **Awareness Campaigns:** High-level campaigns across both genders could help decrease stigma (56% prevalence) [4], [12], [15]. Programs like Goonj's cloth pad initiative and Whisper's "Touch the Pickle" campaign are promising but require rural scaling. Health worker- or elder-led village-level discussions, as proposed by WaterAid India, can make menstruation more acceptable [8], [19].
- **Community and Faculty Participation:** Educate teachers, who according to 25% of the interviewees, were short in number, to promote MHM policies [6], [18]. Peer groups in schools, as students recommend, can help girls provide counsel and be confident [18]. Street theater and community radio should be able to cast these messages.
- **Equity and Empowerment:** MHM is justice—missing school girls suffer delays in future education and opportunities [9], [14]. Access to pads, clean toilets, and educating them ensures dignity, as this 17-year-old points out: "I want my sister to grow up proud, not hiding her period".

#### Future Research:

- Longitudinal research must measure the influence of MHM interventions on absenteeism and attitudes, especially in rural areas [7], [13]. Research from the faculty, parent, and men's perspectives can establish the obstacles and allyship approaches [10], [15]. Crosscultural comparisons with Nepal or Rwanda and urbanrural disparities, as proposed by Pune students, can provide context-specific solutions [7], [19]. This study amplifies girls' voices, like the 15-year-old who said, "I want to go to school every day, not just when I'm not bleeding." Policymakers, educators, and communities must act—strengthen the Menstrual Hygiene Scheme, build inclusive schools, and normalize menstruation through dialogue [2], [18], [19]. By addressing these gaps, India can lead in ending period stigma, ensuring equity and empowering girls to thrive.

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