



## Original Research Article

## A CROSS-SECTIONAL STUDY OF KNOWLEDGE, ATTITUDE AND PRACTICE OF MENSTRUAL HYGIENE AMONG SCHOOL GOING ADOLESCENT GIRLS IN URBAN FIELD PRACTICE AREA OF A TERTIARY CARE HOSPITAL OF SHAHJAHANPUR, UTTAR PRADESH.

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Received : 01/02/2025  
Received in revised form : 20/02/2025  
Accepted : 04/03/2025

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DOI:10.70034/ijmedph.2025.1.224

Source of Support: Nil,

Conflict of Interest: Nonedeclared

**Int J Med Pub Health**

2025; 15 (1); 1196-1199

**ABSTRACT**

**Background:** Menstruation is a natural biological process that occurs in females. In India, restricted access to sanitary hygiene products and a lack of proper sanitary facilities often force individuals to resort to unhygienic methods for managing menstruation. In many developing countries, including India, women often lack awareness about proper menstrual hygiene practices and face difficulties in openly discussing menstruation due to prevailing social taboos. This descriptive study aimed to assess the level of knowledge, attitudes, and practices (KAP) regarding menstrual hygiene among school-going adolescent girls in the urban field practice area of a tertiary care hospital in Shahjahanpur. The research focused on understanding their awareness, perceptions, and hygiene management behaviors to identify gaps and areas for improvement.

**Materials and Methods:** This community-based cross-sectional study was conducted among adolescent girls in the Shahjahanpur district, Uttar Pradesh. The research took place in schools located within the urban field practice area of the Department of Community Medicine, Varun Arjun Medical College & Rohilkhand Hospital, Shahjahanpur. For data collection, a semi-structured, predesigned, and pretested questionnaire was used, and information was gathered through personal interviews. The study included all school-going adolescent girls aged 10 to 19 years who were present on the day of data collection.

**Results:** A total of 220 adolescent girls participated in this study. The majority (65%) were in the 15 to 17-year age group, with an overall average age of 15.67 years. This study revealed that 70.91% of girls had prior knowledge of menstruation before their first period, whereas 29.09% were unaware. Only 15.46% of girls had a celebration for their first menstruation, suggesting that while some families acknowledge menarche as a significant milestone, most do not. Additionally, just 9.09% of girls reported experiencing no social or cultural restrictions.

**Conclusion:** Comprehensive menstrual health programs in schools and communities are essential to educate girls on hygiene, reproductive health, and breaking social taboos.

**Keywords:** Adolescent girls, Menstrual Hygiene, Urban Area, Demographic factors.

## INTRODUCTION

Menstruation is a natural biological process experienced by females. In India, limited access to sanitary hygiene products and inadequate safe sanitary facilities may compel individuals to adopt unhygienic practices for managing menstruation.<sup>[1]</sup> Menstrual Hygiene Day is observed every year on May 28. Studies have shown that many adolescent girls lack complete and accurate knowledge about menstrual physiology and hygiene. Maintaining proper hygiene during menstruation is essential, as inadequate practices can lead to a higher risk of reproductive tract infections (RTIs) and other health complications.<sup>[2]</sup>

The World Health Organization (WHO) defines adolescence as the period between 10 and 19 years of age.<sup>[3]</sup> It is a transitional phase between childhood and adulthood. During this stage, girls typically experience their first menstruation.

Menstrual hygiene goes beyond just managing menstruation; it also involves addressing societal beliefs and taboos related to it. Various factors, including education, socioeconomic conditions, and cultural norms within a family, play a significant role in shaping menstrual hygiene practices.<sup>[4]</sup>

Research indicates that young individuals in low- and middle-income countries often struggle with managing menstruation and maintaining proper menstrual hygiene. These challenges arise due to deeply rooted religious, cultural, and social restrictions that influence perceptions and practices surrounding menstruation.<sup>[5]</sup> Furthermore, the lack of accurate information and prevalent misconceptions contribute to poor menstrual hygiene management. In many developing countries like India, women are often unaware of proper menstrual hygiene practices and are unable to openly discuss menstruation due to social taboos.<sup>[6]</sup>

Menstrual hygiene is a crucial public health issue, yet it often does not receive the attention and action it deserves. This neglect is largely due to unfavorable circumstances, including the indifference of politicians and decision-makers. As a consequence, policies and programs designed to address menstrual hygiene are inadequate, continuing to perpetuate the difficulties faced by women and girls, particularly in marginalized communities.

Therefore, maintaining proper menstrual hygiene is essential during menstruation. This includes using suitable sanitary pads, ensuring proper genital hygiene, taking regular baths, and consuming a balanced diet.<sup>[7]</sup>

This study was conducted with the specific goal of gathering direct insights into the health issues encountered by adolescent girls in urban settings. The descriptive research aimed to evaluate the knowledge, attitudes, and practices (KAP) surrounding menstrual hygiene among school-going adolescent girls in the urban field practice area of a tertiary care hospital of Shahjahanpur.

## MATERIALS AND METHODS

**Study Design:** It is a community based cross-sectional study and this study was undertaken among adolescent girls in Shahjahanpur district, Uttar Pradesh.

**Place of study:** The study was conducted in schools present in the urban field practice area of the Department of Community Medicine, Varun Arjun Medical College & Rohilkhand Hospital, Shahjahanpur, Uttar Pradesh.

**Study Tools:** A semi-structured, predesigned and pretested questionnaire was used for the study. The data collection technique was personal interview method

**Study Subjects:** All school-going adolescent girls age group of 10-19 years who were present in school on the day of data collection.

**Sample size:** Total of 220 adolescent girls were enrolled in this study.

### Inclusion Criteria

All adolescent school-going girls studying in schools within the urban field practice area of Varun Arjun Medical College & Rohilkhand Hospital, Shahjahanpur, whose parents provided consent for their participation in the study on menstrual health, were included. Additionally, verbal consent was obtained from the girls themselves.

### Exclusion Criteria

Students who were absent at the time of the study and those who did not provide verbal consent and whose parents did not give consent to participate were excluded.

### Method of collection of data

A list of all schools present in the urban field practice area of Varun Arjun Medical College & Rohilkhand Hospital, Shahjahanpur was prepared, and two schools were randomly selected by using lottery method. All adolescent school-going girls aged 10–19 years studying in these selected schools, regardless of their place of residence, were included in the study.

All the participants were briefed on the specific objectives, purpose of the research in the beginning of the study. Data collection was started after obtaining clearance from ethical committee. Analysis plan: The information thus collected and entered in MS Excel and presented using tables, bar charts, and pie charts where appropriate.

## RESULTS

A total of 220 adolescent girls were participate in this study, majority of girls were belongs to age group 15 to 17 years (65%) and the overall average age of the participants was 15.67 years. The 10-14 years group comprises 18.18%, while the 18-19 years group represents 15.90%. The majority of respondents (71.81%) are Hindu, followed by Muslims (19.09%), and 10% belong to other religious groups. 75% of mothers are illiterate, meaning they lack basic

education, which could have significant implications for their children's health, nutrition, and academic performance. Only 16% have primary education, and an even smaller proportion (9.90%) have attained secondary education or higher. A vast majority

(77.27%) of mothers are housewives, indicating economic dependency on their spouses or other family members. Only 17.27% are employed in private-sector jobs, while 5.45% hold government jobs..

**Table 1: Socio-demographic characteristics of girls**

	Variant	Number (220)	Percentage (%)
Age group (years)	10-14	40	18.18%
	15-17	145	65%
	18-19	35	15.90%
Religion	Hindu	158	71.81%
	Muslim	42	19.09%
	Others	20	10%
Mother's education	Illiterate	165	75%
	Primary	35	16%
	Secondary & above	20	09.90%
Mother's occupation	Housewife	170	77.27%
	Private job	38	17.27%
	Government job	12	5.45%

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for their children's health, nutrition, and academic performance. Only 16% have primary education, and an even smaller proportion (9.90%) have attained secondary education or higher. A vast majority (77.27%) of mothers are housewives, indicating economic dependency on their spouses or other family members. Only 17.27% are employed in private-sector jobs, while 5.45% hold government jobs.

**Table 2: Knowledge about Menstruation**

	Variant	Number(220)	Percentage
Do you know about menstruation before menarche?	Yes	156	70.91%
	No	64	29.09%
Source of informant:	Mother	166	75.45%
	Teacher	15	6.81%
	Friend	26	11.81%
	Media	14	6.36%

The above table suggests that 70.91% of girls knew about menstruation before their first period, while 29.09% had no prior knowledge. This means that while most girls had some awareness, nearly one-third were unprepared for menarche.

When it comes to sources of information, mothers were the primary informants (75.45%), meaning most girls learned about menstruation at home.

Friends (11.81%) were the second most common source, indicating some peer discussions. However, only 6.81% learned from teachers, showing that schools are not playing a major role in menstrual education. Media (6.36%) was the least common source, suggesting limited awareness through TV, books, or the internet.

**Table 3: Table 3: Attitude about Menstruation**

	Variant	Number	Percentage
Celebration of first menstruation	Yes	34	15.46%
	No	186	84.54%
Cultural or social restrictions during menstruation	Restricted from entering the prayer room	24	10.91%
	Restricted from entering the Kitchen	176	80%
	No restriction	20	09.09%

This table shows that only 15.46% of girls had a celebration for their first menstruation, while the majority (84.54%) did not.

When it comes to restrictions during menstruation, 80% of girls were not allowed to enter the kitchen,

and 10.91% were restricted from entering the prayer room. Only 9.09% of girls faced no restrictions, indicating that cultural taboos around menstruation are still widely followed.

**Table 4: Table 4: Menstrual Hygiene Practices and Disposal Methods**

	Variant	Number	Percentage
Materials used for menstrual hygiene:	Sanitary pads/Napkins	184	83.64%
	Cloths	36	16.36%
Way of disposing used pads:	Dustbin	162	73.63%
	Toilet	12	05.45%
	Open field	46	20.90%

The data shows that 83.64% of girls use sanitary pads, making them the most common menstrual hygiene product. However, 16.36% still use cloth, which, if not cleaned properly, can lead to infections. When it comes to disposing of used pads, 73.63% of girls throw them in a dustbin, which is the safest method. However, 20.90% dispose of them in open fields, which can lead to environmental pollution and health risks. Additionally, 5.45% flush them down toilets, which can cause blockages and sanitation issues.

These findings highlight the importance of educating girls on safe menstrual hygiene practices and proper disposal methods. Schools and communities should promote affordable sanitary products and better disposal facilities to ensure both personal and environmental hygiene.

## DISCUSSIONS

In this study data showing that schools are not playing a major role in menstrual education (6.81%) as relying solely on mothers. Encouraging open discussions in schools and homes, along with the use of media for awareness, could help ensure that every girl is well-informed before experiencing her first period. 15.46% of girls experienced a celebration for their first menstruation. This data suggests that some families recognize menarche as a significant milestone, most do not mark the occasion in any special way. Only 9.09% of girls faced no social and cultural restrictions, these findings highlight that menstruation is still associated with various social restrictions, affecting daily activities. And awareness programs are needed to challenge menstrual taboos and promote it as a normal biological process rather than something impure or shameful.

The data from table 4 suggests that while modern menstrual hygiene products dominate, a portion of the population still depends on traditional methods. This highlights the need for awareness programs, improved accessibility to sanitary products, and discussions around menstrual health and hygiene. Findings also highlight the importance of educating girls on safe menstrual hygiene practices and proper disposal methods. Schools and communities should promote affordable sanitary products and better disposal facilities to ensure both personal and environmental hygiene.

## CONCLUSION

The study highlights a significant lack of awareness and misconceptions about menstruation among girls.

While 83.63% of them use sanitary pads as absorbent material, a notable percentage still relies on traditional methods such as cloth, which may not always be hygienic or safe. This indicates a need for better education and access to menstrual hygiene products.

Furthermore, 80% of girls reported facing restrictions on touching kitchen items during their menstrual cycle, reflecting the deep-rooted cultural taboos and social stigma associated with menstruation. Such restrictions can contribute to feelings of shame, exclusion, and misinformation, further discouraging open discussions on menstrual health.

To address these challenges, it is essential to implement comprehensive menstrual health awareness programs in schools and communities. These programs should educate girls about menstrual hygiene management, reproductive health, and breaking social taboos associated with menstruation. Additionally, involving parents and teachers in these discussions can help create a more supportive environment for young girls.

Moreover, free or subsidized distribution of sanitary pads should be introduced for those who cannot afford them. Government initiatives, NGOs, and community-based programs can play a crucial role in ensuring menstrual equity, reducing health risks, and promoting dignity in menstrual health management. Schools should also provide proper disposal facilities and encourage the use of eco-friendly menstrual products, such as biodegradable pads and menstrual cups, to ensure both personal and environmental hygiene.

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