

# Menstrual Health Management: Knowledge and Practices in Rural Kaushambi District, India

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## Abstract

*Menstrual health, hygiene, and management are still not given the required attention in the majority of India. In our society, menstruations as well as females during menstruation are considered as tainted and impure, resulting in unhygienic menstrual practices and consequential varied infections and diseases. Although this is the problem of every society in our country, the condition of adolescent girls and women in rural areas are more grave and miserable. This study is based on a community-based survey conducted in the year 2019-20 in the rural Kaushambi district of Uttar Pradesh. The main objective of the study is to access knowledge, attitude, and practices regarding menstrual health and hygiene management in rural society. The study found that about 72% of girls in a rural area doesn't have any awareness regarding menstruation before their menarche and more than three-fourth of the respondents don't have any knowledge regarding the cause of menstruation even after menarche. The study came to know that less than one-third of respondents don't have access to hygienic sanitary absorbents to manage their menstruation and the majority of participants don't adopt sustainable ways to dispose of their used sanitary absorbents. Respondents were also informed about various kinds of socio-cultural restrictions during menstruation, which makes their life wretched during their periods.*

**Keywords:** Menstruation, Hygiene, Awareness, Menstrual health, Rural.

## Introduction

Menstruation is a natural physiological process in which female bodies transform for a potential pregnancy. Menstruation has been experienced by all adolescent girls and women in their life till their menopause. Every menstruator menstruates each month but there is variation in maturation days, which is for two to five days and occasionally up to seven days, in which they bleed through the vagina. Menarche is considered as a

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transformation period between childhood and adulthood, leading to various physical, psychological, and biological developments of healthy adolescent girls, transgender men, and non-binary persons of reproductive age (*WHO, 1996*).

According to WHO (World Health Organization), an individual between the age of 10-19 falls under the adolescent stage and the average age of menstruation would be 12 to 13 years which is consistent across most of the population. (*Bagga and Kulkarni, 2000; Diaz et al., 2006*). In India, over 355 million menstruators are present, however, major sections of menstruator still facing barriers in their menstrual hygiene management (MHM) (*Dasra, Kiawah Trust, and USAID Report, 2014*). The menstrual flow may differ across the range of people. To deal with it in a healthy and dignified manner, the menstruators have to practice safe menstrual hygiene management (MHM). Menstrual Health Management is defined as “Menstruator should use clean menstrual hygiene product such as cloth, cotton, sanitary pads, menstrual cup or any such things to collect the menstrual blood which can be disposed or changed in privacy within a short interval of time and the one should wash their body parts by using soap and water” (*SHARE Consortium, 2017*).

Indeed, menstruator all over the world have invented various methods to handle menstruation which may or may not be hygienic. These methods are diverse owing to personal priorities, availability of resources, economic status, cultural value, educational status, and knowledge of menstrual management. These menstrual management techniques are of main concern because they have a wide impact on the whole life of menstruator. It affects the well-being of menstruator sociologically as well as economically and mismanagement may lead to major health issues such as toxic shock syndrome, reproductive tract infections (RTI), Urinary tract infection (UTI), and other vaginal diseases (*Khanna et al., 2005; Narayan et al., 2001; Rajaretnam & Hallad, 2010*).

Menstruation is disgraced all over the world. The topic of menstrual health has not given proper attention and is also considered an impure and forbidden subject resulting in a lack of knowledge, preparedness, and management. The same reason leads to unhygienic use of sanitary material as well as unhygienic disposal practices. The study found that

lack of knowledge is the main barrier to proper menstrual management. Inadequate knowledge and practice make the adolescent girls miss school for several days in a month and also restrict them to meet anyone in the house. These girls are kept isolated in the house. These actions leave a deep impact on the well-being of adolescent girls. Sanitary health care is very important for adolescent girls and women, especially in rural areas, who depend on different options other than sanitary pads such as unsanitized cloths, rug, sand, ash, mud to manage their periods. In rural and remote areas, there is still a lower percentage of menstruators using sanitary napkins because of the lack of awareness, availability, and affordability; hence they are forced to continue with unhygienic practices. Most of the menstruator in our society denied the basic right to hygienic, dignified, and healthy menstrual management practices. These issues are prevalent due to gender inequality, educational inequality, sexism, cultural taboo, economic inequality, poverty, and lack of basic sanitation facility associated with menstruation and challenges faced by menstruator at global, national, and local levels. May 28<sup>th</sup> is recognized as Menstrual Hygiene Day since 2014 worldwide (*United Nation Population Fund, 2017*). Also, it is well known that poor Menstrual Hygiene Management Practices adversely affect the initiatives and performance of the countries achieving the important number of Sustainable Development Goals by the United Nations. (SDG-3, SDG-4, SDG-5, SDG-6, SDG-8, and SDG-12.) (*Tiwary and Anuradha, 2018*).

### **Previous Studies**

Menstruation sterility is a major concern that is faultily addressed and not earns decent- consideration in the reproductive health, water, sanitation, and hygiene (WASH) zone in flourishing countries along with India. Menstruation and its related practices are still equivocal by sociocultural restriction inmates in adolescent girls halting ignorance of the scientific facts and hygienic practices, which meantime opposes the health outcomes. Menstruation is static with reference as unclear and dirty in Indian society. Women who have proper knowledge about menstrual hygiene and its proper practice are less prone to UTIs and other consequences (*Yasmin et. al., 2013*).

The scantiness of relevant and correct information references to

menstrual hygiene in adolescent girls may result in wrong and unhealthy behavior during their menstruation period. Also, many mothers don't know the proper process of menstrual hygiene, and inadequacy of skills to communicate with their daughter lead them to pass wrong information by them propagate false attitude, beliefs, and practices (*Lawan et.al., 2010*). Isolating the menstruating girls and imposing restrictions on them creates an apprehensive outlook towards this process (*Singh et.al., 2001*).

The studies show that during the pre-menstruation and menstruation period, 75% of girls in late adolescence combat problems associated with menstruation such as physical, psychological, and financial (*Senthil et.al., 2013*). Menstruation is an important cycle in the human reproductive process but many functionality disorders affect the lives of adolescents (*Olowokere et.al 2014*). Many studies show that majority of adolescents have improper knowledge and miss apprehension about menstruation and those who know about menstruation, are practicing the erroneous technique associated with hygiene and menstrual management. In developing countries like Nigeria, Uganda, India, adolescent girls are forbidden during the period from doing any kind of household work such as cooking, attending religious practices, etc. The study shows that during menstruation absentees of girls range between 2% to 61.7%. Also, a survey shows that every fifth girl in India and Egypt frequently changes their absorbent in school compared to half of the counterparts in Nigeria. Survey also suggests that urban adolescents take baths more frequently compared to rural adolescents during menstruation. This also indicates that adolescents in India also clean their genitals twice a day during menstruation. These practices also fall under MHM education (*Chandra-Mouli & Patel 2017*).

Contradictory to our belief, a survey static shows that 67.4% of adolescents were well known to MHM, about  $\frac{3}{4}$  of (26.4%) of them have plenty of knowledge of MHM. Referencing attitude of menstruation survey shows that half of the adolescent has a positive attitude towards MHM (*Yadav et. al., 2017*). In western parts of Ethiopia, the survey state that 60.9% of adolescent had plenty of knowledge of MHM. The same survey also found that the primary source of this information was their teachers. Meanwhile, in Nepal, it found that a major number of

adolescents had an eminent level of knowledge on MHM and that knowledge of MHM was predicated by mental education. The menses are considered a typical biological process and a major sign of reproduction health (*Upashe et.al., 2015; Gultie et.al., 2014; Santra, 2017*).

A similar study on adolescent girls in Katsina state in Nigeria showed that only 1/ 3<sup>rd</sup> of them has only primary knowledge of menses, 3 in 5 has no knowledge of the cause of menses and its process. The studies also show that the source of knowledge of proper menstrual hygiene practice was a predictor. Although in Nepal the studies show 5% of adolescent girls have good knowledge of MHM (*Okafor-Terver, & Chuemchit, 2018*).

In India, studies show that less than half of adolescents have menstrual knowledge before menarche. In India, menstruating girls observe religious limitations, while 24% of them miss school during menses. It also shows that every third girl changed their absorbent in school facilities but a quarter of them improperly disposed of their used material (*Barthakur & Barkataki, 2017; Van Eijk et.al., 2016*).

The studies in Uganda show that every fifth adolescent missed their school due to pain during menses whereas menses is treated as a curse or discase by adolescents. In India, most of adolescents received health education at school about 12.4% of them consider the menses blood impure (*Miuro et.al., 2018; Nemade et.al., 2009*).

It is also showing that most adolescents in Uganda use reusable pads. Although in these areas where there is none of any support structure menstruating girls back out, follow unhygienic practices, or miss their school during menstruating. Whether some of them use exempted materials such as wool, cotton, cloth newspaper, etc. as absorbent. (*Hennegan, 2016*).

According to UNESCO, 23% of the rural schoolgirls in India quit their school due to period which potentially shows the irreversible effect on their personal development, socio-economic status, and as well as on their health. 66% of Indian schoolgirls didn't know anything regarding

menstruation before their first period. It is also reported that 87% of the females in rural India were completely heedless regarding menstruation and its biological importance.

In its study, UNICEF has found out some shocking data regarding the menstrual products that are used by the rural schoolgirls in India. 43% to 88% of schoolgirls use reusable cloth which is frequently washed with soap, 41% of schoolgirls should hide their menstrual cloth in their room while 22% of them hide them on the roof and 11% of them have to share their menstrual cloth with others while 75% of schoolgirls use a cotton cloth and 27% of adolescent girls didn't use any type of material to absorb their period blood during their cycle (*UNICEF, 2018*).

### **Objective**

- To analyze the knowledge, attitude, and practices regarding menstrual health and hygiene management in rural society.
- To understand the current status of adolescent girls and women's experience with menstruation and its management in rural society.

### **Materials and Methods**

This is a group based cross-sectional study accomplished in 2019-2020 among the population of Kaushambi district of Uttar Pradesh. This survey was executed on school /college going girls and young menstruating women living in the villages of the study area. Considering the sensitivity of the topic, the girls and women who participated in the study, are explained about the purpose and protocol of the study and has been ensured about the confidentiality of the survey. According to the objectives, a semi-formal questionnaire counting both concealed and indefinite questionnaire has been prepared. For the convenience of participants, the questionnaire was translated into the Hindi language and the researcher assisted the participants in the local language. Information was collected on socio-demographic variables, menstrual health care, and hygiene, availability and affordability of sanitary products, restrictions, and social taboos associated with menstruation, and disposal of sanitary waste. Data were analyzed statistically by simple proportions and percentages.

## Results

[Table-1] This study of menstrual health management has been on the adolescent girls of the age group 10-20 years and women of age group 21 to 50 years living in the villages of Kaushambi district of Uttar Pradesh. A total of 700 respondents participated in the study. Out of 700 respondents, 182 (26%) respondents are of 10-20 years age group, 188 (26.87%) are of 21-30 years age group, 174 (24.85%) are of 31-40 years age group, and 156 (22.28%) are of 41-50 years age group. As data in Table 1 revealed that, the study tried to include the representatives of each age group equivalently, so that study can find out the factors affecting menstrual health and its management at each stage of life of a woman.

**Table 1: Demographic Characteristic of the Study Population**

Variable	Samples collected in Raksarai (n)	Samples collected in Bara (n)	N %
10 - 20 Years	98 (21.25 )	84 (35 )	26%
21- 30 Years	120 (26.08 )	68 (28.34 )	26.87
31-40 Years	132 (28.69 )	42 (17.5 )	24.85
41-50 Years	110 (23.98 )	46 (19.16 )	22.28
Total No. of a collected sample	460	240	

**Table 2: Knowledge and Perception Regarding Menstruation**

Variable	Samples collected in Raksarai (n=460)	Samples collected in Bara (n=240)	% (N= 700)
What is the cause of menstruation?			
Physiological process	87 (18.92 )	58 (24.16 )	20.72
Don't Know	368 (80 )	179 (74.59 )	78.14
Curse of god	5 (1.08 )	3 (1.25 )	1.14
Which organ does the menstrual blood come from?			
Urethra/Vagina Uterus	80 (17.39 )	20 (8.34 )	14.28
Don't Know	56 (12.17 )	16 (6.66 )	10.28
	324 (70.44 )	204 ( 85)	75.44

Village Name	Raksarai (Bara) (n=460)		Kanaili (Bara) (n=240)		% (N= 700)
	YES	NO	YES	NO	
Awareness about menstruation before the first menarche					27.15
Source of information before menarche					
Mother	45		26		10.15
Sister	42		22		9.15
Teacher	9		10		2.71
Friend	20		16		5.14
No one		344		166	72.85
Total	116	344	74	166	

Menstruation is a very normal and essential physiological process and menarche is the first occurrence of menstruation in a girl's life. However, it is very strange to find out that about 72% of girls in rural areas don't have any awareness regarding menstruation before their menarche. [Table 2] Data reveals that only 27.15% of the interviewees were aware of menstruation before their very first period. Those who have some knowledge about menstruation, that knowledge is either transferred to them by their mothers or by elder sisters. The study also found that some participants gained knowledge about menstruation from their friends and teacher also. It has been observed that 547 (78.14%) of the interviewee were not well informed about the actual reason for the bleeding during menstruation even after menarche. Only 145 (20.72%) girls know that it is a physiological process. However, 8 (1.14%) interviewees thought it was an imprecation from God. A major section of the girls [528 (75.44%)] had no idea regarding which organ was involved in the menstruation process and the origin of the menstrual bleeding. However, 66 (10.28%) were well informed that the origin of the menstrual bleeding is the uterus.

[Table-3] Data divulge the study over practices during menstruation showed that 208(29.73%) respondents used sanitary pads during menstruation, 426 (60.85%) respondents used old cloth pieces, and 66 (9.42%) respondents use some combination like cloth pieces, napkins, etc.



[Table 4] Data showed the disposal of used absorbent. The study has been found that a majority of the girls; [127(18.14%)] dump in open, 52 (7.42%) burned it, 43 (6.14%) threw it in an open pond, 40 (5.71%) dispose in a public dustbin, and 414 (59.14%) after the period is over, is the cloth disposed or kept for further use.

**Table 3: Sanitary Products used during Menstruation**

Variable	Sample collected in Raksarai (n=460)	Sample collected in Bara (n=240)	% (N= 700)
Disposable Sanitary Pad	152 (33.05 )	56 (23.35 )	29.73
Reusable Pad	0	0	0.00
Cloth pieces	262 (56.95 )	164 (68.33)	60.85
Some Combination	46 (10 )	20 (8.34 )	9.42

**Table 4: Sanitary Waste Disposal Behavior**

Variable	Sample collected in Raksarai (n= 460)	Sample collected in Bara (n= 240)	% (N= 700)
Disposal in public dustbins	32 (6.95 )	8 (3.33)	<b>5.71</b>
Dump on open	99 (21.52 )	28 (11.66)	<b>18.14</b>
Burning	40 (8.69 )	12 (5)	<b>7.42</b>
Throw in open pond	25 (5.43 )	18 (7.5)	<b>6.14</b>
Flush in toilet	14 (3.04 )	10 (4.16 )	<b>3.42</b>
After the period is over, is the cloth disposed of or kept for further use.	<b>250 (54.34 )</b>	<b>164 (68.35)</b>	<b>59.14</b>

[Table 5] Data depicts different types of restrictions that have been imposed on girls and women during menstruation. All respondents (100%) informed that they all not allowed in the temple or even not attended any religious function during their periods. 502 (71.71%) girls were not allowed to touch stored food, 302 (43.14%) girls were not allowed to (or not willing to) attend their schools during menstruation, 367 (52.42%) girls were prohibited to do any household related chores, 244 (34.85%) girls were not supposed to touch anybody, 424 (60.57%) girls were not permitted to take bath and 478(68.28%) girls were even not allowed to touch plants.

**Table 5: Restrictions during Menstruation**

Sl. No	Variables (Restrictions)	Sample collected in Raksarai (n=460)	Sample collected in Bara (n=240)	Percent of girls N = 700 No (%)
1.	Not allowed attend religious functions	460 (100)	240 (100)	100%
2.	Not allowed touch stored food	342 (74.34)	160 (66.66)	71.71%
3.	Not allowed to go to school	194 (42.17)	108 (45)	43.14%
4.	Household work	229 (49.78)	138 (57.5)	52.42%
5.	Not allowed touch family members	167 (36.30)	77 (32.08)	34.85%
6.	Taking bath on the fourth day of menstruation	259 (56.30)	165 (68.75)	60.57%
7.	Not allowed touch plants	305 (66.30)	173 (72.08)	68.28%

## Discussion

Menstruation is the vital physiological and natural process in the girls when they reached their teenage, but lack of proper knowledge and hygiene leads the several diseases related to the reproductive life of girls and women (*Kamath, 2013*). Recent studies found that most teenage girls have basic knowledge of the menstrual cycle, age, and duration of menstrual bleeding. In a study done over the 700 volunteers, 208 volunteers (29.73%) were using only sanitary napkins as an absorbent material and almost three fourth 426 (60.85%) reported that they were using an only cloth every time and 66 of them (9.43%) reported they are using both old and new cloth as per the availability. In this study, data revealed that 10.28% of teenagers know menstruation occurs through the uterus whereas 78.14% of them are unaware of the real reason for menstruation. The same study conducted in 2012 Karnataka revealed that 72% of teenagers were unaware of the reason for menstruation in the rural area and 67% in West Bengal, (*Dasgupta & Sarkar 2008; Khan, 2012*). but the same study contradicts with the study, which was conducted in Guntur District, Andhra Pradesh in 1994 which reveal that over 78.5% menstruators knows that menstrual bleeding takes places from the uterus (*Drakshayani & Venkata, 1994*). There is a vast gap in the educational system where menstrual health education is neglected as

it is considering insignificant & unsocial, and the main source of knowledge about this topic are mother, sister, and friends. Previous studies conducted in West Bengal in 2014 and Maharashtra in 2010 also revealed similar findings (*Barathalakshmi, 2014; Munday et.al., 2010*). In the present study, 29.73% of respondents using sanitary napkins, in which more than 90% of respondents dump used absorbent by enfolding it in the paper either in the dustbin, pond, flush in the toilet, or dump in open. These same study findings are equivalent to the study conducted in 2008 in Singur, West Bengal (*Dasgupta & Sarkar2008*). The study also revealed that there are various kind types of limitations which were performed in menstruation. Most of them followed various restrictions linked with food, religious rituals, touching plants, going to temples, taking showers, etc. These studies agreeing with further studies conducted in 2008 in Singur, West Bengal, in 2010 Maharashtra, and in Saoner, Nagpur District respectively (*Munday et.al., 2010; Omidwar & Begum 2010; Thakre et.al., 2011*).

## **Conclusion**

People are still not very comfortable talking about periods. Not only men but also women who menstruate but they still not comfortable talking about menstruation either culture, religion or different reasons may be having for it. Here we are trying to break the silence to normalize the period because it is not a condition, it's not diseased, it is natural, biological, and it is beautiful that should be an embrace. We have to stop demonizing the period and have an open conversation. When we have an open conversation about the period, then only we can talk about its hygiene aspects. The moments we understand how it works; our minds will open about it. It just matters of perception. When people understand the importance of menstruation and the importance of health and hygiene associated with it, they will start talking about it. This could be a way to eradicate taboos associated with menstruation from our society. Menstrual education for both girls as well as boys is necessary for proper understanding and knowledge about menstruation in the youth and only by providing them the proper knowledge and education, we can improve menstrual health and hygiene management practices particularly in rural areas. A community-level education for the mothers of adolescent girls

should be encouraged which could lead to menstrual and pubertal hygiene practices and sound women's health.

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