

# A study on Knowledge, Attitude and Practice of menstrual hygiene among women of reproductive age group in a tertiary care hospital

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## Abstract

**Background:** Menstruation is a normal physiological process and determines reproductive health. Poor menstrual hygiene can lead to various urinary tract, vaginal infections, skin infections or even pelvic inflammatory disease.

**Aims:** To assess the knowledge of menstrual hygiene among women of reproductive age group i.e.; 15-49 years attending the OPD of a tertiary care hospital and to assess their attitude and practices regarding the same.

**Methods:** A cross sectional observation study where an interview was conducted among 100 women of reproductive age group (15-49 years) attending the OPD clinic of our hospital over a period of 6 months and data was analysed according to that.

**Results:** Mean age of the participants was  $32.43 \pm 7.74$  years. Out of 100 participants, 68% had good overall knowledge regarding menstruation. 62% were using commercially available disposable sanitary napkins, 28% were using washable cloth and 10% were using homemade reusable cloth napkins. 70% of the participants were practicing good menstrual hygiene practices. 45% of the participants had local complaints suggestive of reproductive/urinary tract infection associated during menstruation out of whom 35% were not following satisfactory menstrual hygiene practices.

**Conclusion:** Menstrual hygiene is an important aspect of reproductive women's health. Unsatisfactory menstrual hygiene management acts as a risk factor for reproductive tract infections. This calls for spreading awareness to bring about a change in attitude and practices regarding the same.

**Keywords:** Menstrual hygiene, menstruation, practice, sanitary pads

## Introduction

Reproductive health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes. Menstruation is a normal physiological process and determines reproductive health.

The United Nations defines adequate menstrual hygiene management as “women and adolescent girls using a clean menstrual management material to absorb or collect blood that can be changed in privacy as often as necessary for the duration of the menstruation period,

using soap and water for washing the body as required, and having access to facilities to dispose of used menstrual management materials <sup>[1]</sup>.

Menstruation is surrounded by various psychological and religious barriers due to lack of knowledge about the scientific process of menstruation. In India too, this time is considered dirty and associated with taboos, especially in rural areas-which has a negative implication for women's health <sup>[2]</sup>.

It is during this period a woman is regarded most vulnerable for developing any kind of reproductive tract infections, urinary tract infections, and various sexually transmitted diseases. The most common lower reproductive tract infections are bacterial vaginosis, vulvo-vaginal candidiasis and *Trichomonas vaginalis* <sup>[3]</sup>. Bacterial vaginosis is the most serious risk factor for women of reproductive age because of its association with adverse pregnancy outcomes such as preterm birth, acquisition of sexually transmitted infections, and the development of pelvic inflammatory disease (PID) <sup>[4]</sup>.

Menstrual hygiene deals with special healthcare needs and requirements of women during monthly menstruation or menstrual cycle <sup>[5]</sup>.

Good menstrual hygiene, such as adequate washing of the genital area and use of sanitary pads is essential during menstruation <sup>[2]</sup>. Poor menstrual hygiene affects the educational activities as well as the day-to-day activities of women. Menstrual hygiene also has an environmental impact. Improper disposal like keeping inside toilets and indiscriminate throwing in ponds/drains poses a threat to the environment which indirectly affects health <sup>[6]</sup>.

Developing country like ours have high incidence of pelvic inflammatory disease. The present study was conducted to assess the knowledge, attitude and practices related to menstrual hygiene among the reproductive aged women attending the OPD clinic in a tertiary care hospital.

### **Aims and Objectives**

To assess the knowledge of menstrual hygiene among women of reproductive age group i.e; 15-49 years attending the OPD of a tertiary care hospital and to assess their attitude and practices regarding the same.

### **Material and Methods**

This was a hospital based observational study conducted in Shri Maharaja Ghulab Singh Hospital, Govt. Medical College Jammu. The study duration consisted of 6 months and was approved by Institutional Ethical Committee. After a thorough review of literature a questionnaire was prepared enquiring about the knowledge regarding menstruation; what was used during that time, its cleaning, storage and maintenance; genital hygiene and any complaints suggestive of reproductive tract or genital infection during that time.

An interview was conducted among 100 women of reproductive age group (15-49 years) attending the OPD clinic of our hospital over a period of 6 months after obtaining proper verbal consent from participants and data was analysed according to that. All pregnant, lactating, perimenopausal/menopausal women were excluded from the study.

Data were analysed by SPSS 20v software. Association between variables was checked by Chi-square test &  $P < 0.05$  was considered as significant. For this study, the use of disposable readymade sanitary napkin or home-made napkins made from clean, washed cloth, using 3 or more absorbents in a day and washing of perineum 3 or more times in a day was considered as satisfactory <sup>[7]</sup>.

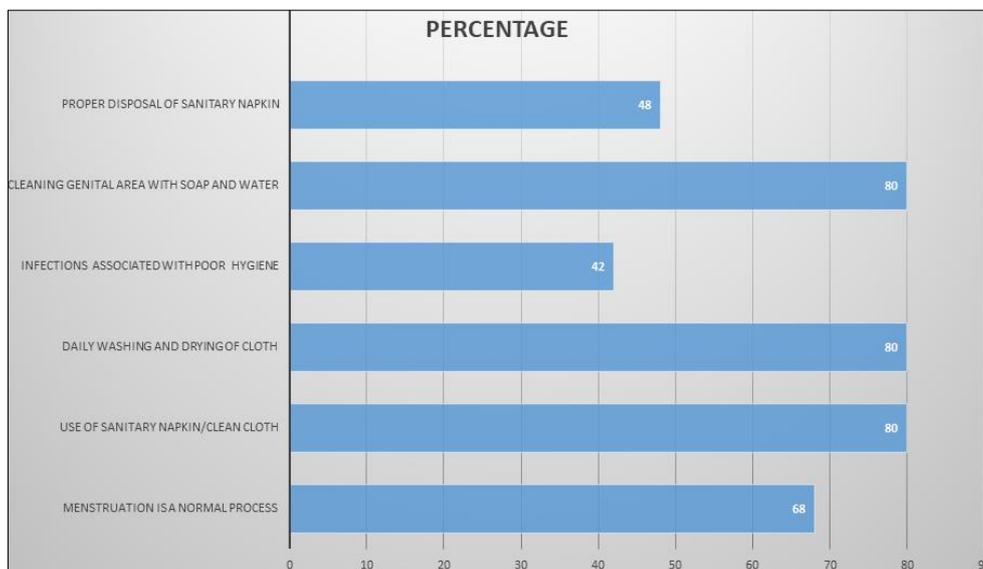
## Results

Out of the total 100 participants, 63% belonged to urban areas and 37% belonged to rural areas. Mean age of respondents was  $32.43 \pm 7.74$  years. About 20% of the women were uneducated. 75% of the participants were married. Majority of them (35%) belonged to upper middle class according to modified BJ Prasad scale. [Table 1].

**Table 1:** General characteristics of the study subjects (N=100)

<b>Mean Age</b>	<b>32.43 ± 7.74 years</b>
Married	75%
Unmarried	25%
<b>Socio economic class</b>	
Class 1 Upper	10%
Class 2 Upper Middle	35%
Class 3 Middle	20%
Class 4 Lower Middle	25%
Class 5 Lower	10%
<b>Place of residence</b>	
Urban	63%
Rural	37%
Uneducated	20%
Read and Write	80%
Unemployed	60%
Employed	40%

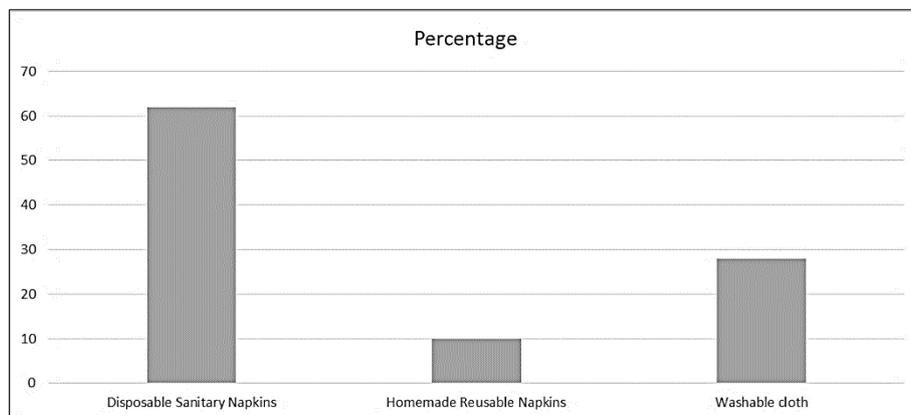
Knowledge of the participants regarding menstruation and the practices associated was assessed. It was noted that out of 100 participants, 68% had good overall knowledge regarding menstruation and knew that it is a normal physiologic process, 80% knew about the usage of sanitary napkin or a clean cloth during menstruation, were aware about proper cleaning and maintenance of cloth used during that time and maintaining genital hygiene, 48% knew about proper disposal of sanitary napkin and 42% were aware about the infections and problems associated with poor menstrual hygiene. (Table 2)



**Fig 1:** Knowledge about menstruation and menstrual hygiene (n=100)

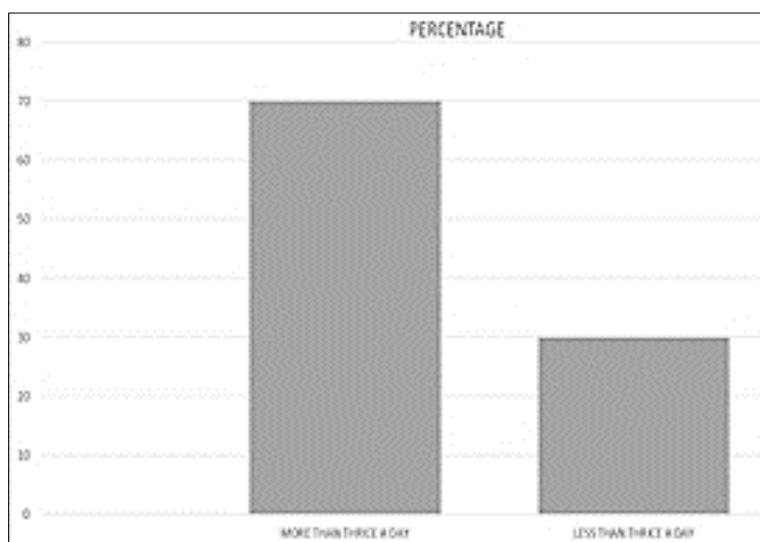
Regarding the absorbents used during menstruation, 62% were using commercially available

disposable sanitary napkins, 28% were using washable cloth and 10% were using homemade reusable cloth napkins. (Figure 2). Among the 38% users of reusable absorbents, 79% were washing cleaning and drying them hygienically.



**Fig 2:** Absorbents used during menstruation

70% of the participants were changing the absorbents more than thrice a day. 60% of all participants took bath daily but all were cleaning genital area daily (100%), among which 70% washed them more than thrice per day. (Figure 3). 60% of them used only water to clean the perineum, 28% used soap and water and 12% used wet cloth/towel.



**Fig 3:** Percentage of participants cleaning genitals more than thrice a day

Regarding the disposal of sanitary napkins, 75% were disposing them in a garbage bins while 25% were throwing them outside in drains/fields.

Out of 100 participants, 45% had one or more problem associated with menstrual bleeding.

**Table 2:** Describes the problems associated during menstruation (N=100)

Problems associated during menstruation	Number	Percentage (%)
Itching in the genital area	65	65
Excessive discharge post menses	32	32
Skin Rash	50	50
Burning micturition	40	40

**Table 3:** Shows association of awareness about menstrual hygiene and satisfactory menstrual hygiene practices

Awareness	Satisfactory menstrual hygiene practices		Total
	Yes (%)	No (%)	
Yes	68%	12%	80%
No	6%	14%	20%
	74%	26%	100%

**Table 4:** Association between various socio demographic factors and satisfactory menstrual hygiene practices

	Total participants (%)	Satisfactory menstrual hygiene practices	
		Yes (%)	No (%)
Married	75	55	20
Unmarried	25	15	10
<b>Socio economic class</b>			
Class 1 Upper	10	10	0
Class 2 Upper Middle	35	28	7
Class 3 Middle	20	7	13
Class 4 Lower Middle	25	12	13
Class 5 Lower	10	3	7
<b>Place of residence</b>			
Urban	63	50	13
Rural	37	12	25
Uneducated	20	3	17
Read and Write	80	60	20
Unemployed	60	30	30
Employed	40	35	5

**Table 5:** Association between problems associated during menstruation and satisfactory menstrual health practices

		Satisfactory menstrual hygiene practices	
		Yes (%)	No (%)
Participants having no complaints	55%	50	5
Participants having local complaints during menstruation	45%	10	35

Local complaints suggestive of reproductive/urinary tract infection were reported among 45% of the participants, out of whom 35% were not practicing satisfactory menstrual hygiene practices.

## Discussion

Menstrual hygiene determines good reproductive health. Awareness of good menstrual practices is of utmost importance. Good hygienic practices, such as the use of sanitary pads and adequate washing of the genital areas, are essential during the menstrual period [8].

Unaddressed menstrual hygiene is also said to hamper the achievement of some of the millennium developmental goals [2].

This study intended to explore the practice of menstrual hygiene among women of reproductive age group. Mean age of the respondents was found to be  $32.43 \pm 7.74$ . 75% of the participants were married which was similar to the study findings suggested by Balamurugan *et al.* where majority of the study population around 88% were married [9]. 63% of the study population belonged to urban area. Nearly 45% of the participants belonged to

the upper (upper and upper middle) socioeconomic status similar to study conducted by Gunjan *et al.* [8] 80% of the study participants were educated Knowledge of the participants regarding menstruation and the practices associated was assessed. It was noted that out of 100 participants, 68% had good overall knowledge regarding menstruation and knew that it is a normal physiologic process, 80% of participants were aware about satisfactory menstrual practices which included the use of disposable readymade sanitary napkin or homemade napkins made from clean, washed cloth, using 3 or more absorbents in a day and washing of perineum 3 or more times in a day, among whom 68% were practicing the same. This was consistent with study conducted by gunjan *et al.* [8]

Regarding the absorbents used during menstruation, 62% were using commercially available disposable sanitary napkins, 28% were using washable cloth and 10% were using homemade reusable cloth napkins. Among these only 38% were changing absorbents more than thrice a day. Among the 38% users of reusable absorbents, 30% were washing them daily.

This was close to study conducted by Thakre *et al.*, where 75% of the participants were aware about the use of sanitary pad [10]. Higher percentage was noticed by Santra S *et al.* where 97% of the participants were aware that sanitary napkin was an ideal absorbent [11]. And the awareness was found to be among 96.7% of the participants in study conducted by Paul *et al.* [7].

In our study, 70% of the participants were changing absorbents more than thrice a day. This was seen in 60.7% of the participants in the study conducted by Chandar *et al.* [12] Percentage of participants cleaning genitals more than thrice a day was seen among 70% of the study population, this was less compared to study conducted by Paul *et al.* [7] where it was 87% and Yasmina *et al.*, where 76.9% washed the perineum [13].

Improper disposal of sanitary napkins is a threat to the environment as well as to the health of people. 75% of the participants were practicing proper disposal of sanitary which was seen in 77% of study participants by Paul *et al.* [7] Poor menstrual hygiene management results in various reproductive tract infections leading to complications later in life. In this study, 45% study subject had one or more problems associated with menstruation, majority (65%) presenting with itching, followed by skin rash (50%), burning micturition (40%) and vaginal discharge (32%). Among these 45%, out of whom 35% were not practicing satisfactory menstrual hygiene practices. In a study conducted by S. Santra, 37.5% study subjects suffered from reproductive tract infection during or just after menstruation [11].

The practice of maintaining menstrual hygiene was affected by various socio demographic factors like higher socio economic class (38%), urban residence (50%), education status (60%) and employment (35%). Higher association in these factors was also seen in study conducted by Anand *et al.* [15].

## Conclusion

Menstrual hygiene is an important aspect of reproductive women's health. Unsatisfactory menstrual hygiene management acts as a risk factor for reproductive tract infections. In our study majority of the population was aware about good menstrual hygiene practices, still not all were practicing the same. Our study was also limited by the cross-sectional nature of data and was subject to interview bias. Efforts such as improving health education on various aspects of menstrual hygiene should be made. There is a need to advocate universalized use of sanitary pads/hygienic reusable absorbents, through easy availability and access ability.

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**Conflicts of interest:** There are no conflicts of interest.

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