

## Challenges in Menstrual Hygiene Practices among Urban and Rural Women (Aged 15-45 Years) of District Pali in Western Rajasthan

Latika Nath Sinha<sup>1</sup>, Sanjay Choudhary<sup>2</sup>, Bal Gopal Bhati<sup>3</sup>, Rakesh Mewara<sup>4</sup>, Amandeep Semwal<sup>5</sup>

<sup>1</sup>Assistant Professor, <sup>2</sup>Associate Professor, <sup>5</sup> Statistician Cum Tutor, Department of Community Medicine, Government Medical College & Hospital, Pali, Rajasthan

<sup>3</sup>Assistant Professor, Department of Gynecology and Obstetrics, Government Medical College & Hospital, Pali, Rajasthan

<sup>4</sup>Medical officer In charge, Rural Health Training Centre- Gundoj, Pali, Rajasthan

**Correspondence :** Dr Latika Nath Sinha, Email: drlatika@gmail.com

### Abstract:

**Introduction:** In India, even today regressive socio-cultural norms pertaining to menstruation continue to thrive in many parts. The government in Rajasthan has been distributing sanitary napkins to girls in the age group 10-19 years through the Education & ICDS department since 2018. This study assesses utilization and acceptance of the sanitary pads distributed free of cost among adolescents and at a nominal rate to women and identifies the challenges in observing menstrual hygiene practices in semi arid areas. **Method:** A cross-sectional study was conducted among women aged 15-45 years in six urban wards and six sub-centre villages under the Rural Health and training Centre (RHTC) Gundoj. Keeping power of study at 80% adding the 10% non-response, 50% prevalence for hygienic menstrual practices, a sample size of 384 participants was taken, 192 each from rural and urban areas with 50% of the participants being school going girls. **Results:** Among school going participants, 184 (95.8%) in urban areas and 169 (88%) were utilizing the free sanitary pads distributed in schools, rest used locally purchased "red cloth". Average level of hygiene practices was comparatively more among urban participants, 173 (90%) than rural women 77 (40.1%) (p value < 0.05). During menstruation performing religious activities, doing idol worship, eating and drinking water with family was taboo among 92% of both urban and rural respondents. **Conclusion:** Distribution of sanitary pads in schools is a successful intervention in Pali District. However, knowledge of healthy menstrual hygiene practices was low (23%) among rural women. Disposal of used pads and attitude towards social taboos need to be addressed in the rural areas of the district with better convergence between Education, ICDS and Health department for advocacy of healthy menstrual hygiene practices.

**Keywords:** Hygiene, Menstrual hygiene, Sanitary pads, Taboos

### Introduction:

In India, even today regressive socio-cultural norms pertaining to menstruation continue to thrive in many parts. UNICEF and the WHO define Menstrual Hygiene Management as "Women using a clean menstrual management material to absorb or

collect blood.<sup>[1]</sup> Menstrual hygiene management also involves addressing harmful societal beliefs and taboos surrounding the issue.<sup>[1]</sup> Menstrual taboos are deeply rooted and contribute to gender inequality. Globally, 663 million people lack access to safe water and 2.4 billion people lack access to adequate

Quick Response Code	Access this article online	How to cite this article :
	Website : www.healthlinejournal.org	Sinha LN, Choudhary S, Bhati B, Mewara R, Deep A. Challenges in Menstrual Hygiene Practices among Urban and Rural Women (Aged 15-45 Years) of District Pali in Western Rajasthan. Healthline.2021; 12(4):78-83.
	DOI : 10.51957/Healthline_261_2021	

sanitation.<sup>[2]</sup> Water, Sanitation and Hand Hygiene (WASH) services are vital for effective Menstrual Hygiene Management (MHM).<sup>[2]</sup>

In various parts of India socio cultural practices are responsible for the use of unhygienic products to manage periods instead of much safer sanitary pads.<sup>[3]</sup> Women are forbidden to bath or cleanse themselves properly during these days, which increase the threat posed to their health . There are varied practices regarding proper disposal of material used and social taboos imposed during this period.

In some settings menstruating women are viewed as impure, so they are separated from men and banned from using the same water sources in order not to contaminate them<sup>[4,5]</sup>. These taboos and social beliefs have led some women to internalize this stigma, reporting that they feel dirty when menstruating and are ashamed of it.<sup>[5]</sup>

Habits like changing sanitary napkins every four hours and washing hands every time sanitary napkin is changed are small but significant steps towards ensuring good hygiene during periods.<sup>[3-5]</sup> Infections due to lack of menstrual hygiene and the lack of awareness among women regarding cleanliness of genital areas and access to safe menstrual hygiene products contribute to 97% of the problem.<sup>[5]</sup>

According to the National Family Health Survey (NFHS-V), in India, 55% of women in the age group 15-24 years use sanitary napkins, 62 % use cloth, and 16 % use locally prepared napkins.<sup>[6]</sup> Under the National Health Mission (NHM) the government has started the distribution of sanitary napkins at nominal rate and frontline workers like ASHAs, AWWs and ANMs. The Department of Health and Family Welfare, Rajasthan has been distributing beltless sanitary napkins in a pink plastic packing named "Freedom" to girls in the age group 10-19 years through the health department since 2018.<sup>[7]</sup> Today girls in the age group 10-19 years who are enrolled in government schools get 12 pads per

month from the school and those who are out of schools get the same from the anganwadi centres. However government made sanitary pads available from Accredited Social Health Activist( ASHAs) and Anganwadi worker (AWW) at a subsidized rate ,Rs 2/- per pad as a form of social marketing.<sup>[7]</sup>

The women from tribal and scheduled caste community in rural part of Rajasthan suffer from extreme lack of access to information about safer ways of managing periods as reported by many social activists proactively working for raising awareness regarding menstrual hygiene among them.<sup>[8,9]</sup>

It is important to study the utilization and acceptance of the sanitary pads distributed free of cost among adolescents and at a nominal rate to women and identify the gaps in practices recommended for menstrual hygiene in semi arid areas.

#### Objectives:

1. To study the current menstrual hygiene practices and identify gaps in menstrual hygiene practices among women aged 15-45 years in semi arid urban and rural areas of Pali district
2. To study the acceptance and utilization of government distributed sanitary napkins in urban and rural areas of the district

#### Method:

This cross sectional study was conducted among women aged 15-45 years in six urban wards in the catchment area of District hospital and six sub-centre villages under the Rural Health and Training Centre(RHTC) at PHC Gundoj.

A pre tested semi structured questionnaire (modified and adapted to Indian context) was used by trained volunteers to collect data regarding knowledge, attitudes and practices of menstrual hygiene by interview of participants over a period of 6 months.<sup>[10,11]</sup> The questionnaire was translated to vernacular language and back translated to English by two independent researchers.

An average score on seven knowledge points was taken and Good knowledge of menstruation and menstrual hygiene was given to those respondents who scored 5–7 points and Poor Knowledge was given to those who scored 0–4 points. The practice of menstrual hygiene score was calculated out of ten practice specific questions. Each correct response on recommended practices of menstrual hygiene earned one point and Good practice of menstrual hygiene was given to those respondents who scored more than or equal to 6 points.

Areas of survey in urban and rural areas were selected purposively but participants within the area were selected using simple random sampling until sample size was achieved. Studies have shown a variation of 25-70%<sup>[4,12,13]</sup> in prevalence of hygienic menstrual practices. Keeping power of study at 80% adding the 10% non-response and average 50% prevalence for hygienic menstrual practices, a sample size of 384 participants was taken, 192 each from rural and urban areas with 50% of the participants being school going girls.

**Inclusion criteria:**

Women (15-45 years) who had attained menarche at the beginning of the study had been assessed for practice regarding menstrual hygiene.

**Exclusion criteria:**

Women not willing to take part in the study were excluded from the study. Women who were seriously ill were excluded from the study.

Data was analysed using Epi info software version 7.2 for proportions using appropriate statistical test of significance.

Ethical considerations: Institutional Ethical clearance was obtained and informed written consent was taken from all participants.

**Results:**

In this study, 192 participants were from urban area and 192 were from rural area of the district. Among the 384 participants, only 130(34%) were

aware about the social marketing of sanitary napkins by the government. Around 223(58%) correctly described the reason for menstruation (bleeding from the uterus) and 173(46%) knew about the harmful effects of unhygienic absorbent material. Around 82(43%) participants in urban and 9(4%) in rural were buying commercially available napkins. Knowledge about proper disposal of napkins was found to be among 78.6% and 34% buried used cloth napkins in a pit in the house /fields in rural areas. Good knowledge of all points of healthy menstrual practices were among 23% in rural areas and 66% in urban areas (Table 1 reflects average of seven knowledge points). Among school going participants 184 (95.8%) in urban areas and 169 (88%) were utilizing the sanitary pads distributed free of cost in schools, rest used locally purchased “red cloth”. Among non school going participants 14% were utilizing the government distributed napkins available at a nominal cost at Anganwadi /health centres.

Average level of hygiene practices was comparatively more among urban participants 173(90%) than rural women 77(40.1%) (p value<0.05). (Table 2) Most participants (90%) of both urban and rural respondents wanted more knowledge regarding the subject from health workers.

During menstruation restrictions on performing religious activities, doing idol worship, using the kitchen, eating and drinking water with family, jumping and running and consequent absenteeism were reported by respondents.

**Discussion:**

Since February 2018, the Rajasthan government has been distributing sanitary napkins free of cost to rural adolescent girls and at a nominal charge to women. Further with a goal to encourage women in rural areas to adopt menstrual hygiene practices and handle their periods with dignity and safety, the government launched a menstrual hygiene management campaign on July 31, 2018. The

**Table 1: Key parameters of menstrual hygiene knowledge among urban and rural participants**

Variables	Area		$\chi^2$ Value	p-value
	Urban (n1=192)	Rural (n2=192)		
Why menstruation happens	169(88.0%)	123(64.1%)	30.247	0.000
It is blood from uterus	154(80.2%)	69(35.9%)	77.275	0.000
It is normal physiological process	180(93.8%)	172(89.6%)	2.182	0.140
Pain during periods is normal	138(71.9%)	134(69.8%)	0.202	0.653
One should dry the cloth in sunlight before reuse	168(87.5%)	108(56.3%)	46.377	0.000
One should not reuse cloth till it tears /beyond 6 months	157(81.8%)	90(46.9%)	50.941	0.000
One should dispose in plastic/paper cover	173(90.1%)	129(67.2%)	30.020	0.000
Total Score (one point for each of the seven knowledge points )				
Good knowledge(5-7 points)	127(66.1%)	44(22.9%)	72.629	0.000
Poor Knowledge(0-4 points)	65(33.9%)	148(77.1%)	72.629	0.000

**Table 2: Key parameters of menstrual hygiene practices among urban and rural participants**

Variables	Area		$\chi^2$ Value	p-value
	Urban (n1=192)	Rural (n2=192)		
Use government distributed sanitary pa (free of cost) materials during menstruation	184(95.8%)	169(88.0%)	7.895	0.005
Uses commercially available brands	82(43.0%)	8(4.2%)	0.844	0.358
Buy red cloth from ladies stores and use	2(1.0%)	23(12.0%)	18.868	0.000
Clean red cloth with soap and water	5(2.6%)	2(1.0%)	1.310	0.252
Dry used cloth in sunlight	2(1.0%)	2(1.0%)	0.000	1.000
Change pads or cloth more than once /day and above during menstruation	90(46.9%)	67(34.8%)	5.700	0.017
Disposes used sanitary pads in dustbin in plastic bag	65(33.9%)	125(65.1%)	37.504	0.000
Uses paper to dispose the pads by wrapping in paper	146(76.0%)	19(9.9%)	171.400	0.000
Bury the pad/cloth used in pit/soil	2(1.0%)	48(25.0%)	48.655	0.000
Takes bath daily with soap during menstruation	184(95.8%)	173(90.1%)	4.820	0.028
Clean external genitalia during menstruation	165(85.9%)	134(69.8%)	14.520	0.000
Practice (summary index)				
Good practices (follow $\geq$ 6 recommended practices)	173(90.1%)	77(40.1%)	105.640	0.000

campaign, which was a joint effort between the departments of Women and Child Development, Panchayati Raj and Rural Development, and Health and Family Welfare, addresses the issue of taboos related to menstruation and encourage women in rural areas to speak more freely on “chuppitododiwas” every three months about menstrual hygiene issues.<sup>[8,9]</sup> Our study showed good acceptance 96% and 88% respectively in urban and rural areas of the sanitary pads distributed among adolescent girls in schools and Anganwadis. However in rural areas 14% of women continued to use the red cloth or “kapda” which was not properly sundried after use. It was dried inside homes in unhygienic corners inside or outside where it could not be seen. This is similar to the study by Choudhary N et al (2019) in rural areas of adjacent Jodhpur district.<sup>[4]</sup> Knowledge levels about healthy menstrual practices were higher in urban areas (66%) as compared to rural areas (23%). This is similar to the finding from other studies done in Rajasthan in Jodhpur and Udaipur.<sup>[4,12]</sup>

However cultural taboos existed in both rural and urban areas in Pali wherein menstruating girls do not visit religious places, do not water the holy basil (tulsi) and do not even enter the kitchen. This is similar to the findings in other studies by DeoDS et al (2005), Grace G et al (2019 in Kancheepuram) and Shaili V (2021).<sup>[14-16]</sup>

Women of rural area were less aware about bleeding from the uterus in comparison to urban (14% versus 73%) in this study, which is also evident from a study done by Kalpana Katiyar et al 2013 in Meerut.<sup>[17]</sup> The possible reason for lower awareness among rural girls is lack of literacy of their mother, sisters, friends or elderly female relatives who are usually the greatest source of information.

Bathing and keeping external genitalia clean were practiced equally in both urban and rural areas especially in households with access to closed toilets. The safe disposal of napkins in an environment-friendly manner is a real challenge in semi-arid areas.

Regarding disposal practices, in rural areas sanitary pads were mostly thrown in dustbins or buried in the ground /fields. In urban areas pads were wrapped in plastic or newspaper and disposed in dustbins. In a study by Kothari B (2010 Jaipur) similar practice of disposal was seen.<sup>[18]</sup> Lack of toilet facilities at school with no dustbins, lockable toilet doors and lack of water led to discomfort in changing pads and hence absenteeism among rural and urban adolescents. Vashisht R et al. (2018) and Jothy K et al (2012) also reported similar findings.<sup>[19,20]</sup>

### **Conclusions:**

Distribution of Sanitary pads in schools is a successful intervention of NHM in Pali District. However knowledge of healthy menstrual hygiene practices was low among rural women. Soft and absorbent pads supplied in schools were used by 93% of respondents; rest used locally purchased red cloth. Among the respondents 90% wanted more knowledge from health workers regarding the subject.

### **Recommendations:**

Disposal of used pads and attitude towards social taboos need to be addressed in the rural areas of the district. Better convergence between Education, ICDS and Health department for advocacy of healthy menstrual hygiene practices is required. Self help groups and NGOs can further advocate use and proper disposal of free sanitary napkins. Menstrual hygiene day on May 28 should be commemorated more openly to spread awareness on the issue.

### **Declaration:**

Funding: Nil

Conflict of Interest: Nil

### **References:**

1. SHARE Consortium, London School of Hygiene & Tropical Medicine, Policy Brief, Menstrual Hygiene Management. Available from: [http://www.menstrualhygieneday.org/wp-content/uploads/2017/01/SHARE\\_-MHM\\_policybrief\\_2017.pdf](http://www.menstrualhygieneday.org/wp-content/uploads/2017/01/SHARE_-MHM_policybrief_2017.pdf). [Last accessed on 2021 June 6].

2. Dasgupta A, Sarkar M. Menstrual hygiene: How hygienic is the adolescent girl? *Indian J Community Med.* 2008;33(2):77-80
3. Sinha RN, Paul B. Menstrual hygiene management in India: The concerns. *Indian J Public Health.* 2018;62:71-4.
4. Choudhary N, Gupta MK. A comparative study of perception and practices regarding menstrual hygiene among adolescent girls in urban and rural areas of Jodhpur district, Rajasthan. *J Family Med Prim Care.* 2019;8(3):875-880. doi:10.4103/jfmpc.jfmpc\_69\_19
5. Kaur R, Kaur K, Kaur R, "Menstrual Hygiene, Management and waste disposal practices and challenges faced by girls/women of developing countries", *Journal of Environmental and Public health*, Vol .2018 , Ministry of Health and family welfare , ID 1730964, 9 pages, 2018. <https://doi.org/10.1155/2018/1730964>
6. National Family Health Survey-5, [http://rchiips.org/nfhs/factsheet\\_NFHS-5.shtml](http://rchiips.org/nfhs/factsheet_NFHS-5.shtml) Ministry of Health and family welfare [last accessed 21 July 21]
7. Directorate of Medical ,health and family welfare ,<http://rajswasthya.nic.in> [last accessed on 21 July 21]
8. Menstrual Hygiene : Rajasthan's new campaign encourages women to break menstruation taboos, <https://swachhindia.ndtv.com> [last accessed 21 July 21]
9. Dhingra R, Kumar A. Knowledge and practices related to menstruation among tribal (Gujjar) adolescent girls. *Etho-Med.* 2009;3(1):43-48
10. Upashe, S. P., Tekelab, T., & Mekonnen, J. (2015). Assessment of knowledge and practice of menstrual hygiene among high school girls in Western Ethiopia. *BMC women's health*, 15, 84. <https://doi.org/10.1186/s12905-015-0245->
11. Ministry of Health and family Welfare (National Rural Health Mission), Training manual for ASHAs on Menstrual Hygiene 2012.
12. Tundia MN, Thakrar DV. A study on menstrual hygiene practices and problems amongst adolescent girls in Udaipur, Rajasthan, 2018. *Int J Community Med Public Health.* 2018;5:3486-91
13. Gupta P, Gupta J, Singhal G, Meharda B. Knowledge and practices pertaining to menstruation among the school going adolescent girls of UHTC/RHTC area of Government Medical College, Kota, Rajasthan. *Int J Community Med Public Health.* 2018;5:652-6.
14. Deo DS, Ghattargi CH. Perceptions and practices regarding menstruation: A comparative study in urban and rural adolescent girls. *Indian J Community Med.* 2005;30:33-4.
15. Grace, G. et al. "Menstrual hygiene practices of women in a rural area of Kancheepuram district, India: a cross sectional study." *International Journal of Community Medicine and Public Health* 6 (2019): 1734
16. Shaili Vadera, A Study on Menstrual Hygiene Management at the Bottom of Pyramid in India (March 2, 2021). Available at <http://dx.doi.org/10.2139/ssrn.3795881>
17. Katiyar K, Chopra H, Garg SK, Bajpai SK, Bano T, Jain S, Kumar A. KAP Study of Menstrual Problems in Adolescent Females in an Urban Area of Meerut. *Indian J Community Health.* 2013;25(3):217-20.
18. Kothari, B. (2010). Perception about Menstruation: A Study of Rural Jaipur, Rajasthan. *Indian Anthropologist*, 40(1), 43-54.
19. Vashisht A, Pathak R, Agarwalla R, Patavegar BN, Panda M. School absenteeism during menstruation amongst adolescent girls in Delhi, India. *J Fam Community Med.* 2018;25:163-168
20. Kailasraj K., Basavaraju V, Kumar J, Manjunatha, S. A study of knowledge and practice of menstrual hygiene among adolescent school girls in rural and urban field practice area of RajaRajeswari Medical College and Hospital, Bangalore, India. *International Journal Of Community Medicine And Public Health.* 2020; 7(2): 665-672.