

Menstrual Hygiene Practices among Women Aged 15-24 years in India: Evidence from NFHS-4

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Abstract

The study assesses the prevalence of menstrual hygiene habits and the factors influencing them among Indian women aged 15 to 24 years. It utilises the National Family Health Survey (NFHS-4) data collected from women who have menstruated in the age group of 15-24 years. Bivariate and multivariate analyses were carried out with the selected socio-economic and demographic factors associated with the use of hygienic methods during menstruation. The analysis shows that 57 per cent women practised hygienic methods in India and more than 60 per cent used cloth during their menstruation to prevent the blood stains from becoming evident. Place of residence, year of schooling, caste/tribe, wealth index, region, marital status, structure of the house and exposure to mass media were statistically significant with the use of hygienic methods. A significant proportion of adolescent females does not practise good menstrual hygiene. It is crucial that young girls are taught the value of keeping their bodies clean throughout their menstrual periods in order to lower their chances of developing reproductive tract infections.

Keywords: Menstruation, menstrual hygiene practices, NFHS-4, RTI, India.

I. Introduction

According to World Health Organization (1996), a person aged 10–19 years is considered as an adolescent. Adolescence, which marks the passage from childhood to adulthood, is characterized by a child's growth and development. A child's physical, psychological, and biological growth occurs throughout this time (Takre et al., 2011). It is acknowledged as a unique time in a girl's life cycle that needs special consideration. As the beginning of a woman's reproductive phase, menarche is a significant biological turning point in her life (Bagga et al., 2000; Diaz et al., 2006). Menstruation, often known as a 'period', is regular vaginal bleeding that starts around puberty and is a natural aspect of a woman's monthly cycle. Unfortunately, the problem gets worse for females owing to lack of understanding regarding menstruation preparation and management or due to shyness and shame (Archibald et al., 2003; Nagar et al., 2017). It's crucial for women to adopt cleanliness during their 'periods' to avoid negative health effects.

Even though menstruation is a natural occurrence, it is nonetheless frowned upon in Indian culture since it is viewed as filthy and disgusting. Although menstruation is a natural physiological occurrence, it is nonetheless fraught with societal stigmas, superstitious notions, myths and rituals that make it problematic for females in developing nations (Belayneh & Mekuriaw, 2019; Tegegne & Sisay, 2014). Menstrual habits are viewed as a major barrier to managing menstrual hygiene because of the cultural, religious, and societal stigmas. Menstrual hygiene is crucial, yet in many areas of the world it is still an unaddressed issue. Even while menstruation is a typical physiological event for females, maintaining excellent cleanliness is not always simple for adolescent girls. Menstrual hygiene practices are important since they have an effect on health and, if neglected, they can result in toxic shock syndrome, reproductive tract infections (RTIs), cervical cancer, urinary tract infections (UTIs) and other reproductive health morbidities (Garg et al., 2012; Das et al., 2015;

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Rizwan et al., 2015; Juyal et al., 2014). UTIs are the most common among the girls and women of menstruating age and they often occur due to unhygienic menstruation practices (Das et al., 2015; Janoowalla et al., 2020; Prasad et al., 2019; Khanna et al., 2005). During menstruation, it's crucial to exercise good hygiene, including using sanitary napkins and cleaning the genital area properly. There is a clear relationship between RTIs, menstrual hygiene behaviour and socioeconomic level.

Shanbhag et al., (2012) stated that the millions of women have suffered RTI and its complications and often this infection is transmitted to the offspring. The spread of vaginal infections among adolescent girls is caused by the repeated usage of filthy cloth and the incorrect drying of old cloth before its reuse. When menstruation is not managed effectively and safe hygiene is not practised, this might result in discomfort, genitourinary tract infections, cervical cancer, odour, guilt, reproductive tract infections, poor academic performance and school dropout (Khanna et al., 2005; Belayneh & Mekuriaw, 2019; Dasgupta & Sarkar, 2008). Infertility issues, early deliveries, stillbirths, miscarriages, pregnancy infections and cervical cancer are a few of the additional difficulties linked to poor menstrual hygiene (Ram et al., 2006; Bathija et al., 2013). To give a priority to the menstrual health, 28th May is celebrated as 'Menstrual Hygiene Day' by WASH (Water, Sanitation and Hygiene) United. The Government of India has also recognised the importance of maintaining hygiene during menstruation and has started a scheme of making available subsidized sanitary napkins to adolescent girls in rural India since August 2011.

Menstrual Hygiene Management (MHM) is defined as "women and adolescent girls using a clean material to absorb or collect menstrual 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" (Shyam et al., 2018, p. 2). Menstrual hygiene and management are issues that have not gotten enough attention or acknowledgement. Girls who are aware of menstrual hygiene management have the independence to make their own choices and the self-assurance to lead regular lives. It aids in dispelling cultural superstitions and beliefs. It aids in keeping women and girls from developing RTI or UTI. The present study is an attempt to understand the practice of different methods of hygiene during menstruation based on the fourth round of the National Family Health Survey, (2015-16) (NFHS-4).

II. Data and methodology

Dependent variable

The respondents constituted 2,44,500 women of aged 15-24 years from NFHS-4. The respondents were asked what they used for protection during their menstrual period to prevent bloodstains from becoming evident and the option was included cloth, sanitary napkins, locally prepared napkins, tampons, any other method not included previously and nothing. These methods are categorised into two hygienic (women who use sanitary napkins, locally prepared napkins, tampons and menstrual cups) and unhygienic (use of cloths and others).

Independent variables

The categorical variables pertaining to the respondent, her household and region of residence, considered for the analysis are: age (15-19 and 20-24) years, completed years of schooling (no schooling, less than five years, 5-7 years, 8-9 years, 10-11 years and 12 or more years), marital status (never married, currently married and widowed/divorced/separated), religion (Hindu, Muslim, Christian and others which included no religion), caste (scheduled castes, scheduled tribes, other backward castes and others), wealth index (poor, middle and rich), place of residence (urban and rural), exposure to mass media (whether or not the respondent watches television, listens to radio and reads newspaper) and region of residence (northern, central, eastern, north-eastern, western and southern). Further, to understand the importance of maintaining hygiene during menstruation, the variable of the type of toilet facility has been used which is classified as no facility/open space, flush,

pit and others. Type of toilet facility available to the women will indicate the facilities available to them to maintain hygiene during menstruation.

Analysis

Descriptive analysis was done to understand the distribution of study participants. Bivariate analysis was carried out with selected background characteristics to analyse the socio-economic and demographic factors associated with the use of hygienic methods during menstruation. The bivariate and multivariate logistic regressions were applied to examine the covariates associated with menstrual hygiene practices. The regression results are presented by estimated odds ratios. The odds for use of the hygienic method were computed by employing binary logistic regression. Appropriate sample weight was used to estimate the percentages. STATA-16 software was used for analysis.

III. Results

Table 1 presents the profile of the menstruating women. It shows that women are evenly distributed in the age groups of 15-19 and 20-24 years (50% each), two-thirds of the women (68%) live in rural areas, 10 per cent never attended school and about 30 per cent completed 12 or more years of schooling and 59 per cent never married, while 40 per cent are currently married and the rest are widowed/divorced/separated. A majority of them are Hindus (79%) followed by Muslims (16%); 22 per cent are schedule castes (22%), schedule tribes (10%) and other backward classes (46%). A majority of them (84%) are exposed to mass media. The largest proportion of them live in the central region (27%) of India, followed by eastern (23%), southern (19%), and northern and western regions. Only half of the women have access to flush toilet, while 38 per cent do not have the toilet facility.

Table 2 exhibits the menstrual protection methods used during pregnancy by the women. It shows that a majority of them used clothes (62%) during their menstruation to prevent blood stains from becoming evident as per NFHS-4. The use of hygienic methods during menstruation which include locally prepared napkins (16%), sanitary napkins (42%) and tampons (2%) accounts for 58 per cent. The total exceeds 100 per cent due to multiple responses as some women use both hygienic and unhygienic methods. Less than half a per cent of women used other methods and a negligible proportion used nothing.

Table 3 shows the prevalence of use of hygienic methods (sanitary napkins, locally prepared napkins and tampons) during menstruation among the women aged 15-24 years in India by their background characteristics. The proportion of women who used hygienic methods to prevent bloodstains from becoming evident was 58 per cent. An equal proportion of women used hygienic methods in the age groups of 15-19 and 20-24 years (58% and 57% respectively). The use of hygienic method is lower in rural areas compared with urban areas, i.e., only half of the women from rural areas (48%) and more than three-fourths from urban areas (77%) used hygienic method. The use of hygienic methods is higher among never married women (63%) compared with currently married (49%) and widowed/divorces/separated women (41%). More women from nuclear families (63%) use hygienic methods compared with women from joint families (55%).

The use of hygienic methods is lower among Muslim (54%) and Hindu women (57%) when compared with Christian women (75%). It is the least among scheduled tribes (40%) and highest among 'other' castes (68%). Wealth Index is directly associated with the use of hygienic methods as their use increases with an increase in the household's wealth status. Only one-fifth (21%) of the women from the poorest quintile use hygienic methods, whereas as high as 89 per cent women from highest wealth quintile use hygienic methods. Exposure to mass media plays a crucial role in the use of hygienic methods as their use is higher among women who are exposed mass media (64%) than those who are not (21%).

Table 1: Percentage distribution of menstruating women aged 15-24 years, NFHS-4.

Background characteristics	Percentage	No. of women
Age group (years)		
15-19	49.7	121,533
20-24	50.2	122,967
Residence		
Urban	32.0	78,436
Rural	67.9	166,064
Years of schooling		
No schooling	10.3	25,318
<5 years completed	3.5	8,725
5-7 years completed	12.5	30,567
8-9 years completed	23.2	56,868
10-11 years completed	21.1	51,595
12 or more years completed	29.2	71,427
Marital status		
Never married	58.9	144,153
Currently married	40.4	98,767
Widowed/divorced/separated	0.6	1,580
Type of family		
Nuclear	30.0	74,084
Non-nuclear	70.0	170,416
Religion		
Hindu	79.1	193,478
Muslim	15.8	38,732
Christian	2.01	4,927
Others	3.01	7,363
Caste/Tribe		
Schedule castes	21.9	51,694
Schedule tribes	9.8	23,281
Other backward classes	45.5	107,153
Others	22.6	53,227
Wealth Index		
Poorest	18.3	44,898
Poorer	21.2	51,849
Middle	21.4	52,529
Richer	20.6	50,568
Richest	18.2	44,655
Type of toilet facility		
No facility/open space	37.9	92,775
Flush	49	119,897
Pit	6.7	16,568
Others	6.2	15,260
Exposed to mass media		
No	15.6	38,358
Yes	84.3	206,141
Region		
North	13.7	33,696
Central	26.9	65,913
East	23.0	56,256
Northeast	3.3	8,237
West	13.5	33,228
South	19.2	47,170
Total	100.0	244,500

Table 2: Percentage distribution of various methods used during menstruation by women aged 15-24 years, NFHS-4.

Type of menstrual protection	NFHS-4
Cloth	62.1
Locally prepared napkins	16.2
Sanitary napkins	41.8
Tampons	2.4
Others	0.5
Nothing	0.008

Note: Percentages do not add to 100 due to multiple response of question.

Use of hygienic methods appears to be strongly influenced by the availability of toilet facility at home. In households with flush toilets, the use of hygienic methods is higher (74%) when compared with women from households without toilet facility (37%). The use of hygienic methods varies across regions from 43 per cent in northern region to 71 per cent in central region, while regions fall in-between.

Figure 1 shows the prevalence of use of hygienic methods during menstruation to prevent blood stains from becoming evident by the place of residence and geographical regions. Throughout the country, the use of hygienic methods is higher in urban areas compared with rural areas. It also varies within the urban and rural areas of the same region. In urban areas, it varies from 89 per cent in the central region to 69 per cent in the northern region and in rural areas from 62 per cent in the central region to 41 per cent in the eastern region.

Figure 1: Menstrual hygienic practices by geographical regions and place of residence, NFHS-4

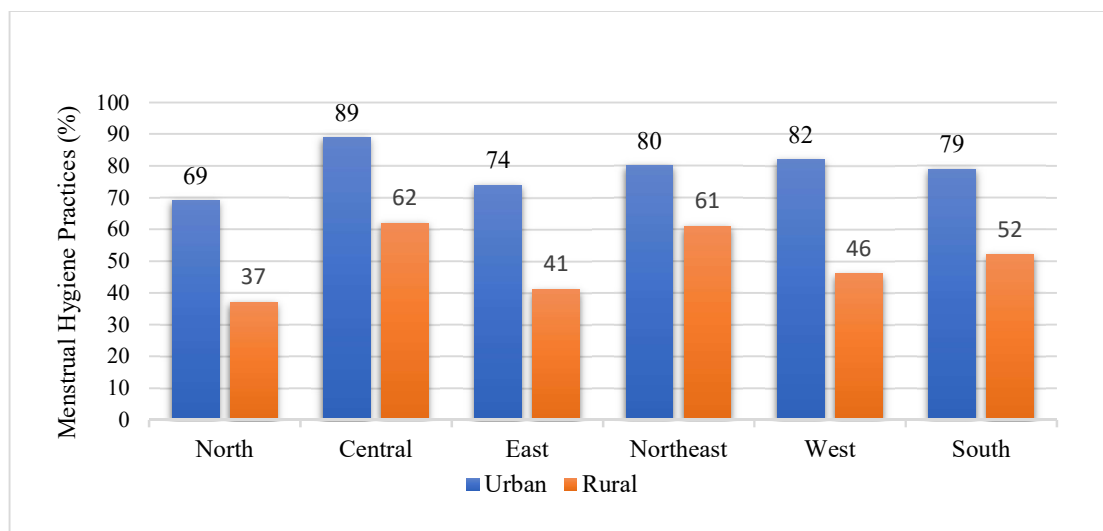


Table 3 also shows the results of logistic regression analysis for the use of hygienic methods during menstruation. Women who live in rural area are 35 per cent less likely (OR 0.65, $p < 0.001$) to use hygienic methods during menstruation than those of urban area. Years of schooling is a major predictor of hygienic practices. Women who have completed 12 or more years of schooling are seven times (OR 7.2, $p < 0.001$) more likely to use hygienic methods compared with women without schooling. Women with 8-9 years of schooling are nearly three (OR 2.8, $p < 0.001$) and women with 10-11 years of schooling are nearly five times (OR 4.7, $p < 0.001$) more likely to use hygienic methods than the women without schooling.

Table 3: Prevalence of use of hygienic methods during menstruation among the women aged 15-24 years and its determinants by logistic regression analysis, NFHS-4.

Background characteristics	Hygienic methods (%)	Odds Ratio	95% CI
Age group (years)			
15-19®	57.7		
20-24	57.4	0.93*	0.88 - 0.99
Residence			
Urban®	77.4		
Rural	48.1	0.65***	0.61 - 0.69
Years of schooling			
No schooling®	19.9		
<5 years completed	27.4	1.44***	1.23 - 1.67
5-7 years completed	37.6	1.87***	1.68 - 2.07
8-9 years completed	49.8	2.88***	2.62 - 3.17
10-11 years completed	69.2	4.72***	4.27 - 5.22
12 or more years completed	80.9	7.22***	6.53 - 7.99
Marital status			
Never married®	63.4		
Currently married	49.3	0.83***	0.78 - 0.89
Widowed/divorced/separated	40.6	0.51***	0.38 - 0.68
Type of Family			
Nuclear®	62.8		
Non-nuclear	55.3	0.78***	0.76 - 0.79
Religion			
Hindu®	57.2		
Muslim	53.9	0.84***	0.78 - 0.90
Christian	74.9	2.10***	1.84 - 2.39
Others	72.8	1.88***	1.64 - 2.15
Caste/Tribe			
Schedule castes®	54.4		
Schedule tribes	40.2	0.87**	0.80 - 0.94
Other backward classes	57.3	0.93*	0.87 - 0.99
Others	68.2	1.22***	1.12 - 1.32
Wealth Index			
Poorest®	21.1		
Poorer	41.2	2.62***	2.55 - 2.69
Middle	60.4	5.63***	5.48 - 5.79
Richer	76.1	11.32***	10.98 - 11.66
Richest	88.7	27.21***	26.21 - 28.23
Type of toilet facility			
No facility/open space®	37.1		
Flush	73.6	1.35***	1.18 - 1.26
Pit	57.3	1.63***	0.82 - 0.86
Others	56.1	1.42***	1.01 - 1.07
Exposed to mass media			
No®	20.9		
Yes	64.4	2.04***	1.87 - 2.16
Region			
North®	43.2		
Central	71.0	0.36***	0.35-0.37
East	54.5	0.34***	0.33-0.35
Northeast	68.1	0.88***	0.85-0.90
West	57.7	0.71***	0.68-0.73
South	60.5	1.79***	1.73-1.86
Total	57.5		

® represents the reference category; ***, ** and * represent 1%, 5% and 10% levels of significance.

Respondents who are currently married (OR 0.83, $p < 0.001$) and widowed/divorced/separated (OR 0.51, $p < 0.001$) are less likely to follow hygienic methods than the never married women. Women who live in non-nuclear households are 22 per cent less likely to adopt hygienic methods (OR 0.78, $P < 0.001$). Compared with joint families, the availability of privacy in nuclear households may be a reason behind the higher use of hygienic methods among them.

Compared with Hindu women, use of hygienic methods is 16 per cent less likely among Muslim women (OR 0.8, $p < 0.001$). The odds of use of hygienic method is twice higher among Christian women (OR 2.1, $p < 0.001$) than their Hindu counterparts. The scheduled tribe women are 13 per cent (OR 0.9, $p < 0.001$) less likely to follow hygienic methods than the scheduled caste women.

Wealth index is found to be one of the strongest predictors of menstrual hygiene practices. Compared to women from the poorest households, the odds of using hygienic methods increase with an increase in the wealth status of the households. In comparison to poorest women, the odds of using hygienic method is 2.6 times higher among poorer women (OR 2.6, $p < 0.001$), 5.6 times higher among middle wealth (OR 5.6, $p < 0.001$), 11 times higher among richer women (OR 11.3, $p < 0.001$) and 27 times higher among richest women (OR 27.2, $p < 0.001$).

The odds of using hygienic method are significantly high among women living in households with flush toilet (OR 1.3, $p < 0.001$) than the women without no toilet facility in their households. Hence, the availability of water for flushing the toilet is one of the important predictors of use of hygienic methods.

Women who are exposed to any mass media, are twice more likely to use hygienic methods during menstruation than women who are not exposed (OR 2.0, $p < 0.001$). Women from the southern region are more likely to use hygienic methods than women of the northern region (OR 1.8, $p < 0.001$). But the women who belong to the north-eastern region (OR 0.9, $p < 0.001$), western region (OR 0.7, $p < 0.001$), eastern region (OR 0.3, $p < 0.001$) and central (OR 0.4, $p < 0.001$) regions are less likely to use hygienic methods than women of the northern region.

IV. Discussion

Women's hygiene habits during menstruation are important for their health. Use of unhygienic methods during menstruation impacts health by raising the risk of infection, particularly infections of the urinary tract and perineum. Studies from India and other developing nations have brought attention to typical behaviour among adolescent women (Dasgupta et al., 2008; Gilany et al., 2005). In the present study, almost 62 per cent of the girls used cloth as absorbent during menstruation and 42 per cent used sanitary napkins, while 16 per cent used locally prepared napkins. Jogdand & Yerpude (2011) reported that 35 per cent girls used old clothes during menstruation. Poverty and high cost seemed to be the reasons for not using hygienic methods. A study conducted in Rajasthan reveals that three-fourths of the girls used old cloths during their periods and only one-fifth reported using readymade sanitary pads (Khanna et al., 2005). A study done by Mary & Krishna (2018) in East Godavari district reports that 78 per cent of the respondents use sanitary napkins, 22 per cent use cloth and 83 per cent change the napkin 2-3 times per day. But in contrast, another study in Puducherry revealed that the majority of the girls (89%) were using pads as menstrual absorbent, seven per cent fresh cloths and three percent reusable cloth (Priya et al., 2017).

Major factors that determine the use of hygienic method are the socioeconomic characteristics of women. Several studies have reported that education, economic and social status are the major determinants in the use of hygienic methods. They have found that women with a higher level of education are more likely to use hygienic methods and similarly women in a higher wealth quintile are more inclined toward their use (Garg et al., 2001 & Kansal et al., 2016). In this study it is found that the use of hygienic methods increases with increase in education and socioeconomic status,

i.e., the prevalence of hygienic methods is found to be the highest among the richest (89%), highly educated (81%) and higher caste (73%) women.

The current study also found that urban women have higher prevalence of hygienic menstrual practices than the rural women. Others studies have also reported a higher use of hygienic methods in urban areas compared with rural areas (Khanna et al., 2005; Gilany et al., 2005; Singh & Anand, 2018). Other studies indicate poorer menstrual hygiene among women in rural areas (Narayan et al., 2001; Kulhmann et al., 2019; Paria et al., 2014; Thakre et al., 2011; Kumar & Srivastava, 2011) with the expected results.

A study done by Kansal et al., (2016) found that respondents who were Hindu (34%) were following more hygienic practices in comparison with their non-Hindu counterparts. But in our study, we found that only Muslims have a low prevalence of hygienic methods. Women's exposure to mass media is found to be an important determinant of the use of hygienic methods than those who are not exposed to it. The same finding has been endorsed by other studies also (Nemade et al., 2009; Roy et al., 2021). According to this study, women from southern region have the highest incidence of healthy sanitary behaviour while women in middle and eastern regions have the lowest during menstruation. Other studies using the previous rounds of NFHS data reported the same conclusion (Roy et al., 2021; Vishwakarma et al., 2021).

A study done by Torondel et al. (2022) in Odisha found that women who had access to household-level piped water, bathing area and latrines reported better menstrual hygiene practices related to changing and washing of menstrual clothes. Women who had the toilet facility were more likely to use hygienic methods during menstruation. Women who had flush toilet were more likely to use hygienic methods than others (Anand et al., 2015). Poor access to water and lack of a latrine in the household were associated with the UTI (Das et al., 2015). As of 2015, 2.3 billion people lacked even basic sanitation services, with 860 million using unimproved facilities and another 890 million practicing open defecation—with a high proportion residing in India (World Health Organization, 2019). It is estimated that half a billion people around the world live without adequate menstrual hygiene (WHO, 2019).

Inadequate WASH facilities can pose a major obstacle for women and girls. Menstruation management is more difficult in areas with restricted access to water, sanitation and hygiene. Lack of toilets, unavailability of means to dispose of used sanitary pads and water to wash hands and genital area means that women and girls face challenges in maintaining their menstrual hygiene in a private, safe and dignified manner. The amount of water provided to the household in rural areas may be insufficient to fulfil the different needs that women face when managing their menstruation (Sebastian et al., 2013). Making water available into households, especially closer to the sanitation facilities, may help to meet the needs of women during menstruation (Routray et al., 2015; Schmidt et al., 2009). Although water and sanitation are important for all women, the need for WASH facilities is particularly pressing for those menstruating for personal washing and changing, and to meet the needs of women who use reusable materials.

A study found that only 15 per cent women used sanitary pads/locally prepared napkins during menstruation in India. Both RTI and vaginal discharge were positively related with non-use of hygienic methods (OR = 1.046, $p < 0.001$, CI = 1.021-1.071) and vaginal discharge (OR = 1.303, $p < 0.001$, CI = 1.266-1.341) (Anand et al., 2015). Unhygienic practices during menstruation are a serious risk factor for reproductive tract infections. Other studies have also found that using unhygienic methods during menstruation is significantly associated with RTI (Ademas et al., 2020; Dasgupta et al., 2008; Mahajan & Kaushal, 2017). A study also analysed the association between the use of hygienic practices during menstruation and two self-reported RTI symptoms, namely, genital sore/ulcer and genital discharge. Those women who have not used hygienic methods during menstruation were significantly 1.59 ($p\text{-value} < 0.001$) times and 1.37 ($p\text{-value} < 0.001$) times more likely to have genital sores/ulcers and genital discharge (Vishwakarma et al., 2021). A study done

by Torondel et al. also investigated into significant association between the menstrual hygiene management and RTI.

V. Conclusion

This study shows that a significant proportion of adolescent females does not practise good menstrual hygiene. Menstrual behaviour is influenced by a number of variables, but the most significant are socioeconomic position, level of education, place of residence, urban or rural residence, social status, mass media exposure, access to flush toilets, etc. Designing a system to allow access to healthy menstruation information is crucial. It is important for the governmental and non-governmental groups to step up and inform rural, less educated, lower caste and poor women about menstruation, menstrual hygiene management, importance of indoor toilets, handwashing and illnesses of the reproductive tract brought on by inadequate cleanliness. To solve the disposal issue, emphasis should be placed on the usage of reusable sanitary or cloth pads. It is crucial that young girls are taught the value of keeping their bodies clean throughout their periods in order to lower their chance of developing reproductive tract infections. Healthy conversation should be used to eliminate taboos. The future health of these young women, their families, the society and the country as a whole would benefit from focused treatment and counselling. *Anganawadi* staff members should educate people about reproductive health and cleanliness, and this information should also be covered in the school curriculum.

The Indian Government in collaboration with Water Supply and Sanitation Collaborative Council (2013) in this context has issued *WASH and Health for Menstrual Hygiene Management, Training of Trainers' Manual, V1.0* to educate the youth on menstrual hygiene and practices (WSSCC, 2013). It is essential to promote policies, standards of excellence and vibrant menstrual products in marketplaces. These factors will help women have access to safe and inexpensive solutions. One of the most crucial aspects of the sustainable development goals is the promotion of ecologically friendly sustainable menstruation products and their disposal. We also need to inform the girls about the government programmes they may take advantage of such as free sanitary products to prevent genital infections. It is crucial to be aware of the need for knowledge on healthy menstruation habits. A framework must be created to address and support access to them.

Limitations of the study

The data set used in the study did not provide information such as how often the women changed sanitary pads or cloths, how often they washed genital area during menstruation, how well they washed genital area, whether they used clean clothes or dirty clothes, bathing practices during menstruation, etc. So, the data doesn't include any WASH practices during menstruation. The NFHS-4 lacks data on other potential determinants of disposable absorbent use such as myths, traditional beliefs, perceived side effects and access to disposable absorbents. The present study is unable to assess whether women used disposable absorbents in a hygienic manner. Also, there is no information regarding the knowledge of menstruation among the women like whether they know about menstruation before their menarche, why menstruation happens, why the blood comes out from the body every month, what they think about the process, what will happen if they practise unhygienic methods during menstruation and most importantly what is the source of their information. The data only provide for absorbent use among women aged 15–24 years, thus excluding women older than 24 years whose menstrual hygiene practices may differ from those of younger women.

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