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Differential Uses Pattern of Menstrual Material among Non-Tribal and Tribal Community in selected rural areas of West Bengal: A case study

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ABSTRACT

Menstruation and menstrual activities are still subjected to a slew of social, cultural, and religious constraints, which pose a significant impediment to proper menstrual hygiene management. In addition, women in rural areas either do not have access to sanitary products or do not know anything about the different forms to maintain menstrual hygiene. A descriptive and cross-sectional study of adolescent girls in the chosen districts was conducted. The sampling technique was used to choose 788 women who had menstrual flow for at least three consecutive menstrual cycles as a sample. There are 435 non-tribal women and 353 tribal women among the population, and data is being collected. After that, the information is presented in a comparative analytical format. Statistical Package for Social Sciences (SPSS) version 20.0 was used to analyze the data, including descriptive and inferential statistics. **Result**: determinants of the significant differences of access to menstrual material between the Non-tribal & Tribal community. There is a significant difference in the access to menstrual material between non-tribal and tribal communities. Public awareness should be raised to promote reusable sanitary products or natural sanitary products made from eco-friendly natural materials to enjoy fearless, shameless and affordable menstruation.

***Key words**: Cloth, Sanitary pad, Women, Menstruation*

Introduction

Menstruation and menstrual activities are still subjected to social, cultural, and religious constraints, which pose a significant impediment to proper menstrual hygiene management. Women have developed their methods to deal with menstruation worldwide, which differ from country to country and are influenced by economic status, personal interests, local customs, cultural values, and educational status. In many cases, menstrual management methods are unsanitary and inconvenient, particularly in less developed areas. Most girls, particularly in rural areas, are unprepared and unaware of menstruation in many ways. They confront several difficulties and problems at home, schools, and work. Women in remote areas either do not have access to sanitary products or do not know anything about the different forms and how to use them or cannot afford them due to their high cost. The scenario became complicated when access to menstrual material creates a burden for women in different socio-economical classes.

Objectives of the study

Find the facts regarding access to menstrual product

during Menstrual Hygiene and Management among women can be classified into the following objectives: **1.**What kind of material women are mainly used during menstruation **2.**What factors related to determining the uses of menstrual product **3.** Are they satisfied to use this material and **4.** Is there any differential approach among non-tribal and tribal communities to determine the knowledge about menstrual material?

Methods and sample size: A descriptive cross-sectional survey was conducted to identify two distinct groups based on access to menstruation material. Based on census 2011 (Overview of Census, 2011), four districts (Howrah, Purba Medinipur, Coach Bihar, and South 24 Pargana) with the largest concentrations of non-scheduled tribe population were chosen for the study (n= 435). On the other side, 353 respondents were chosen from the districts with the most significant tribal concentration (Darjeeling and Purulia). The task is chosen for the typical age range of 13 to 48 menstrual women from various working statuses. A stratified random sampling technique was carried out to achieve the goal.

Significance of the study: UNICEF aims to ensure that girls and women have access to various affordable and acceptable choices instead of endorsing just one alternative to manage their menstruation in a dignified way. Access to high quality, valuable hygienic absorbent materials for menstruation management is missing for most girls and women in most countries. There is no single menstrual material or product that fits every girl and woman in every situation. Women and girls have different needs and desires and must have an alternative in private or public places. Girls with various disabilities can also have unique preferences depending on their case (Guide to menstrual hygiene materials, 2019). Community awareness and their participation in menstrual hygiene reflect a healthy relationship between women and access to the material. Menstrual hygiene includes women choice of freedom. Proper access to menstrual product can prevent women from infection in the reproductive and urinary tract. Therefore, hygiene-related practices of women during menstruation are of considerable importance, as they may increase vulnerability to Reproductive Tract Infections (R.T.I.'s) (Dasgupta, and Sarkar, 2008). In this study, a comparative analysis was carried out where non-tribal and tribal women are considered to display their choice, problems and barriers to choosing the menstrual product. This study can portray the causes behind the shame, obstacles, and adverse situations women can face when selecting and using menstrual products in a global arena.

Statistical Analysis: The "Chi-square" test compared if there is a difference between observed data and expected data due to chance. Statistical *p*-value test helps to determine the significance of results about the null hypothesis. The *p*-value or probability value represents how likely it is that the data could have occurred under the null hypothesis (Dahiru, 2008). The objective of factor analysis is to reduce numerous individual items into a less number of dimensions. Thus, factor analysis can simplify data, such as reducing the number of variables in regression models. Most typically, factors are rotated following extraction (Ather and Balasundaram, 2009). The t-test is a type of inferential statistic used to determine a significant difference between the means of two groups, which may be related to certain features (Ugoni and Walker, 1995).

Results

Periods should not interfere with daily activities. There are a variety of items available to keep comfortable and dry during the menstrual time. Various aspects to consider when options, including the activity that will be undertaking, the cost of the product, ease of use, and the product's environmental impact to choose the menstrual kit. Personal preference, cultural acceptability, economic status, and availability in the local market all influence sanitary material selection during menstruation.

The choice of absorbents varies among non-tribal

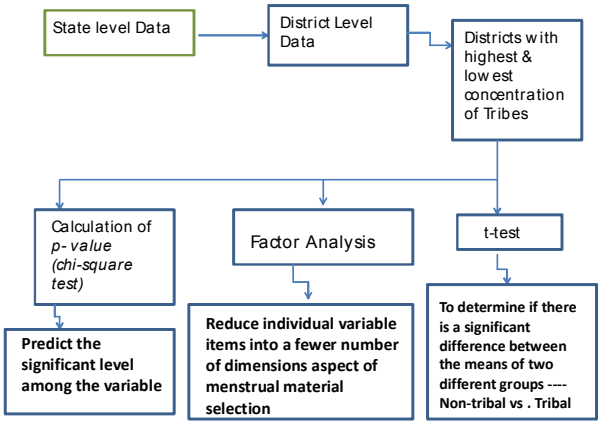

Fig. 1. (Showing the represented values with the help of statistical analysis)

and tribal menstrual women. Among the non-tribal women, commercial pads (46%) preferred as absorbents (Fig: 2a). Women opt to switch to menstrual cloth pads include comfort, savings over time, environmental effect and health reasons. Moreover, 16 % of them are comfortable using both sanitary pad and cloth. In most cases, when clothes are not adequately dry during monsoon, women are using commercial pads. In some cases, due to its comfort, women in the working ground use a commercial pad, but they preferred to use cloths at home. Whereas 90% of women in the tribal population are preferred to use cloths (Fig: 2b) because it is reusability and, for many women, is seen as a cheaper, readily available more sustainable way than sanitary pads.

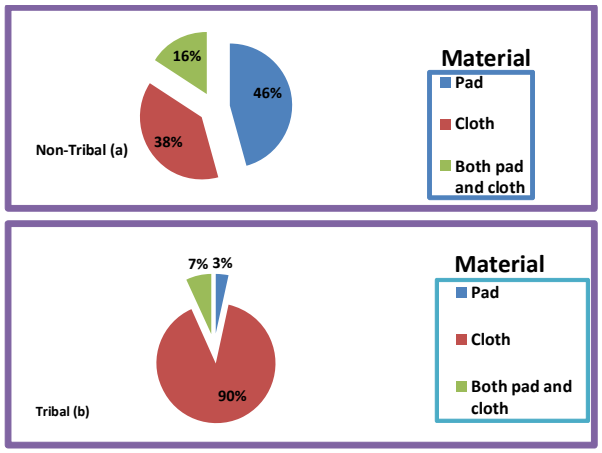

Fig. 2 (a &b). Shows the different menstrual material used by Non-tribal and Tribal women in the selected districts.
Source of Data: Primary data surveyed (2018-2019)

Fig: 3 show a comparative picture of different material used in different age groups among non-tribal and tribal communities. The graph depicted that among the non-tribal communities below the age group of 18 are more comfortable using cloth, whereas among the tribal respondents (<=18), using re-useable cloth is famous. Of those using commercial pads and cloths, 63% of them (non-tribal) use pads in monsoon because of cloth drying, and 37% are used in the workplace because they are not comfortable with cloth working ground. In the case of tribal population, those using commercial pads and cloths, 87% of them are using it in the workplace, and 13% use the commercial pad in monsoon because of the drying problem of cloths. Above the age group of 18 in both non-tribal and tribal communities, cloths and pads are used, but the percentage varies. But the significant differentiation visible among the <=18 age group between non-tribal and tribal communities. Among the tribal communities, girls are influenced by their mother and decided to choose cloth as an absorbent material, whereas among the non-tribal community, choosing the material is mainly influenced by friends and peer groups.

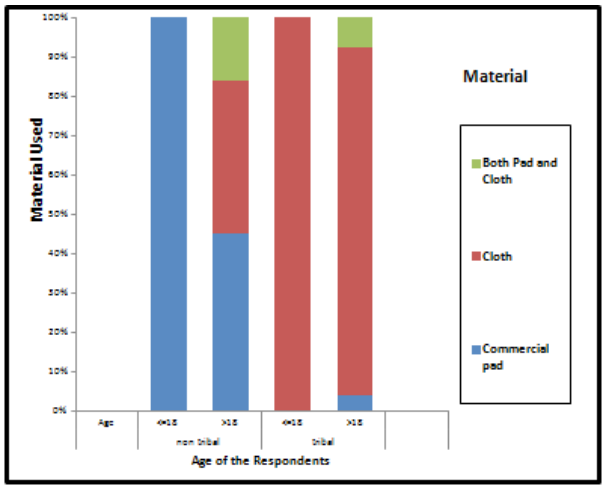

Fig. 3. Shows the Material Used Status in Respect of Age and Cast (Non-tribal and Tribal) of the Respondents
Source of Data: Primary data surveyed (2018-2019)

The above two tables (Table 1 a and b) show a very contrasting scenario between the two casts regarding using menstrual materials and the working category of the respondent. In the case of the non-tribal respondent (Table 1a), the non-working-class women are familiar to use commercial pads, cloth and both the material simultaneously. However, among the non-working tribal respondent (Table 1b), women are only using clothes. On the other hand, a significant difference visible among the non-tribal working-class, mainly, works in the unorganized sector and tribal working community. It is seen that among the non-tribal unorganized community, cloths are mainly used as an absorbent material. This discrimination is associated with the high price of the commercial pad, shyness to use commercial pads and the disposable problem during working hours. In contrast to that, using a commercial pad is comparatively high among the working organized sector in both communities. It is mainly

because of the disposal facility in the working sector and the cheap availability of sanity pads made by the "Self-help group" to a certain level. Women who are still using cloth in the working sector are comfortable with clothes. In some cases, they do not afford it because of its price and feeling shy to buy the product from the medical shop.

(Table 2) shows that age group is one of the essential variables regarding used material during menstruation. Below the age group18 and above this age group are considered for the study. The chi-square analysis revealed that the *p*-value is lesser than 0.05 (*p*-value 0.000). Chosen significance level highlighted a significant association between age and access to the material during menstruation. In the education scenario, three groups are considered (illiterate to 5, class 6 to class 10 and above class 10). The calculated *p*-value is 0.000, which justified that a significant relation reflects education level and menstrual material. Another critical parameter income status (<70000, 70000-273000 and > 273000/ per annum) of the respondent is measured. The estimated *p*-value is 0.000, which statistically significant, which means that there is a good chance that a

Table 1a. (Non-tribal) 1b(Tribal): showing the relation between working category and material preferred to used by the Non- tribal respondents n=435 & Tribal respondents n= 353

1 a (Non-Tribal)

Working category			Working Status		
			Working	Non-Working	Total
Non-working	Material	Pad		91	91
		Cloth		82	82
		Both		34	34
	Total		207	207	
working organized Sectors	Material	Pad	79		79
		Cloth	21		21
		Both	27		27
	Total		127		127
working un-organized Sectors	Material	Pad	29		29
		Cloth	64		64
		Both	8		8
	Total	100		101	
Total	Material	Pad	108	91	199
		Cloth	85	82	167
		Both	34	34	69
	Total		**227**	**207**	**435**

1 b (Tribal)

Working category			Working Status		
			Working	Non-Working	Total
Non-working	Material	Cloth		57	57
	Total		57	57	
Working organized	Material	Pad	12		12
Sectors		Cloth	21		21
		Both	24		24
	Total		57		57
Working unorganized	Material	Cloth	239		239
Sectors	Total		239		239
Total	Material	Pad	12	0	12
		Cloth	260	57	317
		Both	24	0	24
	Total		**296**	**57**	**353**

Source of Data: Primary data surveyed (2018-2019)

relationship exists between two variables. In the case of social media access of the respondent, two types of answer are considered, whether the respondents access to social media or not. This category carried the importance of any menstruation-related knowledge respondent can get or not. In this testing, the *p*-value is 0.000. This statistical analysis represents the significant relationship between these two considered variables. An awareness programme regarding menstruation-related knowledge is also considered for the study. An awareness programme organized by the government or any non-government organization organized or not is measured. In this case, the *p*-value is 0.001, and it signified an association between the two levels. On the other hand (Table 3) shows that age group is an essential variable regarding used material during menstruation. Below the age group18 and above this age group are considered for the study. The chi-square analysis revealed that the *p*-value is lesser than 0.05 (*p*-value

Table 2. Association between materials used to manage Menstruation and Selected Variables of Non- tribal Respondents n=435

Variables	Materials used to manage Menstruation.			$\chi 2$	p-value
	Commercial Pad (%)	Cloths (%)	Both Materials (%)		
Education				104.578	0.000
Illiterate to 5	9 (15.0)	49 (81.7)	2 (3.3)		
6 to 10	72 (36)	95 (47.5)	33 (16.5)		
> 10	118 (67.4)	23 (13.1)	34 (19.4)		
Income				51.208	0.000
<70,000	33 (23.4)	82(58.2)	26 (18.4)		
70,000- 273000	97 (51.1)	62 (32.6)	31 (16.3)		
>273000	69 (66.3)	23 (22.1)	12 (11.5)		
Social Media Access				91.754	0.000
Yes	142 (60.9)	41 (17.6)	50 (21.5)		
No	57 (28.2)	126 (62.4)	19 (9.4)		
Awareness Programme	14.298	0.001			
Yes	70 (56.9)	30 (24.4)	23 (18.7)		
No	129 (41.3)	137 (43.9)	46 (14.7)		

Table 3. Association between materials used to manage Menstruation and Selected Variables of Respondents n= 353 (Tribal respondents)

Variables	Materials used to manage Menstruation.			χ^2	p-value
	Commercial Pad (%)	Cloths (%)	Both Materials (%)		
Education				105.79	0.000
Illiterate to 5	5 (2.6)	179 (94.8)	5(2.6)		
6 to 10	5 (4.4)	90 (79.7)	18 (15.9)		
> 10	12 (23.5)	33 (64.7)	6 (11.8)		
Income				84.086	0.000
<70,000	6 (2.5)	217(92.4)	12 (16.0)		
70,000- 273000	5 (8.2)	44 (72.1)	12 (19.7)		
>273000	12 (21.1)	39 (68.4)	6 (10.5)		
Social Media Access				67.829	0.000
Yes	12 (21.1)	40 (70.1)	5 (8.8)		
No	5 (1.6)	267(90-3)	24(8.1)		
Awareness Programme				54.725	0.000
Yes	6 (5)	90 (75)	24 (20)		
No	12 (5.2)	215 (92.2)	6 (2.6)		

Source of Data: Primary data surveyed (Table 2 & 3) (2018-2019)

0.000). Chosen significance level highlighted a significant association between age and access to the material during menstruation. In the education scenario, three groups are considered (illiterate to 5, class 6 to class 10 and above class 10). The calculated *p*-value is 0.000, which justified that a significant relation reflects education level and menstrual material. Another critical parameter income status (<70000, 70000-273000 and > 273000/per annum) of the respondent is measured. The estimated *p*-value is 0.000, which statistically significant, which means that there is a good chance that a relationship exists between two variables. In the case of social media access of the respondent, two types of answer are considered, whether the respondents access to social media or not. This category carried the importance of any menstruation-related knowledge respondent can get or not. In this testing, the *p*-value is 0.000. This statistical analysis represents the significant relationship between these two considered variables. An awareness programme regarding menstruation-related knowledge is also considered for the study. An awareness programme organized by the government or any non-government organization is measured *p*-value is 0.000, and it signified an association between the two levels.

In the case of non-tribal and tribal respondents (Fig. 4) itching problem during menstruation is widespread. In both cases where respondents are using commercial pad or cloth are suffering itching related issues. In most cases, it is because of practising poor menstrual hygiene practice in case of a tribal respondent long time of using one cloth which is not adequately dry in sunlight indulgent the situation poorly.

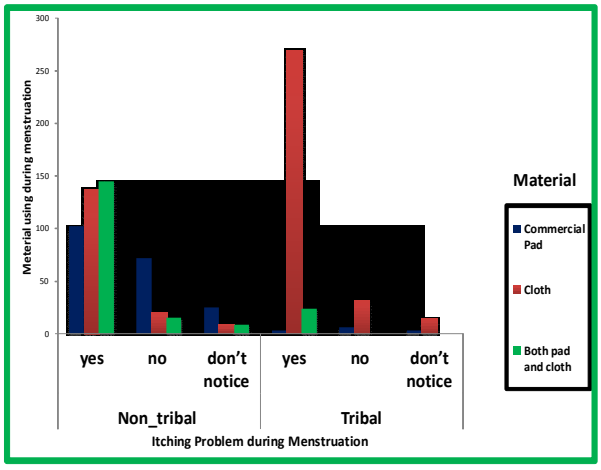

Fig. 4. Showing the Relation between Material Used and Itching Problem of Vaginal Areas during Menstrual Period among the Non-Tribal and Tribal Communities
Source of Data: Primary data surveyed (2018-2019)

The above data (Table 4 & 5) represented that among the non-tribal and tribal communities using sanitary pads and cloth and facing itching problems, mainly using tap water to clean their genital organs during menstruation. Whereas as among the tribal community (Table 5), who are mostly facing itching related issues using cloth are not using water to clean their genital organ during menstruation.

Factor analysis is a technique primarily used to reduce a high number of variables into fewer factors. This methodology removes maximum common variance from all variables and puts them into a standard score. We can use this score as an index of all variables for further investigation. The above tables (6a and b) show the factor loading regarding the choice of the product during menstruation between two communities (Non-tribal and Tribal). (Table 6a) shows that among the non-tribal communities, component 1, i.e. (Social media access, Educational status, Income range and awareness programme), has higher factor loading (component 1) in comparison to the Working category and Age category (component 2). In contrast to tribal respondents (6b), Working Category and Income range have higher factor loading (components 1) compare to Social media access, Educational status, awareness programme and age category (component 2). So in the, both the analysis income range have a common factor loading component 1 which influence the factor for choosing menstrual material in both the communities.

Fig. 5 shows no such relation between education status and knowledge regarding commercial pads made by both the communities (non-tribal and tribal). Most of the respondents who are using commercial pad have partial knowledge regarding this. According to their response, cotton is the only material by which pads are made. They are entirely unaware of Super Absorbent Polymer (SAP) as an absorbent material, with Polyethylene (P.E.) for the back cover. The companies are also not written the components in such a way so that women can at least know that they are using them. Only a few respondents have aware of the material they are using.

The above Figure 6 (a & b) represents the changing frequency of used material among non-working

and working classes. Fig 6 (a) represents that among the non-working respondents using clean cloths, changing times varies between 1 to 2 times per days. In contrast, most respondents change their napkin 2 to 4 times per day in sanitary napkin users. The average working hours vary between 6 to 8 hours per day in organized and unorganized sectors. In the case of working scenario (6b), respondents who are

Table 4. Showing the relation among material using menstruation, water use of clean vagina and itching problem of non-working women in non-tribal respondent

Material			Itching Problem During Menstruation			
			Yes	No	do not notice	Total
Pad	Latrine water household					
		Pump water	13	13	2	28
		Tap water	15	16	7	38
		Pond water	9	7	1	17
		Tube well	5	2	1	8
	Total		42	38	11	91
Cloth	Latrine water household					
		Pump water	2	1	0	3
		Tap water	24	0	1	25
		Pond water	39	4	1	44
		Tube well	6	2	0	8
	Total		71	7	2	80
Both	Latrine water household					
		Pump water	6	3	2	11
		Tap water	14	2	3	19
		Pond water	1	0	0	1
		Tube well	4	0	0	4
	Total		25	5	5	35

Source of Data: Primary data surveyed (2018-2019)

Table 5. Showing the relation among material using menstruation, water use of clean vagina and itching problem of working women in tribal respondent

Material			Itching Problem During Menstruation			
			Yes	No	do not notice	Total
Pad	Latrine water work	Not use	1	2	2	5
		Pump water	42	26	12	80
		Tap water	11	3	0	14
		Tube well	6	3	0	9
	Total		60	34	14	108
Cloth	Latrine water work					
		Not use	35	8	3	46
		Pump water	12	0	2	14
		Tap water	10	3	0	13
		Pond water	2	0	0	2
		Tube well	5	1	2	8
	Total		64	12	7	83
Both	Latrine water worknot use	36	10	5	51	
		Pump water	10	3	1	14
		Tap water	7	7	2	16
		Tube well	3	0	1	4
		Total	**56**	**20**	**9**	**85**

Source of Data: Primary data surveyed (2018-2019)

Table 6a and 6b. Showing the factor responsible for determining the choice of menstrual product among the Non-tribal population & Tribal with the help of the factor analysis process

Rotated Component Matrix (Table: 6a)

	Component	
	1	2
social media	.833	
Educational status	-.803	
Income range	-.612	
Awareness programme	.524	
Working category		.797
Age category		.744

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Rotated Component Matrix(6b)

	Component	
	1	2
Working category	-.925	
Income range	.862	
Social media		.769
Educational status		-.673
Age category		.626
Awareness programme		.539

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Source of Data: Primary data surveyed (2018-2019)

using the sanitary pad in their working field changing it 1 to 2 times but in the case of cloth, no changes during working hours is primarily visible.

(Table 7 and 8) presented that there is an inverse relationship between the educational status of the respondents and attitude toward drying of cloth after menstruation. The knowledge gap regarding this issue in both communities creates a poor hygienic practice where most respondents dry their used cloth in a damp area. These are favourable for the growth of bacteria and foul odour. This condition is prone to urinary tract infection. The response is also

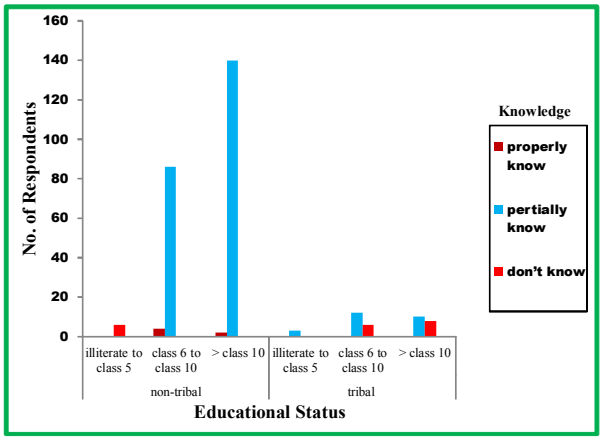

Fig. 5. Showing the knowledge level of the respondent about the commercial pad made off based on their education status who are using commercial pad among tribal and non-tribal community
Source of Data: Primary data surveyed (2018-2019)

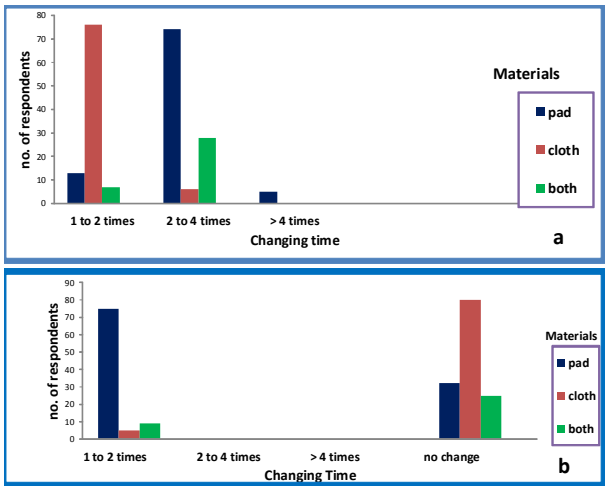

Fig. 6(a). Showing the relation between the material used by the non-working respondents in the Non-tribal and Tribal community and the change of material during a day and 6(b) working respondents in Non-tribal and Tribal community and the change of material during a day
Source of Data: Primary data surveyed (2018-2019)

not to dry their used cloth in the sunlight because of the fear of black magic. In respective of educational status, this fear is common among both communities.

Table 9 represents that 199 of the response using a sanitary napkin, and among them, 141 are happy and satisfied. The 53 respondents who are not happy with a sanitary napkin advise doctors to use a sanitary napkin to manage heavy flow during menstruation. They are not happy because of its high price and problems associated with disposal related issues. However, with the cloth user, 83 out of 167 are not happy with it because of its soggy nature and the problem of changing it in any place. On the other hand, they do not afford to use a napkin in their daily lives because of the high price. For women who are using both pad and cloth simultaneously, the satisfactory level is shallow.

Table 10 represents that among the respondents, 12 using sanitary napkin are happy and satisfied. However, in the case of cloth user, 200 out of 317 are happy with the use of cloth because it is cheap, affordable and readily available. For women who are using both pad and cloth simultaneously, the satisfactory level is deficient. However, for women who are using both pad and cloth simultaneously, the satisfactory level is high.

The above Figure 7 shows the relation between self-help group made sanitary pad and their satisfactory level. The napkin made, but the S.H.G. cost

Table 7. Showing the relation between education and attitude of drying menstrual material among non-tribal respondent

Education level	Material	Feeling shame to dry cloth	Dry cloth		
			Sunlight	Damp area	Total
Illiterate to class 5					
	Cloth	Yes	7	40	48
	Both		2	0	2
	Total		10	40	50
Class 6 to class 10		Yes			
	Cloth		6	89	95
	Both		6	24	30
	Total		12	113	125
	> Class 10				
	Cloth	Yes	2	21	23
	Both		4	27	31
	Total		6	48	54

Source of Data: Primary data surveyed (2018-2019)

Table 8. Showing the relation between education and attitude of drying menstrual material among tribal respondent

Education level	Material	Feeling shame to dry cloth	Dry cloth		
			Sunlight	Damp area	Total
Illiterate to class 5					
	Cloth	Yes	12	177	189
	Total		12	177	189
Class 6 to class 10	Yes				
	Cloth		5	90	95
	Both			18	18
	Total		5	108	113
> Class 10					
	Cloth	Yes	3	30	33
	Both			6	6
	Total		**3**	**36**	**39**

Source of Data: Primary data surveyed (2018-2019)

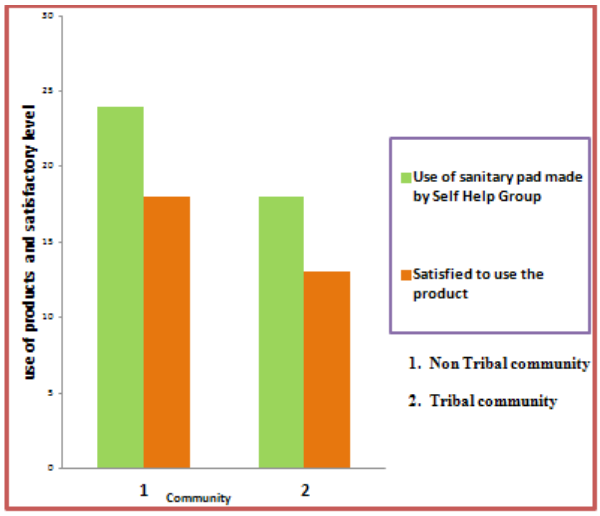

Fig. 7. Showing the relation between the use of pad made by self-help group and the satisfaction level among the tribal and non-tribal communities
Source of Data: Primary data surveyed (2018-2019)

per packet is Rs. 10/ per packet. In a packet, there are three napkins, and per napkin, the cost is almost Rs. 3.33/. Though it is cheap in the rate because of its wrong size and not availability, it is not satisfactory. Whereas in the commercial pad, each napkin cost varies Rs. 10/ to Rs. 15/ but because of its high price, the commercial pad is not accepted in all section of women.

In the case of a napkin made by S.H.G. 8(A), the length of a napkin is 21cm, width is 7cm, and thickness is 1.5cm. On the other hand, in commercial pad 8(B), the length of a napkin is 29cm, the width is 8cm, and the thickness is 0.5cm. So in respect of comfort and blood holding capacity commercial napkin is more acceptable than S.H.G. prepared napkin. However, it is required to change frequently because of the low blood holding capacity, which creates discomfort and disposal-related problems. However, both sanitary napkins come into a plastic cover packet, and the instructions about using the

Fig. 8. Showing a comparative representation of sanitary pad made by Self Help Group (A) and market available napkin (B)

Table 9. Satisfaction level for using the product among non-tribal community

Satisfaction level for using the product	Material			Total
	Pad	Cloth	Both	
Happy	141	79	7	227
Not happy	53	83	55	191
Confused	5	2	7	14
No choice, so no option	0	3	0	3
Total	**199**	**167**	**69**	**435**

Source of Data: Primary data surveyed (2018-2019)

Table 10. Satisfaction level for using the product among tribal community

Satisfaction level for using the product	Material			Total
	Pad	Cloth	Both	
Happy	12	200	18	230
Not happy	0	24	3	27
Confused	0	44	3	47
No choice, so no option	0	49	0	49
Total	**12**	**317**	**24**	**353**

Source of Data: Primary data surveyed (2018-2019)

product and disposal related issues are not written clearly.

Most of the women in the selected districts face a lack of access to high-quality, hygienic absorbent products for managing menstruation. There is no single menstrual product or substance that will suit every woman in every situation. In this aspect (Table: 12), the determinants of the significant differences of access to menstrual material between the Non-tribal & Tribal community. The value of 0.000(Sig. (2-tailed)) is < 0.05, which indicated that there is a significant difference in the field of access to menstrual material between non-tribal and tribal communities.

Discussion

In this study, women's access to menstrual material is primarily determined by their family's tradition, and their fear of discussing this topic prevents them from doing so. It has been observed that the first menstrual experience influences a girl's menstrual hygiene practices. Furthermore, society does not create a safe and healthy environment for menstruating girls during their menstrual periods, preventing them from accessing inappropriate material. Girls should be taught about menstruation and basic menstrual hygiene practices beginning in primary school to eliminate stereotypes about menstruation. Age, income level, educational status, social media access, awareness programme operational level, and working sectors play a crucial role in opting for material during menstruation. The statistical analysis gives a very appropriate picture where menstrual material and other depending variables are interdependent among the non-tribal and tribal community in the participation level.

Recommendations: Menstrual-related research has been ignored after a lengthy period of independence. After the 1980s, the government took particular good initiatives to break the silence among menstruation women and society. However, the initiative was not well accepted by all segments of society, and it did not reach all levels of society. Health information on menstruation hygiene should also be emphasized in the media. Companies that manufacture sanitary pads should publish information on the chemical makeup of the pads so that appropriate technologies for their disposal and treatment can be used. Manufacturers of sanitary goods should employ eco-friendly ingredients to prevent soil and water pollution and speed up the decomposition process. The provision of menstruation management advice to adolescent girls is an important step. Menstrual hygiene management should be a component of every student's education. The toilet must be constructed and built in a way that is favourable to girls and women. In public places, sanitary napkin vending machines have been put in semiautomatic restrooms and run by inserting a coin. Proper accessibility and affordability of sanitary pads among all the communities are required.

Conclusion

In most cases, subject menstruation and menstruation behaviours veer for the societal, cultural, and religious constraints, which pose a significant impediment to proper menstrual hygiene management. Because many girls in many regions of the

Table 11. t-test value showing the comparison between two groups regarding access to menstrual material
Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
				t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.						Lower	Upper
Material	Equal variances assumed	674.073	.000	-7.006	711	.000	-.313	.045	-.401	-.225
	Equal variances not assumed			-8.466	538.223	.000	-.313	.037	-.386	-.241

Source of Data: Primary data surveyed (2018-2019)

country, particularly in rural regions, are unprepared and unaware of menstruation hygiene, they confront several difficulties and problems at home, schools, and work. Girls and women have little or no understanding of reproductive tract infections caused by a lack of personal hygiene during menstruation. Women in rural regions either do not have access to sanitary products or do not know much about the different varieties and how to use them, or they cannot afford them owing to the high cost. As a result, they primarily rely on reusable cotton pads, which they wash and reuse. Despite significant improvements in water and sanitation, the needs and requirements of adolescent girls and women remain overlooked. As a result, there should be a need to educate and inform them about environmental pollution so that the health risks must come with it. The use of advanced procedures such as incineration can aid in waste reduction. Also, public awareness should be raised to promote the use of reusable sanitary goods or natural sanitary goods manufactured from banana fibre, bamboo fibre, sea sponges, water hyacinth, and other natural materials.

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