

Assessing the Knowledge, Attitude and Practice of Menstrual Hygiene Management Among School Girls of ZPPGHS, Gollaprolu, East Godavari, Andhra Pradesh

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ABSTRACT

Menstrual hygiene ignorance has an impact on women's everyday activities, social interactions, and the environment. Lack of knowledge and poor hygiene habits during menstruation are major causes of severe illnesses worldwide, including genital tract infections, urinary tract infections, and bad odour. This study on knowledge, attitude, and practice seeks to understand the level of awareness of menstrual health and hygiene among adolescent schoolgirls.

Using a census sampling method, the Menstrual hygiene questionnaire is sent by google form to the adolescent girls studying in the government school of Gollaprola, East Godavari, Andhra Pradesh. 323 students participated in the study. After that, we conducted menstrual hygiene Awareness class and after the session post-session questionnaire response was collected by google form. The statistical score for the responses was calculated & analysis was performed.

Keywords: Menstrual Hygiene, School Girls, Reproductive Tract Infections, Menstrual Period.

INTRODUCTION

Teenage females' menstruation marks the beginning of their physiological maturation. i.e., having regular vaginal bleeding periods is a normal and essential step in the

development of reproductive capacity. Menstruation is associated with myths and a set of dos and don'ts for women in India.

For females, a significant contributor to reproductive tract infections is poor menstrual hygiene. Reproductive tract infections have serious effects that can have a negative influence on women's health, including chronic pelvic pain, dysmenorrhea, and in extreme instances, infertility. Menstrual hygiene is not just about the management of menstrual period, but also the need to address societal beliefs & taboos surrounding the issue. As there is lack of safe & private spaces for menstrual health management, lack of information on MHM, Embracement & anxiety, overcrowding, cultural taboos & restrictions on MHM. Government of India is now making efforts in this direction, the menstrual hygiene scheme was launched in 2011.

As per a study conducted in 2018 regarding menstrual hygiene among adolescent girls from urban slum areas using pretested proforma, there were unsatisfactory results regarding menstrual hygiene due to low level of education and improve assumption about phenomenon of menstruation. Also, it was observed that there is a lot of school dropouts, prevalence of age-old restrictions,

false beliefs, traditional perceptions, wrong attitude regarding menstruation process due to uneducated women in the family.

As per a study conducted in February 2021 in Maharashtra regarding menstrual hygiene practices of adolescent girls. Age group 13-19 years using Anganwadi workers in that area.

They have calculated that there is poor awareness and understanding regarding menstruation among adolescent girls and their families. There is lack of resources and knowledge leading to poor hygiene management which in turn leads to hygiene associated health issues. There are a lot of restrictions during menses in physical and emotional aspect.

A study conducted in university about menstrual hygiene among adolescent girls studying in university of Gujarat. Descriptive cross-sectional study done by interviewing the subjects using the interviewer administered questionnaire pretested & predesigned proforma. Among the study subjects 79% had proper knowledge about menstruation, nearly 96% used sanitary pads and 2.36% used re-usable clothes. The study showed that menstrual hygiene was unsatisfactory among adolescent girls. Therefore, they need to be educated about the facts of menstruation & proper hygienic practices.

As per the study conducted on January 2022 about menstrual hygiene – preparedness among schools in India. This study is aimed to conduct systematic review regarding the existing evidence on menstrual hygiene management across schools in India. They have conducted MHM practices are poor in India furthermore we lack sufficient data to conclude the MHM situations in schools. The government has developed National level guidelines on all the aspects of MHM. According to the study conducted on December 2014 about a comparative study on menstrual hygiene upon urban and rural adolescent girls of west Bengal. They concluded that awareness regarding menstruation was more in urban adolescent girls as compared to rural significantly. A

significantly greater number of girls in urban areas were using sanitary pads as compared to the rural girls. Hygiene practices during menstruation were unsatisfactory in rural areas compared to urban areas. Girls should be educated about the facts of menstruation and proper hygiene practices during menstruation to both urban and rural adolescent girls.

According to the study conducted regarding menstrual hygiene management among adolescent girls in India – a systematic review and meta-analysis. Half of the girls reported being informed prior to menarche, commercial pad use was more common among urban than rural. Approximately a third of girls changed their absorbents in school facilities, half of the girl's homes had a toilet. They concluded that strengthening of menstrual hygiene management programme in India is needed education on awareness, access to the hygienic absorbents and disposal of menstrual hygiene management items needed to be addressed.

Aim:

To study menstrual hygiene, practice among adolescent school going girls and awareness about menstrual hygiene and its management.

Objectives:

The objective of the study is to bring awareness about menstrual hygiene and its management among adolescent school girls.

MATERIALS & METHODS

Study Setting

A detailed study based on knowledge and practice during menstruation is assessed by the means of Questionnaire. Subjects are taken from authorized school in the government school of Gollaprola, East Godavari, Andhra Pradesh.

Study was conducted in authorised school in the government school of Gollaprola, East Godavari, Andhra Pradesh based on the Questionnaire.

Study design: Observational study

Sample size

Total 323 students were selected among the school going girls (12years -16years age group)

Selection of Tool

In East Godavari, Andhra Pradesh's Gollaprola Government School, a cross-sectional descriptive and analytical study was performed. By using census sampling, girls between the ages of 12 to 16 years who had reached menarche were chosen for the research. Girls were given a predesigned, validated questionnaire named The menstrual practices Questionnaire with questions intended to assess their knowledge of menstruation, related practises, and hygiene. The school administration provided their ethical approval. In the local language, all the inquiries were explained to the girls, and their verbal consent was obtained. After completing this pre-test questionnaire, participants attended a session on menstruation and associated hygiene. They were provided a post-test questionnaire after the session. Chi square analysis and SPSS software were used to analyse the data that was gathered.

Inclusion Criteria

Age between 12-16years school going girls

Exclusion Criteria

Age below 12years and above 16years are excluded Mentally disabled girls are excluded

Outcome assessment

Assessment was done by the pre-test and post-test Questionnaire and Post data collection analysis was done by Chi-square test with SPSS Software.

STATISTICAL ANALYSIS

Chi-square Test is performed once the pre and post data is collected.

Ethical issues

Ethical clearance is obtained from the school authorities. Girls were explained about the questionnaire in their own language and verbal consent was obtained.

Table 1 knowledge of respondents on menstruation:

Variables	Frequency	Percentage
Did you have any knowledge about Menstruation before you attained menarche?		
Yes	83	25.6
No	189	58.5
I had an idea	51	15.7
if yes, who told you?		
Mother/sister	173	88.3
Friends/ teachers	22	11.3
Books	0	
Phone/advertisement	1	0.5

Table 2 practice of menstrual hygiene

[Cloth users] Were your cloths bought to be used for menstruation or used for something else first? (select one)		
Bought to be used during menstruation	2	0.64
Used for something else first (e.g., clothes, bedding)	179	57.3
Don't know	131	41.9
Did you wash and reuse any of your menstrual materials during your last menstrual period? (select one)		
No	318	98.4
Yes	5	1.54
Where did you most often change your menstrual materials when you were away from your home [at school/at work] during your last menstrual period? (select one)		
Latrine	64	19.8
A bathroom (separate from latrine)	259	80.1
Another room at the location	0	0
Outside/bush/field	0	0
After your last menstrual period, did you keep [store] your menstrual materials? (includes leftover disposables or reusables)(select one)		
No	315	97.5
Yes	8	2.4
When your menstrual materials were drying, did you usually cover them with anything? (select one)		

No	259	99.2
Yes	2	0.76
When your menstrual materials were drying during your last menstrual period, were they in the sun?(select one)		
Never	154	100
Sometimes		
All the time		
During your last menstrual period, when you were at home did you use the same location for urination as when you do not have your menstrual period? (select one)		
Never	34	10

Sometimes	15	4.6
All the time	274	84
During your menstrual last period, when you were at work did you use the same location for urination as when you do not have your menstrual period?(select one)		
Never	16	4.9
Sometimes	24	7.4
All the time	283	87.6

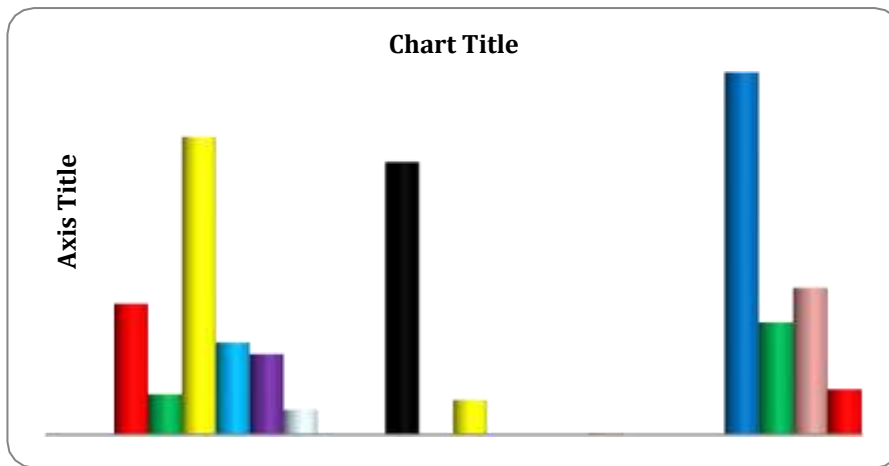


Fig 2 Knowledge of respondents on menstruation

RESULT

Table 3 post questionnaire data after awareness programme

VARIABLES	FREQUENCY-BEFORE	PERCENTAGE-BEFORE	FREQUENCY-AFTER	PERCENTAGE-AFTER
During your last menstrual period, how many times did you change your menstrual material on the heaviest day of your period?				
1 time (wear until the next day)	19	5.8	16	4.9
2 times (e.g. Morning, evening)	69	21.3	47	15
3 times (e.g. Morning, evening, once during day)	149	46.1	137	42.4
4 times (e.g. Morning, evening and twice during day)	55	17	75	23.2
More than 4 times	31	9.5	48	15
Where did you most often change your menstrual materials when you were at home during your last menstrual period?				
Latrine	16	4.9	122	38
Bedroom	3	0.9	1	0.3
Bathroom/washing space (separate from latrine)	299	92.5	200	62
Outside/bush/field	5	1.5	0	0
How often did you change your menstrual materials when you away from your home (at school/ at work) during your last menstruation? (e.g. school, market, working outside the house) select one				
Every day of my period			269	83.2
Some days			14	4.3
One day			29	8.9
Never / No days			11	3.4
Did you wash your hands before changing your menstrual material during last menstrual period				
Never			123	38
			50	15

Sometimes	145	44.8	92	28.4
Every time	55	17	182	56.3
Did you wash your hands after changing your menstrual materials during your last menstrual period? (Select one)				
Every time	309	95.6	322	99.7
Never	8	2.4	0	0
Sometimes	6	1.8	1	0.3
How often did you wash your genitals during your last menstrual period? (Select one)				
At the end of my period only	2	0.6	0	0
Every 2-3 days	8	2.4	2	0.61
Once per day	30	9.2	5	1.54
Twice per day	11	3.4	16	5
Three or more times per day	272	84.2	300	93
When you washed your genitals, did you use soap? (select one)				
Never	138	42.7	10	3
Sometimes	117	36.2	93	29
Every time	68	21	220	68.1
Where did you most often dispose your used menstrual materials when you were at home during your last menstrual period? (select one)				
Into the latrine /toilet	17	5.2	0	0
Burned	11	3.4	32	10
Household rubbish(bin in latrine)	32	9.9	80	25
Household rubbish (bin not in latrine)	115	35.6	30	9.2

Taken to community rubbish	100	30.9	180	56
Buried/ bush/ waterway	44	13.6	0	0
Did not dispose any materials (including reusables)	0	0	0	0
Other	4	1.2	1	0.3
Where did you most often dispose of your used menstrual materials when you were away from your home [at school/ at work] during your last menstrual period? (Select one)				
Transported home to dispose or reuse	1	0.3	0	0
Into the latrine /toilet	3	0.92	0	0
Bin in the latrine or toilet	200	61.9	243	75.2
Bin onsite but outside of the latrine/ toilet	15	4.6	70	22
Community rubbish(not onsite)	88	27.2	10	3.09
Bush/ buried/waterway	1	0.3	0	0
Burned	0	0	0	0
Other	14	4.3	0	0
When disposing of your used menstrual materials, did you usually wrap them in anything? (select one)				
No	8	2.4	0	0
Yes, plastic bag, cover of pad	104	32.2	150	46.4
Yes, toilet paper	10	3	6	2
Yes, cloth	7	2	2	0.6
Yes, newspaper	175	54	165	51
Other	19	5.8	0	0
Are you ashamed or embarrassed to talk about menstruation before everyone (including males)?				

No	180	56	215	67
Yes	143	44	108	33.4
How often do you change your cloth or pad?				
3hrs	84	26	191	59.1
6hrs	190	59	118	37
12hrs	41	13	8	2.4
Whole day	8	2.4	6	2
Do you believe blood which comes out During menses is bad blood?				
Yes	181	56	123	39
No	142	44	201	62.2
Do you believe menstruation process is related to bad or supernatural entity?				
Yes	100	31	43	13.3
No	323	69	280	87
How do you wash your private parts after you defecate or urinate?				
Front to back	230	71.2	297	92
Back to front	93	28.79	26	8.04

Table 4 Difference between the pre and post tests by using Chi square test with spss software

S. No	Responses	Pretest (n=323)	Post-test(n=323)	Chi square value	P value	Statistical significance
1.	During your last menstrual period, how many times did you change your menstrual material on the heaviest day of your period? (day = 24 hours) (select one)					
	1 time (wear until thenext day)	20	16	12.2	.016	p<.05
	2 times (eg. morning and evening)	70	47			

3 times (eg. morning, evening and once during day)	149	137			
4 times (eg. morning, evening, and twice during day)	55	75			
More than 4 times	31	48			
2 Where did you most often change your menstrual materials when you were at home during your last menstrual period? (select one)					
Latrine	16	122	8.56	.036	p<.05
Bedroom	3	1			
Bathroom/washing space (separate from latrine)	299	200			
Outside/bush/field	5	0			
3 How often did you change your menstrual materials when you were away from your home [at school/at work] during your last menstrual period? (e.g., school, market, working outside the home) (select one)					
Every day of my period	269	296	17.02	.001	p<.05
Some days	14	15			
One day	29	7			
Never/no days	11	5			
4 Did you wash your hands before changing your menstrual materials during your last menstrual period? (select one)					
Never	123	50	110.71	<.001	p<.05
Sometimes	145	92			
Every time	55	182			
5 Did you wash your hands after changing your menstrual materials during your last menstrual period? (select one)					
Every time	309	322	11.84	.003	
Never	8	0			p<.05
Sometimes	6	1			
6 How often did you wash your genitals during your last menstrual period? (select one)					
At the end of my period only	2	0	25.75	<.001	p<.05
Every 2-3 days	8	2			
Once per day	30	5			
Twice per day	11	16			
Three or more times per day	272	300			
7 When you washed your genitals, did you use soap? (select one)					
Never	138	10	193.67	<.001	p<.05
Sometimes	117	93			
Every time	68	220			
8 Where did you most often dispose of your used menstrual materials when you were at home during your last menstrual period? (select one)					
Into the latrine/toilet	17	0	117.54	<.001	p<.05
Burned	11	32			
Household rubbish (bin in latrine)	32	80			
Household rubbish (bin not in latrine)	115	30			
Taken to community rubbish	100	180			
Buried/bush/waterway	44	0			
Did not dispose of any materials (including reusables)		0			
Other	4	1			
9 Where did you most often dispose of your used menstrual materials when you were away from your home [at school/at work] during your last menstrual period? (select one)					
Transported home to dispose or reuse	1	0	118.83	<.001	p<.05
Into the latrine/toilet	3	0			
Bin in the latrine/toilet	200	243			
Bin onsite but outside of the latrine/toilet	15	70			
Community rubbish (not onsite)	88	10			
Bush/buried/waterway	1	0			
Burned	0	0			
Other	14	0			
10 When disposing of your used menstrual materials, did you usually wrap them in anything? (select one)					
No	8	0	19.85	<.001	p<.05
Yes, plastic bag, cover of pad	104	150			
Yes, toilet paper	10	6			
Yes, cloth	7	2			
Yes, newspaper	175	165			
Other	19	0			
11 Are you ashamed or embarrassed to talk about menstruation before everyone (including males)?					
No	180	215	7.98	.005	p<.05
Yes	143	108			
12 How often do you change your cloth or pad?					
3hrs	84	191	80.97	<.001	

	6hrs	190	118			p<.05
	12hrs	41	8			
	Whole day	8	6			
13	DO you believe blood which comes out during menses is bad blood?					
	Yes	181	123	21.21	<.001	p<.05
	No	142	201			
14	Do you believe menstruation process is related to bad or supernatural entity?					
	Yes	100	43	29.18	<.001	p<.05
	No	223	280			
15	How do you wash your private parts after you defecate Or urinate?					
	Front to back	230	297	46.24	<.001	p<.05
	Back to front	93	26			

DISCUSSION

In this study Table 4 shows the difference between the pretest and post-test by using Chi square test with SPSS Software. P value for question no.1 to 15 is statistically significant which provides the information in awareness programme that it is very much necessary regarding the knowledge of menstruation and Menstrual hygiene for girls and women to manage their periods in day to life. In this study it is found that majority of girls had no much awareness about menstruation prior to their first periods which is in line with other previous studies. They are lacking in knowledge regarding the maintenance of self-hygiene during menses. As we know commonly that mother is main source of information regarding menses which is common in many studies. But, in this study it is observed that girls are lacking with knowledge about how frequently they should change their menstrual products and where they should change and also how to maintain their personal hygiene after the usage of menstrual, materials, also hygiene maintenance before and after the usage of washroom. It also concluded that even though the girls had awareness about menses before their first period many of them had poor knowledge about how to manage their periods. Most of the girls had used cloth as their menstrual absorbent, this is because they are unable to afford the cost of sanitary pads prior to the awareness programme. Past studies revealed that genital hygiene maintenance is very poor among girls, it is understood that most of the girls were lacking with the knowledge in maintaining hygiene during their menstruation like washing genitalia, habit of washing hands

after disposing their pads/cloth which lead to many health issues. Majority of girls had developed rash after menstruation due to poor hygienic practices in changing the menstrual absorbent for many hours. So, goal of this study is known that awareness and sharing the knowledge of hygiene practices is the need of the hour in students to know about menstruation and its hygienic practices to prevent infections. Parents should be equally responsible in including such programs to avoid myths regarding menses.

CONCLUSION

The study concluded that the knowledge, practise and attitude in the awareness of Menstruation and menstrual hygiene, girls in school going age group are very much lacking behind. Menstrual hygiene is a issue to be considered as need of the hour which needs intervention in various levels, which bring effects in menstrual behaviour due to economy, information lacking due to various myths. In spite of knowledge practicing them in day to day life due to lack of following in regular basis. So by this study we felt like such awareness should be conducted by teachers in schools as a part of curriculum, about usage of menstrual absorbents and hygiene practices during menses. It is very much necessary for girls and parents equally to undergo such awareness sessions to propagate prior awareness of menstruation and hygiene practices.

Declaration by Authors

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