

## Menstrual Hygiene Practices Followed among Rural Adolescent Girl Students

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Menstrual hygiene is an integral part of menstruation in maintaining the reproductive health of adolescent girls. It is crucial for the health, dignity and well-being of every girls and women. In this study, sample of 100 adolescent girls from Bangalore rural were taken randomly. The results showed that that majority of the respondents (72%) never used iron on menstrual materials before reusing them. Only 64% of the respondents sometimes had access to clean place to change absorbents. Majority of the respondents (78%) did not undergo any poor menstrual hygiene symptoms whereas few respondents undergo symptoms like redness (10%), itching (6%) and unusual discharge (6%) and majority of the respondents (65%) did not undergo treatment and tolerate by themselves. The present study concludes that moderate hygiene practices were followed among the rural adolescent girls. Educational programme are in need of the hour to make cent present girls are following good menstrual hygiene practices especially in rural area.

**Key words:** Adolescents, menstrual hygiene, practices, rural area

Menarche is the onset of menstruation in girls and adolescents. Menstruation usually begins between ages 12 and 13, but it may happen at a younger or older age. Menstrual hygiene is an integral part of menstruation in maintaining the reproductive health of adolescent girls and must have access to menstrual hygiene products to absorb or collect the flow of blood during menstruation, privacy to change the materials, and access to facilities to dispose of used menstrual management materials is necessary. Vidhi Parikh et. al (2019) conducted a study on Menstrual hygiene among adolescent girls studying in a university of Gujarat. The results showed that 79% had proper knowledge about menstruation. 82% had a normal menstrual pattern. Nearly 96% used sanitary pads, and 2.36% used reusable cloths. Regarding restrictions, 74.80% restrained themselves from visiting the places of worship, 21% avoided physical exercise, and 7.87% had to remain isolated with minimal social contact. Nearly 19% made conscious

efforts for dietary changes during menstruation. The study however reflected the fact that menstrual hygiene was unsatisfactory among adolescent girls. It is essential for adolescent girls and women to be aware of menstrual hygiene practices as unhygienic practices increase vulnerabilities of urinary and reproductive tract infections.

### Materials and Method

The present study was undertaken at government school offering higher secondary standards in rural area, Bangalore with the objectives to study the menstrual hygiene practices among them. A standardized tool developed by Hennegan J et.al (2020) was used for the present study. The tool was re-modified by the researcher according to the purpose of the study and was subjected to "expert validation and content validation". The tool consists of 44 statements. In this study, samples of 100 adolescent girls were taken randomly. Data collection was done beginning with rapport building to adolescent

girls; they were explained about the purpose of the study and were assured of the confidentiality of their statements collected. The tool was administered to the rural girls. Prior permission was taken from the principal

of the respective Government School Bangalore, karnataka. The statistical methods applied for data analysis were percentages and chi square.

### Results and Discussion

Table 1. Response on Menstrual material use

N=100

Aspects	Category	Respondents	
		Number	Percent
Materials used to absorb your menstruation when you were at home	Cloth/towel	2	2.0
	Disposable sanitary pad	98	98.0
Materials you used to absorb your menstruation when you were away from home	Cloth	2	2.0
	Disposable sanitary pad	98	98.0
Cloths/sanitary napkins bought to be used for menstruation or used for something else first	Bought to be used during menstruation	94	94.0
	Used for something else first	2	2.0
	Don't know	4	4.0
Wash and reuse any of your menstrual materials during your last menstrual period	Sometimes	2	2.0
	Never	98	98.0
Total		100	100.0

Table 1 indicates the response on menstrual material use. Regarding menstrual materials used at home, it is evident that majority of the respondents (98%) used disposable sanitary pad and only 2% used cloth/towel as absorbents during menstruation. 98% of the respondents used disposable sanitary pad and only 2% used cloth when they were away from home. Majority of the respondents (94%) bought cloth/sanitary napkins to be used during

menstruation whereas 2% of the respondents used for something else first before using during menstruation and 4% respondents do not know about it.

With regard to menstrual materials wash and reuse, majority of the respondents (98%) never wash and reuse any of the menstrual materials during their last menstrual period while 2% of the respondents wash and reused menstrual materials sometimes.

Table 2. Response on changing menstrual materials

N=100

Aspects	Category	Respondents	
		Number	Percent
How many times changed menstrual material on the heaviest day of your period	1-2 times	33	33.0
	3 times	41	41.0
	4+ times	26	26.0

Most often change menstrual materials when you were at home	Toilet	96	96.0
	Booth room/Washing place	4	4.0
Often did you change your menstrual materials when you were away from your home	Every day of period	35	35.0
	One day	19	19.0
	Some days	34	34.0
	Never	12	12.0
Most often change your menstrual materials when you were away from your home	Toilet	100	100.0
	Bath room	0	0.0
Total		100	100.0

Table 2 Figure 1 represents the response on changing menstrual materials. It is found that majority of the respondents (41%) changed menstrual material 3 times on the heaviest day of period, 33% respondents changed 1-2 times and 26% changed 4+ times on the heaviest day of period. Almost all the respondents (96%) changed their menstrual materials inside the toilet when they are at home and least percentage (4%) of the respondents changed inside booth

room/washing place. It is seen that 35% of the respondents always changed their menstrual materials when they were away from home closely followed by 34% of the respondents who changed sometimes, 19% who changed once a day and 12% who never changed the menstrual materials when away from home. Regarding place of changing menstrual materials when away from home, all the respondents (100%) changed their menstrual materials inside the toilet.

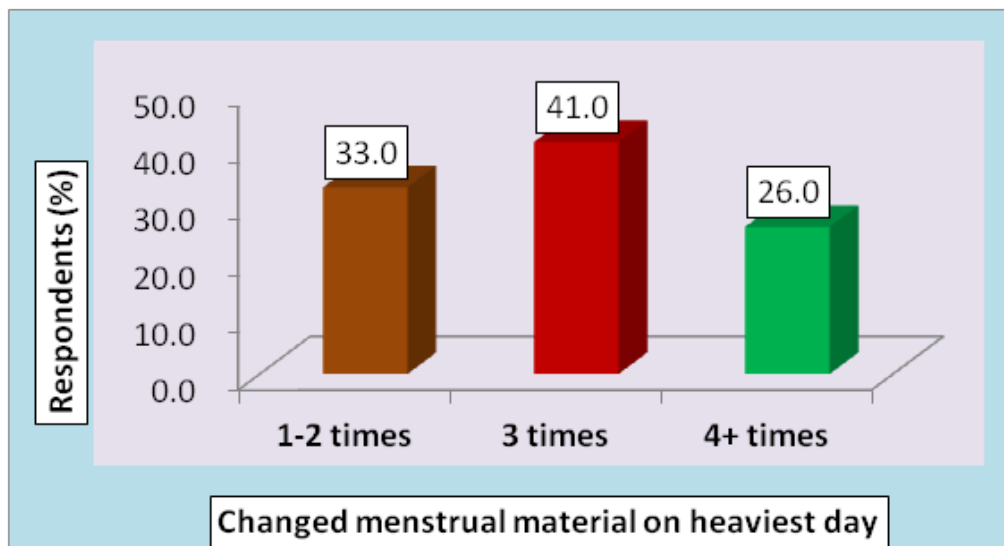


Figure. 1: Response on changing menstrual materials

Table 3. Response on Hand washing

N=100

Aspects	Category	Respondents	
		Number	Percent
Wash hands before changing your menstrual materials	Every time	74	74.0
	Sometimes	13	13.0
	Never	13	13.0
Wash hands after changing your menstrual materials during your last menstrual period	Every time	92	92.0
	Sometimes	8	8.0
Wash hands with soap after changing your menstrual materials	Every time	53	53.0
	Sometimes	47	47.0
Total		100	100.0

Table 3 figure 2 depicts the response on hand washing. With respect to statement of washing hands, it is revealed that 92% of the respondents washed their hands every time after changing menstrual materials during their last period while least percentage (8%) of the respondents washed only sometimes. Regarding washing hands after changing menstrual materials, it is clear that majority

of the respondents (74%) washed hands before changing menstrual materials whereas 13% each of the respondents washed their hands only sometimes and never. Further regarding the washing of hands using soap after changing menstrual materials, 53% of the respondents washed hands with soap after changing menstrual materials closely followed by 47% of the respondents who washed only sometimes.

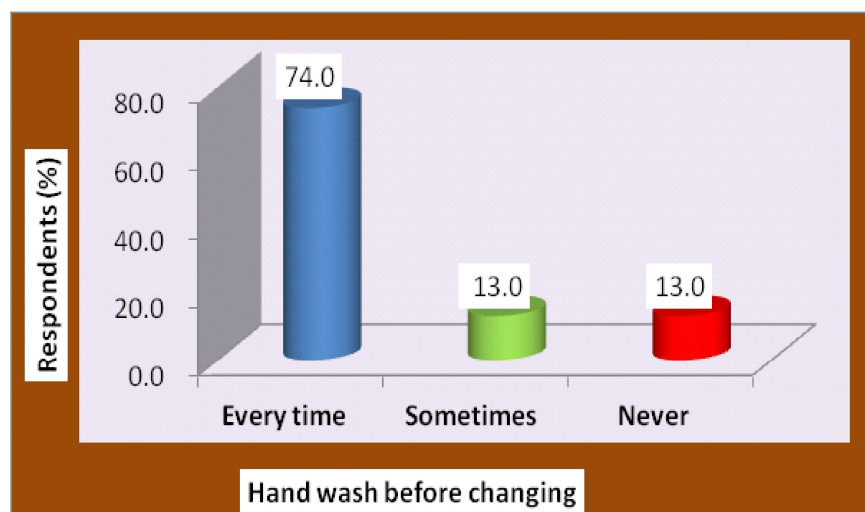


Figure. 2: Response on Hand washing before changing menstrual materials

Table 4. Response on Genital washing

N=100

Aspects	Category	Respondents	
		Number	Percent
Clean genital frequently during menstruation	Every time	81	81.0
	Some time	19	19.0
Washed your genitals, do you use soap	Every time	32	32.0
	Some time	47	47.0
	Never	21	21.0
Wash hands with soap before washing your genitals	Every time	42	42.0
	Some time	49	49.0
	Never	9	9.0
How often did you wash your genitals during your last menstrual period	Once	11	11.0
	Twice	23	23.0
	Three or more	46	46.0
	Every 2-3 days	11	11.0
	At the end of period	9	9.0
Total		100	100.0

Table 4 figure 3 shows the response on the practice of genital washing. The data from the table indicates that majority (81%) of the respondents cleaned their genital every time during menstruation while 19% cleaned only sometimes. Majority of the respondents (47%) used soap to wash genitals sometimes, 32% used soap every time and 21% never used soap. From the data of the table, it is found that only 49% washed hands with soap

before washing genitals followed by 42% of the respondents that washed hands with soap every time and least respondents (9%) that never used soap. Majority of the respondents (46%) washed genitals three or more times during last menstrual period followed by 23% respondents that washed twice, 11% both that washed once and every 2-3 days and only 9% of the respondents washed at the end of the period respectively.

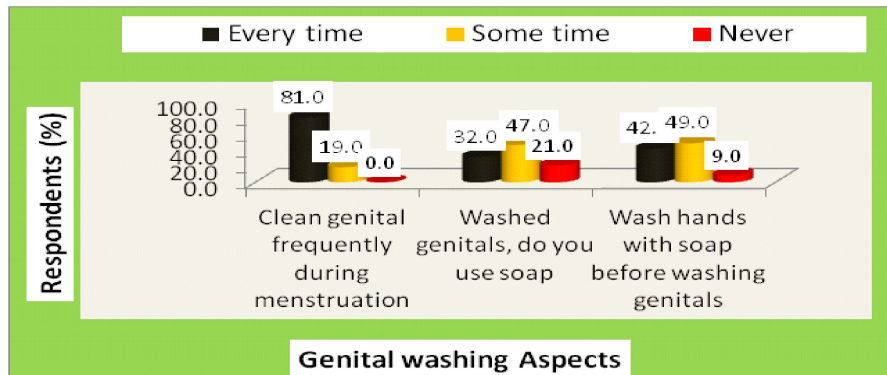


Figure. 3: Response on Genital washing

Table 5. Response on Disposal of menstrual materials

N=100

Aspects	Category	Respondents	
		Number	Percent
Most often dispose of your used menstrual materials when you were at home	Burned	26	26.0
	Household dustbin	60	60.0
	Washed and buried	4	4.0
Most often dispose of your used menstrual materials when you were away from your home	Into the latrine/toilet	5	5.0
	Into the bin of the latrine/toilet	25	25.0
	Bin onsite but outside of the latrine/toilet	61	61.0
	Community rubbish	9	9.0
Disposing of used menstrual materials, did you usually wrap them in anything	Plastic bag/ cover of pad	43	43.0
	Toilet paper	50	50.0
	Cloths/Others	7	7.0
Total		100	100.0

Table 5 represents the response of the respondents on the practice of disposal of menstrual materials. Regarding most often disposal place of used menstrual materials, it is found that 60% of the respondents disposed of at household dustbin, 26% respondents burned it and few respondents (4%) washed and buried the used menstrual materials. Further it is found that 61% of respondents disposed of used materials in

bin onsite but outside of the latrine/toilet, 25% respondents disposed into the bin of the latrine/toilet, 9% respondents disposed into community rubbish and 5% respondents disposed into the latrine/toilet. The most common method of disposal of used menstrual materials found among the respondents is the method of wrapping with toilet paper (50%) followed by plastic bag/ cover pad (43%) and cloths/others (7%).

TABLE – 6 Response on Toilet/latrine practice during menstruation

N=100

Aspects	Category	Respondents	
		Number	Percent
During last menstrual period, at home/school did you use the same location for urination as when do not have menstrual period	Every time	49	49.0
	Sometimes	38	38.0
	Never	13	13.0
During menstrual period, when were at home/school, did have a clean place to change your absorbents	Sometimes	64	64.0
	Never	36	36.0
Is the door of the toilet(s) open	Yes	4	4.0
	No	96	96.0
Total		100	100.0

Table 6 Figure 4 represents the response of the respondents on toilet/ latrine practice during menstruation. With respect to the statement of toilet (s) door, it is evident that majority (96%) of the respondent's toilet (s) is closed whereas least percentage of the respondents (4%) toilet (s) is opened. It is further found that majority of the respondents (64%) had asses to clean place to change

absorbents sometimes and 36% respondents never had asses to clean place. Whereas 49% of the respondents used the same location every time for urination as when they do not have menstrual period. About 38% respondents used the same location sometimes and only 13% respondents never used the same location.

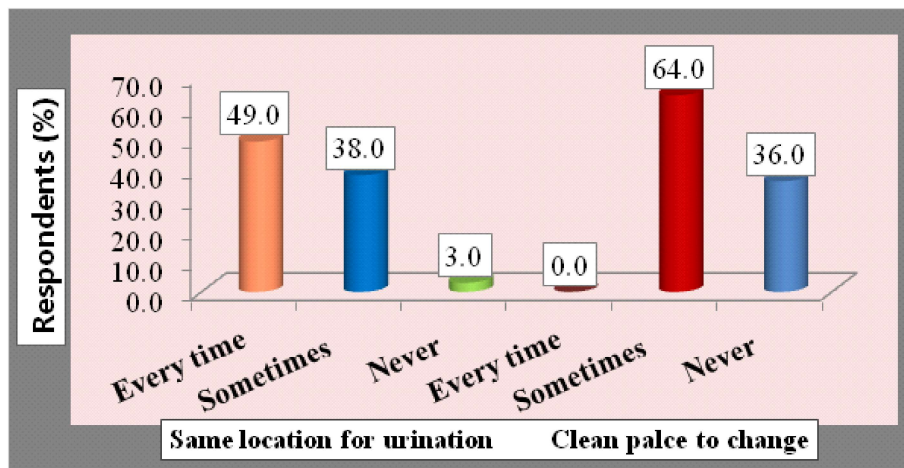


Figure. 4: Response on Urination practice during menstruation

Table 7. Wash hands with soap after changing your menstrual materials by Age group

N=100

Age Group (years)	Sample	Wash hands with soap after changing your menstrual materials				$\chi^2$ Test
		Every time		Sometimes		
		N	%	N	%	
12-13	45	22	48.9	23	51.1	0.56 <sup>NS</sup>
14-15	55	31	56.4	24	43.6	
Total	100	53	53.0	47	47.0	

NS: Non-significant,  $\chi^2$  (0.05,1df) = 3.841

The table depicts that the responses of the respondents from the age group of 12-13 years and 14-15 years washed their hands every time (53%) and sometimes (47%) with soap before changing menstrual materials were nearly equal.

The data was found to be non-significant ( $\chi^2 = 3.841$ ). Therefore, null hypothesis is

accepted and hence there is no association with respect to age and hand washing practices as equal number of respondents has given moderate importance in washing hands which could be due to better educational facilities and awareness in order to prevent infections, diseases and infertility.

TABLE-8 Clean genital frequently during menstruation by Age group

N=100

Age Group (years)	Sample	Clean genital frequently during menstruation				$\chi^2$ Test
		Every time		Sometimes		
		N	%	N	%	
12-13	45	40	88.9	5	11.1	4.34*
14-15	55	41	74.5	14	25.5	
Total	100	81	81.0	19	19.0	

\*Significant at 5% Level,  $\chi^2$  (0.05,1df) = 3.841

The table depicts that majority of the respondents (81%) cleaned their genital frequently during menstruation while least percentage of the respondents (19%) cleaned only sometimes. The data is found to be statistically significant at 5% level ( $\chi^2 = 3.841$ ), it means that age of the respondents cleaning of genital is found to be associated. The age group of 12-13 years (88%) are more hygienic when compared with age group of 14-15 years (74%) and therefore null hypothesis is rejected which

states that there is no effect of independent factors on menstrual hygiene practices among the selected respondents.

According to research conducted by Mamata Sharma Neupane et. al (2020), adolescent girl's age was significantly associated ( $p < 0.05$ ) with menstrual hygiene practice. Further, the researchers found a significant positive relationship between knowledge on menstruation and menstrual hygiene practice.

Table 9. Use an iron on your menstrual materials before you reused them during your last menstrual period by Age group

N=100

Age Group (years)	Sample	Use an iron on your menstrual materials before you reused them during your last menstrual period						$\chi^2$ Test
		Every time		Sometimes		Never		
		N	%	N	%	N	%	
12-13	45	5	8.9	3	6.7	37	84.4	6.61*
14-15	55	8	16.4	12	21.8	35	61.8	
Total	100	13	13.0	15	15.0	72	72.0	

\*Significant at 5% Level,  $\chi^2$  (0.05,2df) = 5.991

The table indicates that majority of the respondents belonging to the age group of 12-13 years (84%) never used an iron on their menstrual materials before they reused them when compared to respondents belonging to the age group of 14-15 years

(61%). Least percentages of the respondents from both the age groups used iron every time (13%) and sometimes (15%) on menstrual materials before reusing them. The data from the above table is found to be



statistically significant at 5% level ( $\chi^2 = 5.991$ ) and hence poor sterilization practices among the residents could be due to lack of maternal education, not been sensitized in schools, lack of privacy, poor socio-economic background and lack of access to sanitary products.

### Conclusion

Menstruation and menstrual hygiene practices are important for the adolescent girls to maintain healthy life. One third of adolescent girls have inadequate knowledge on menstruation and one in four girls have poor practice on menstrual hygiene. Social taboos are also prevalent among the girls such as not entering into kitchen and not participating in religious activities. Further, adolescent girl's age, are significantly associated with their menstrual hygiene practice. Hence, there is need for awareness and advocacy programs for the adolescent girls to enhance their knowledge as well as for encouraging safe hygienic practices during menstruation. Therefore, an educational awareness and advocacy programs on menstruation and menstrual hygiene practices are needed for the rural adolescent girls to safeguard themselves against reproductive tract infections. The study was conducted in rural area so intervention programmes need to be conducted for school going adolescents studying in rural areas.

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