

Menstrual Hygiene among Adolescent Girls:

A Cross-sectional study in Government High School, Kakinada , East Godavari District

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Abstract— Introduction: Menstruation is generally considered as unclean in the Indian society. Good hygienic practices such as the use of sanitary pads and adequate washing of the genital area are essential during menstruation. Aim: To study the overall menstrual hygiene practices among adolescent girls. Objective:

1.To assess the Knowledge & Practices of Menstruation and Menstrual Hygiene among Adolescents of Government High school. 2.To assess the restrictions which were practised by adolescent school girls during menstruation. Materials and methods: Study was conducted among 95 adolescent girls of 9th & 10th standards from a high school, Kakinada, East Godavari district using pre-designed, pre-tested questionnaire. Adolescent girls who have not attained menarche were excluded from the study. Data analysis was done using Excel & SPSS 20. Results: Mean age of menarche was 12 years with a SD of 1.41. 80% knew about menstrual cycle before their menarche. 78% used sanitary napkins. 92.6% of the respondents followed some restriction or taboo during menstruation. Hand washing with soap and water was present in 82.1% of the respondents. Conclusion: 80% have heard about menstruation before attaining menarche, however they are not sure of what the menstruation is & its implications. Majority of them are using sanitary napkins suggesting that use of cloth is on its way out. Menstrual hygiene is good as washing hands & private parts while taking bath is a common practice and there are no restrictions relating to these practices. Restrictions in doing Household activities is very much existent and causing inconvenience. Unscientific dietary restrictions are very common.

Keywords- menstrual hygiene, adolescent girls, menstruation

I. INTRODUCTION

Menstruation is a phenomenon unique to the females.^[1] Although menstruation is a natural process, it is linked with several misconceptions and practices, which sometimes result in adverse health outcomes. Hygiene related practices of women during menstruation are of considerable importance, especially in terms of increased vulnerability to reproductive tract infections.^[2] Menstrual hygiene is an issue that is insufficiently acknowledged and has not received adequate attention in reproductive health. Water, Sanitation and Hygiene (WASH) and RCH sectors in developing countries including India have not established its relationship with and its impact on achieving Millennium Development Goal-2. Its contribution is rarely acknowledged. Studies that make the issue visible to the concerned policymakers and informed practical actions are very much warranted. The first menstruation (menarche) occurs between 11 and 15 years with a mean of 13 years.^[3] Menstruation is still regarded as something unclean or dirty in Indian society. The reaction to

menstruation depends upon awareness and knowledge about the subject. The manner in which a girl learns about menstruation and its associated changes may have an impact on her response to the event of menarche.^[4] Women having better knowledge regarding menstrual hygiene and safe practices are less vulnerable to RTI and its consequences.^[5] Therefore, increased knowledge about menstruation right from childhood may escalate safe practices and may help in mitigating the suffering of millions of women. With this background the present study was undertaken to assess the knowledge, beliefs, and source of information regarding menstruation among the adolescent school girls of the secondary school and also to identify the status of menstrual hygiene among them.

Aims & objectives

To study the overall menstrual hygiene practices among adolescent school girls. Objectives: 1.To assess the Knowledge & Practices of Menstruation and Menstrual Hygiene among Adolescents of Government High school. 2. To assess the restrictions which were practised by adolescent school girls during menstruation.

II. MATERIALS & METHODS

Study was conducted among 95 adolescent girls of 9th & 10th standards from high school, Kakinada, East Godavari district. Study tool: The participants were interviewed using pre-designed, pre-tested questionnaire. Exclusion criteria: Adolescent girls who have not attained menarche were excluded from the study. Software: Data analysis was done using Excel & SPSS 20.

III. RESULTS & DISCUSSION

The study showed that age of the respondents (n=95) varied from 13 – 16 years. The students of class IX were mostly 13-14 years (50.5%) and students of class X mostly 14-16 years (49.5%) with mean age 14.5 years and standard deviation 2.12 years. The study population were mainly Hindu (92.6%) and of nuclear family (88.4%). The education level of their mothers was mostly primary (50.5%) followed by high school (45%). Mean age of menarche was 12 years with a SD of 1.41, range between 11-14 years. In the present study maximum number of girls have attained menarche between 12-14 years. Narayana KA, Srinivasa DK, Petlo PJ.^[6] reported findings similar to present study.

TABLE I: DISTRIBUTION OF STUDY POPULATION BASED ON KNOWLEDGE REGARDING MENSTRUATION

Knowledge regarding	Distribution of respondents	
	No. of respondents	Percentage(%)
1. Knowledge about menstruation before menarche (n = 95) a. Yes b. no	74	77.9
	21	22.1
2. Source of knowledge (n = 74) a. Mother b. Friends c. Sisters	56	75.7
	10	13.5
	8	10.8
3. Knowledge of organ from where bleeding occurs (n = 95) a. Uterus b. bladder	69	75
	26	25

In this study 80% of the respondents knew about menstrual cycle before attaining menarche. In most cases predominant source of information was their mother. Only 82% knew that the bleeding occurs from uterus.

TABLE II: DISTRIBUTION OF STUDY POPULATION BASED ON PRACTICES DURING MENSTRUATION

Practices	Distribution of respondents	
	No. of respondents	Percentage(%)
1. Type of absorbent (n = 95) a. Sanitary pads b. Cloth	70	73.7
	25	26.3
2. Frequency of changing napkin (n=95) a. 1-2times b. 2-3times c. >3times	6	6.3
	79	83.1
	10	10.6
3. Cleaning of private parts every time after changing napkin/cloth a. Yes b. no	95	100
	0	0

In this study 78% of the respondents use sanitary napkins, rest of them (22%) use cloth. 83% of the respondents have the habit of changing the napkin 2-3 times per day. Cleaning of external genitalia during menstruation was present in all of the respondents

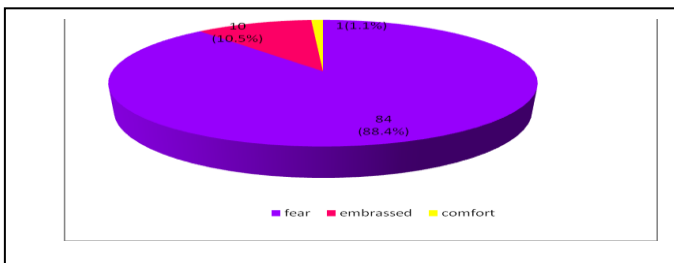


Fig. 1: Distribution of study population based on reaction to first menstruation (n=95).

In this study 88% of the respondents complained of fear during first menstruation.

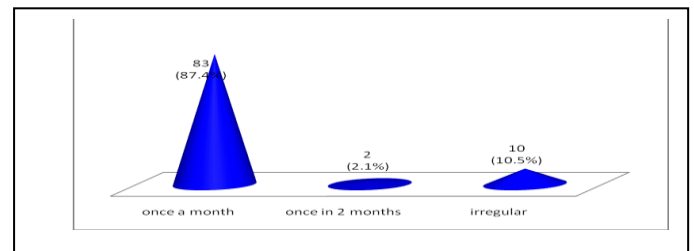


Fig. 2: Distribution of study population based on frequency of their menstrual cycles (n = 95).

In this study 87% of the respondents have regular monthly cycles & 10% have irregular cycles.

TABLE III: DISTRIBUTION OF STUDY POPULATION BASED ON HYGIENIC PRACTICES DURING MENSTRUATION

Hygienic practices	Distribution of respondents	
	No. of respondents	percentage
Hand washing(n=95)		
Yes	95	(100%)
No	0	(0%)
Hand washing with(n=95)		
Soap and water	78	(82%)
Disinfectant	17	(18%)
bath during menstruation(n=95)		
once	94	(98.9%)
twice	1	(1.1%)

Regarding hygienic practices during menstruation 99% take bath twice daily . Hand washing with soap and water was present in 82% of the respondents.

TABLE IV: DISTRIBUTION OF STUDY POPULATION BASED ON SOCIO-DEMOGRAPHIC FACTORS AND RESTRICTIONS DURING MENSTRUATION

Socio-demographic factors	Restrictions during menstruation (n=95)	
	Yes	No
1.Religion		
a. Hindu (n=88)	82(93.2%)	6(6.8%)
b. Muslim (n=4)	3(75%)	1(25%)
c. Christian (n=3)	3(100%)	0
2.Type of family		
a. joint(n=11)	11(100%)	0
b. nuclear(n=84)	77(91.6%)	7(8.4%)
3.Motherseducation		
a. illiterate(n=2)	2(100%)	0
b. primary(n=48)	42(87.5%)	6(12.5%)
c. high school(n=43)	42(97.7%)	1(2.3%)
d. graduate(n=2)	2(100%)	0

It was seen that religious taboos and restriction on type of food was maximum in 93.2% of Hindus. Such restrictions were present in 91.6% of the nuclear families. Education doesn't seem to have much relation with presence or absence of such restrictions (p value = 0.287).

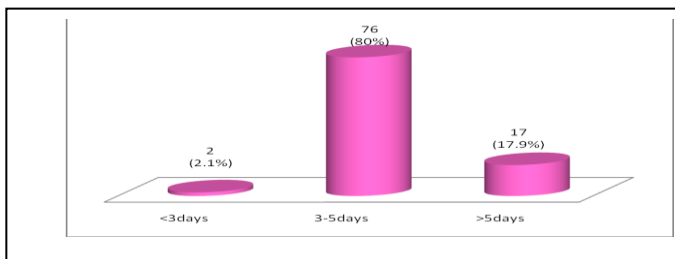


Fig. 3: Distribution of study population based on duration of their menstrual cycles (n = 95).

In this study 80% girls have reported blood flow of 3-5 days duration. Balsubramanian^[7] study in Tamil nadu reported 84% girls had 3-5 days menstrual blood flow.

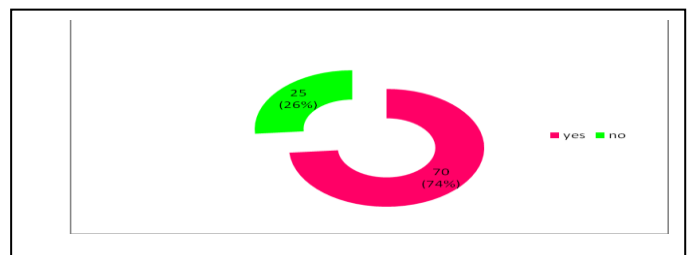


Fig. 4: Distribution of study population based on awareness about free supply of sanitary napkins (n=95).

In this study 74% of the respondents knew about free supply of sanitary napkins by the government.

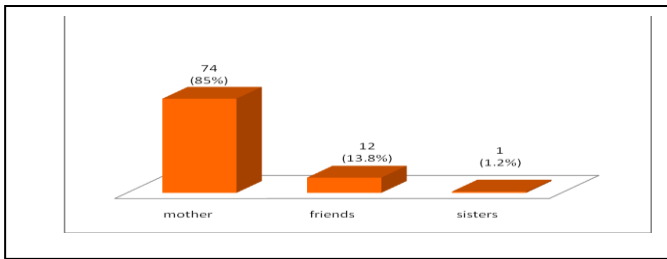


Fig. 5: Distribution of study population with whom they are comfortable to discuss menstrual issues (n=87).

In this study 85% of the respondents were comfortable to discuss about their menstrual issues with their mothers & 14% with their friends.

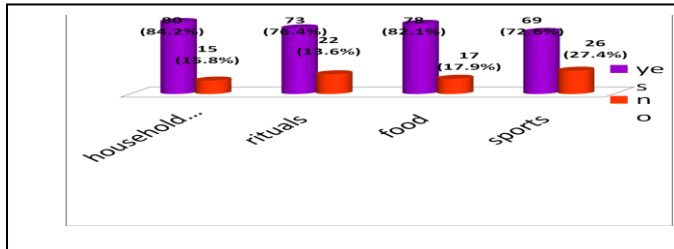


Fig. 7: Distribution of study population based on various restrictions during menstruation (n=95).

In this study household activities & food restrictions are more compared to other restrictions

SUMMARY & CONCLUSIONS

- 88% of the adolescent girls were afraid of their first menstrual cycle though 80% have heard about menstruation before attaining menarche, suggesting that more discussion is needed among adolescents to prepare them for their first menstrual cycle.
- 99% of the adolescent girls have affirmed that they take bath twice daily during menstrual cycles.
- 82% of the adolescent girls have said that they use soap & water to clean their hands after changing napkins.
- All girls from joint families & 91.6% of girls from nuclear families are under the influence of religious taboos.
- 93.2% of adolescent Hindu girls as compared to 75% of Muslim girls are under religious taboos/ food restrictions.
- 75% of adolescent girls are aware of free supply of sanitary napkins but they are not utilizing this benefit as the scheme is not being implemented uniformly.
- 85% of adolescent girls discuss their menstrual problems with their mothers as compared to friends & sisters.

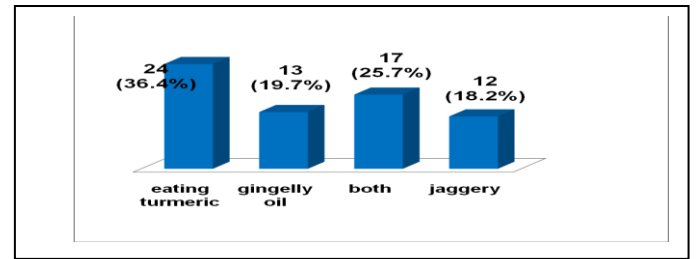


Fig. 6: Distribution of study population based on traditional habits of consuming various food items during menstruation (n=66).

In this study 36% & 20% of the respondents were consuming turmeric & gingelly oil respectively during menstruation.

- The common food fads observed among the adolescent girls during menstruation are consumption of turmeric (36.4%), gingelly oil (19.7%), both (25.7%). And this fads need to be encouraged as they provide energy, iron & disinfection.

RECOMMENDATIONS

- The government should resume the free supply of sanitary napkins to all the adolescent girls has the environment is right for use of sanitary napkins
- Regular Health education regarding menstrual hygiene should be provided to all the adolescent girls.
- Education to be more effective among the adolescents, child to child program may be carried out.

ACKNOWLEDGMENT

My sincere thanks to entire faculty of Community Medicine department, Rangaraya medical college for guiding me in making this paper.

My special thanks to Dr.Surya Prabha Post Graduate in the Department of Community Medicine for her constant support and encouragement.

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