Indian Journal of Medical Research and Pharmaceutical Sciences June 2016; 3(6) ISSN: ISSN: 2349-5340 DOI: 10.5281/zenodo.55354 Impact Factor: 3.052

### A STUDY ON MENSTRUAL PRACTICES AND HYGIENE AMONG ADOLESCENTGIRLS IN A GOVERNMENT HIGH SCHOOL

Dr. L.Vijayasree\*, Dr. Kusneniwar GN, Dr. Leo Sequeira Vaz, Dr. B. Sita Rama Rao

\*Post Graduate. Email: reddy.vijji7@gmail.com

Professor and HOD. Email: drkgn2012@gmail.com

Professor . Email:lsvaz@rediffmail.com

Professor. Email: srbudaraju2@gmail.com

Department of Community Medicine, MediCiti Institute of Medical Sciences, SHARE INDIA.

*Keywords:* Menstrual practices, Menstrual hygiene, Adolescent girls, Government high school.

#### Abstract

**BACKGROUND**: Menstruation is considered unclean in the Indian society. Isolation and restrictions being imposed on menstruating girls in family, have reinforced a negative attitude towards this phenomenon. Menstrual hygiene is a very important component of Reproductive Maternal, New-born, Child Health + Adolescent Programme (RMNCH+A). OBJECTIVE: To assess menstrual hygiene and menstrual practices among adolescent girls of Government Zilla Parishad Girls High School ,Medchal. Telanagana, India.

**MATERIALS & METHODS**: A cross-sectional study was conducted among 252 girls belonging to 8th, 9th & 10th standards. Consent taken from the Head Mistress of the school and the respective class teachers. A pre-designed, pre-tested self-administered questionnaire in the local language (telugu) was distributed in each class. Data was entered into MS Excel and analysis done using Epi-info 7.1. **RESULTS**: Only 15.29% know that menstruation is a normal physiological process. 21.9% do not use sanitary pads. 96.28% bathe regularly during menstruation. 9.09% do not go to school, 76.45% are not allowed to go out and play with friends outdoors, 93.39% do not attend religious functions and do not worship god during menstruation.

**CONCLUSIONS**: Menstrual hygiene is found to be satisfactory but there is a need to educate the girls about menstruation, its importance and practices.

#### Introduction

According to 2011 census data, there are 253 million adolescents in the age group 10-19 years, which comprise little more than one-fifth of India's total population.<sup>1</sup> This age group needs special attention as these are the formative years when physical, psychological and behavioural changes take place. Girls in this age face several social, psychological, physical and reproductive problems. Attaining menarche is a very important mile stone in any adolescent girl's life, as it more or less marks the transition of a girl in to a woman. Despite menstruation being a normal function generations of women have had to endure ill health, discomfort, lack of hygiene and even personal risk in trying to manage this normal function.<sup>2</sup> Menstruation and menstrual practices in Indian society are still clouded by taboos and socio-cultural restrictions resulting in adolescent girls remaining ignorant of the scientific facts. Isolation of the menstruating girls and restrictions being imposed on them in the family, have reinforced a negative attitude towards this phenomenon. Menstrual hygiene is a very important component of Reproductive Maternal, New-born, Child Health + Adolescent Programme (RMNCH+A).<sup>2</sup> There is a substantial lacuna about menstrual hygiene and practices among adolescent girls as observed in a study conducted by Thakre SB et al., <sup>3</sup> among high school girls in Nagpur district, a study by Das P et al., <sup>4</sup> among women in Odisha and in another study

## Indian Journal of Medical Research and Pharmaceutical Sciences

June 2016; 3(6)	ISSN: ISSN: 2349-5340
<b>DOI</b> : 10.5281/zenodo.55354	Impact Factor: 3.052

by Aniebue UU et al., <sup>5</sup> among high school girls. Thus this study was planned to find out the situation in the study area as unhygienic practices may sometimes result into adverse health outcomes.

#### Materials and methods

Study Design: A cross sectional study.

**Study Period:** 1<sup>st</sup> to15<sup>th</sup> October 2013.

**Study Population:** Study was conducted among 252 girls belonging to 8th, 9th & 10th standards of Government Zilla Parishad Girls High School, Medchal, R.R district, Telangana. This school was randomly selected for the study. All girls present on the day of study and willing to participate in the study were included. 10 questionnaires were incomplete, thus they were excluded and only 242 subjects were included in the study.

Sample Size: All the girls present on the day of study were included. Thus convenient sampling was followed.

**Study Instrument:** A pre-designed, pre-tested, self-administered questionnaire prepared in English. It was translated into the local language Telugu for data collection. To test the accuracy, the Telugu questionnaire was again back translated into English.

Ethical Clearance: Ethical approval was taken from the Institutional Ethical Committee.

**Data Collection:** After taking permission from the school authority, the class teachers were explained about the study and rapport was built up with the girls and verbal consent was obtained from the students.

Questionnaire in local language (Telugu) was distributed in each class after giving a small introduction about the purpose of the study and briefing was done to the students regarding the questionnaire provided to them. At the end of the study, after collection of the questionnaire from the students, they were encouraged to ask questions, all their doubts were clarified. A quick general examination of all the girls was done, Iron tablets were distributed to those who found to be anaemic and B-complex tablets given to those showing signs of vitamin deficiencies on general examination. Instructions were given to them on healthy diet, and general as well as menstrual hygiene. Drugs prescribed for minor ailments, those beyond the scope of treatment on the spot were referred to MediCiti hospital for free consultation.

Data entry and Analysis: Data was entered into MS Excel and analysis was done by using Epi-info version 7.1.

#### Results

Mean age of the study population was found to be 13.91 years. It was found that 94.53% subjects attained menarche. Mean age at menarche was 12.23 years. For 86.10% student's mother was the main source of information about menstruation. Only 15.59% knew that menstruation is a normal physiological process. About 44.63% do not remember the date of the last menstrual period. There was not statistical significance between mother's literacy status and the subject's knowledge about menstruation. (p=0.079)

This study showed that 21.9% did not use sanitary pads, 87.2% wash their hands each time they change pad, 19.83% did not change the pad at school, 96.28% bathe regularly during menstruation.

Prior knowledge on menstruation had a statistically significant association with hygiene practices like use of sanitary napkins, appropriate disposal methods, washing hands each they changed pads. Prior knowledge did not have any association with regular bathing during periods. (Table 3)

It was found that 9.09% were not allowed to go to school, 62.4% sleep on floor, 76.45% were not allowed to go out and play with friends outdoors, 93.39% did not attend religious functions and don't worship god during menstruation.

Dysmenorrhea was the most common problem followed by menorrhagia in the study subjects. About 49.59% complained of dysmenorrhea. About 49% do not discuss problems related to their menstruation with their mother/ sister/ friend/ teacher. Only 21.90% showed treatment seeking behaviour for the menstrual problems that they had.

Indian Journal of Medical Research and Pharmaceutical Sciences June 2016; 3(6) ISSN: ISSN: 2349-5340 DOI: 10.5281/zenodo.55354 Impact Factor: 3.052

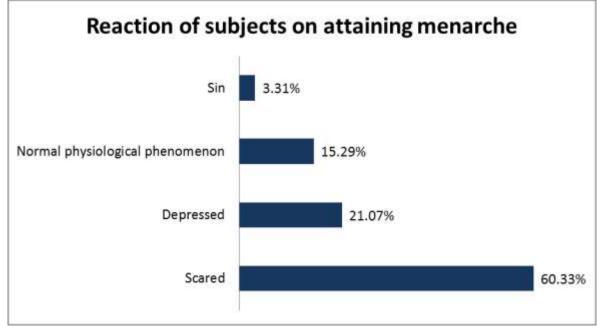
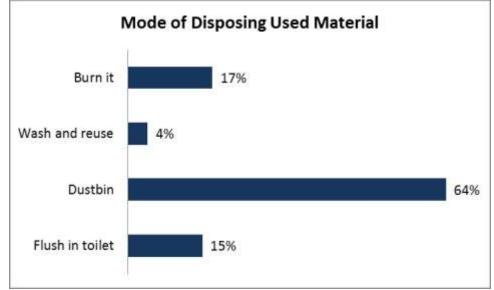


Figure 1: Reaction of subject on the attainment of menarche

Material Used <sup>1%</sup> <sup>3%</sup> <sup>6</sup> <sup>13%</sup> <sup>6</sup> <sup>Cloth</sup> <sup>8</sup>Sanitary Napkins <sup>8</sup>Both cloth & sanitary napkins <sup>8</sup>Cotton

Figure 2: Distribution of study subjects according to the material they use during their menstrual cycles

# Indian Journal of Medical Research and Pharmaceutical SciencesJune 2016; 3(6)ISSN: ISSN: 2349-5340DOI: 10.5281/zenodo.55354Impact Factor: 3.052



#### Figure 3: Distribution of study subjects according to method of disposal of the material used.

#### Table 1: Menstrual practices of the study subjects.

Question	Yes	No
Do you discuss about your menstrual problems with your	190 (78.51%)	52 (21.49%)
mother/friend/sister/teacher?		
Do you wash hands every time you change pad?	211 (87.2%)	31 (12.80%)
Do you clean your private parts every time you change the pad?	157 (64.9%)	85 (35.1%)
Do you change the pad at school?	48 (19.83%)	194 (80.16%)
Do you go to school during your periods?	220 (90.91%)	22(9.09%)
Do you sleep on the floor during your periods?	151 (62.4%)	91 (37.6%)
Are you allowed to play outdoors during your periods?	57 (23.55%)	185 (76.45%)
Are you allowed to worship god & attend religious functions	16 (6.6%)	226 (93.39%)
during your periods?		
During your periods do you take a bath every day?	202 (83.47%)	40 (16.53%)
Did you ever go to a doctor for your menstrual problems?	53 (21.90%)	189 (78.10%)

#### Table 2: Reasons for not attending school during menstruation.

Reasons	Number	Percentage
Shame/fear of leakage/staining	4	18.18
Had no pads to manage periods	3	13.63
Lack of continuous water supply	7	31.81
Pain/discomfort	6	27.27
Lack of disposal system at school	2	9.09
Total number of girls who did not attend school during periods (	22	100%
n=)		

#### Indian Journal of Medical Research and Pharmaceutical Sciences June 2016; 3(6) ISSN: ISSN: 2349-5340 **DOI**: 10.5281/zenodo.55354 Impact Factor: 3.052 \_\_\_\_\_

Table 3: Influence	e of prior kn	owledge of menstrue	tion on the hygiene	practices.
		Prior knowledge on menstruation		
		Present	Absent	P value
Use sanitary napkins	Yes	165	24	0.034
	No	40	13	
		·	·	
Bathing regularly	Yes	90	112	0.885
during menstruation	No	12	28	
Disposal of napkins	Yes	124	31	0.006
in dustbin	No	81	6	
			·	
Wash hands on	Yes	183	28	0.023
changing napkin	No	22	9	

Table 3: Influence of	f prior knowledge of	f menstruation on the hygiene practices.
2 00 00 2000000000000000000000000000000	prior milende of	

Chi-square test was used.

#### Discussion

In the present study mean age at menarche was 12.23 years. In a study done by Thakre SB et al.,<sup>3</sup> it was found to be 12.85 years. In a study done by Das P et al., <sup>4</sup> mean age at menarche was found to be 13.4 years, which was close to the current observation.

Menarche is an important event in girls at the threshold of adolescence and ideally, mother should be the main source of information at this tender age of the girl. In the present study for 86.10% subject's mother was the main source of information about menstruation. In a study done by Aniebue UU et al., <sup>5</sup> mother was the source of information to 57.6% of study subjects.

In the current study only 15.59% knew that menstruation was a normal physiological process. In a study done by Thakre SB et al., <sup>3</sup>18.35% subjects knew menstruation is a normal physiological phenomenon. Where as in a similar study by Dasgupta A et al., <sup>6</sup> 86.25% subjects said menstruation is a normal physiological phenomenon.

In the present study 60.3% subjects were scared on attaining menarche, 21.07% felt depressed, 3.31% thought it is because of their sins, and 15.59% said it was expected as they had knowledge of menstruation, that it is a normal physiological phenomenon. In a study done by Aniebue UU et al.,<sup>5</sup> experience at menarche was, 16.1% were confused, 25.3% were frightened, said it was expected as they had knowledge about it.

In current study 9.09% did not go to school, 62.4% slept on floor, 76.45% were not allowed to play out doors, 93.39% did not attend religious functions or worship god. Similar study conducted by Thakre SB et al., <sup>3</sup> 5.17% were not allowed to go to school, 73.64% slept on the floor, 77% were not allowed to play out doors, 94.76% did not attend religious functions. In another study by Aniebue UU et al., <sup>5</sup> 32.6% said they did not play sports, and 2.2% did not go to school during menstruation.

In the current study (Figure 2) 13% used cloth 78% used sanitary pads, 8% used both cloth and sanitary pads and 1% used cloth. Method of disposal of the absorbent was by burning in 17%, in dustbin by 64%, flushing it in toilet by 15% subjects while 4% washed and reused them. (Figure 3) In a similar study conducted by Aniebue UU et al., <sup>5</sup> menstrual absorbent used cloth by 7.7%, sanitary roll by 17.2%, and sanitary pad by 75.1%. Disposal of absorbent was done roadside by 1.8%, in toilet by 34.1%, in dust bin by 27.8%, by burning, washed by 0.7%. In study by Boosev R et al., <sup>7</sup> absorbent used was cloth by 87.1% and sanitary pads by 12.9%.

In this study 9.09% did not go to school. (Table 2) Most common reasons for not going to school were fear of staining cloths, lack of water supply in school toilets, dysmenorrhoea, and lack of proper disposal system at school.

# Indian Journal of Medical Research and Pharmaceutical Sciences

June 2016; 3(6)	ISSN: ISSN: 2349-5340
<b>DOI</b> : 10.5281/zenodo.55354	Impact Factor: 3.052

In a study done by Boosey R et al., <sup>7</sup> menstruation related absenteeism was prevalent among 61.7% subjects who missed school at least for one day every month. Reasons for school absenteeism were lack of private place for change of absorbent at school in 63.8%, fear of staining 59.4%, discomfort 55.1% subjects.

In the present study 87.2% washed hands every time they changed pad, 64.9% cleaned their private parts every time they changed pad, 83.47% took bath daily with soap and water during menstruation (Table 1). In a similar study conducted by Fakhri M et al., <sup>8</sup> in the study group who received education on menstrual hygiene 61.6% subjects took bath during their periods. While in control group who did not receive any education only 49.3% subjects too regular bath, this was statistically significant.

#### Conclusion

From this study it can be concluded that the menstrual hygiene among the study population is satisfactory as majority of the participants used sanitary pads, disposed the used material in dustbins, washed hands after changing pad, and take bath regularly during their cycles. While practices like restricting girls from going to school, playing outdoors, asking them to sleep on floor during menstrual cycles need to be addressed.

All the above observations call for a stronger educational strategy. Socio-cultural restrictions need to be addressed by spreading information and educating the whole community as a unit and encouraging communication. Only then will the taboos surrounding menstruation be eliminated.

#### Acknowledgements

We acknowledge the school management for their complete cooperation and support and student for their participation and sharing the information necessary.

#### References

- 1. http://censusindia.gov.in/
- 2. http://nrhm.gov.in/nrhm-components/rmnch-a.html
- Thakre SB, Thakre SS, Reddy M, Rathi N, Pathak K, Ughade S. Menstrual hygiene: Knowledge and practice among adolescent school girls of Saoner, Nagpur District. J Clin Diagnostic Res. 2011;5(5):102733.
- Das P, Baker KK, Dutta A, Swain T, Sahoo S, Das BS, et al. Menstrual Hygiene Practices, WASH Access and the Risk of Urogenital Infection in Women from Odisha, India. PLoS One [Internet]. 2015;10(6):e0130777. Available from: <u>http://dx.plos.org/10.1371/journal.pone.0130777</u>
- 5. Aniebue UU, Aniebue PN, Nwankwo TO. The impact of pre-menarcheal training on menstrual practices and hygiene of Nigerian school girls. Pan Afr Med J. 2009;2:9.
- 6. Dasgupta A, Sarkar M, Menstrual Hygiene: How Hygienic is the Adolescent Girl?. Indian Journal of Community Medicine 2008; 33(2): 77-80.
- Boosey R, Prestwich G, Deave T. Menstrual hygiene management amongst schoolgirls in the Rukungiri district of Uganda and the impact on their education: a cross-sectional study. Pan Afr Med J [Internet]. 2014;19:1–13. Available from: <u>http://www.panafrican-med-journal.com/content/article/19/253/full/</u>
- Fakhri M, Hamzehgardeshi Z, Hajikhani Golchin N, Komili A. Promoting menstrual health among Persian adolescent girls from low socioeconomic backgrounds: a quasi-experimental study. BMC Public Health. 2012;12(1):193.