

## AWARENESS OF MENSTRUAL HYGIENE: ASSESSMENT OF KNOWLEDGE AND PRACTICE OF MENSTRUAL HYGIENE AMONG ADOLESCENT COLLEGE GOING GIRLS OF NAGUNOOR, KARIMNAGAR

*Mohapatra I1, Samantaray SR2, VivekanandA3, Soujanya B4*

1Associate Professor, 2Associate Professor, 3Professor, 4Senior resident, Department of Obstetrics and Gynaecology, Prathima Institute of Medical Sciences.

Address for correspondence Dr. SUBHARANJAN SAMANTARAY. C-Blook 303 Prathima institute of medical sciences, Karimnagar

E-mail: demurerosy@gmail.com

### ABSTRACT:

**Objective:** To assess the knowledge, attitude and practices of menstrual hygiene among the college going adolescent girls.

**Materials and methods:** The study was done among the adolescent girls of age group 18-20 years from Government residential college of Nagunoor, Karimnagar district, Telangana. 300 girls from the above mentioned college were selected. Data collection was done using a semi-structured questionnaire with a total number of 30 questions from June 25, 2018 to July 15, 2018.

**Results:** Mean age of menarche in the study subjects was 11.7 years. 47.7% of participants had some knowledge about menstruation before menarche, and the most common source of information was either mother (58 cases i.e. 40.5%) or teacher (34 cases i.e. 23.7%). 83% cases thought that menstruation is a physiological process and 7.3% cases thought it to be pathological. 40% cases used sanitary pads during menstruation. Amongst the girls using clothes, 52% girls cleaned the clothes with soap and water. 75% of the girls were not allowed to attend religious functions. 60% of them were not allowed to do household works.

**Conclusion:** Menstrual hygiene is a matter that has to be dealt with at all levels. Though the basic awareness regarding menstrual process is satisfactory, but still many social taboos are linked with it. Health policy makers should build up a way to tackle with these problems so that adolescent girls can have the access to healthy menstrual practices.

**Key words:** Adolescence, menstrual practices

### BACKGROUND:

Adolescence, as defined by the World Health Organization is the period of life spanning the ages between 10 and 19 years. 1 Adolescent girls form a part of susceptible age group because of their status in society, age and health. Mind-set towards menstruation and menstrual practices developed at menarche may persist throughout life. 2 The study of menstrual practices of adolescent girls reveals health issues that are linked with their adjustment to reproductive life and

it also provides the base for developing health education strategies. Faulty beliefs and practices regarding menstruation will influence wellbeing of a great number of women in the reproductive age group. Many studies done in the past have revealed that adolescent girls have incomplete and inaccurate information about the physiology of menstruation and its hygiene. They also revealed that mothers, friends, teachers, social media and relatives were the main resource of information to young girls<sup>3, 4, 5</sup>

The data about the level of knowledge and attitude towards menstruation of young girls is valuable for developing a programme for improving the understanding level in the society. Hence this cross sectional study was carried out.

#### **The objectives of this study were:**

1. To assess the knowledge, attitude and practices of menstrual hygiene among the college going adolescent girls.
2. To study various social factors which play a role in preventing the acceptance and following of menstrual hygiene practices among the respondent population.

#### **MATERIALS AND METHODS:**

1. Study design: Community based cross sectional study.
2. Study setting: The study was done among the adolescent girls of age group 18-20 years from Government residential college of Nagunoor, Karimnagar district, Telangana.
3. Study population: 300 girls from the above mentioned college were selected for the study.
4. Sample selection: the residential college had 1200 adolescent girls from which 300 girls were selected randomly.
5. Study tools and techniques: Data collection was done using a semi-structured questionnaire with a total number of 30 questions. The data collection technique was personal interview of the subjects. The questionnaire covered knowledge about menstruation, menstrual practices and social factors associated.
6. Timeperiod: Data collection was done from June 25, 2018 to July 15, 2018.

#### **RESULTS:**

TABLE-1 shows the demographic details of the subjects. The age group included in the study ranges from 18-20 years, of its maximum (47%) being 18 years age. Majority of the girls (73.4%) belong to above poverty line group. 61% of the girls had uneducated parents.

TABLE-2 shows the menstrual details of the girls. Mean age of menarche in the study subjects was 11.7 years. Maximum number of girls (54.7%) had discomfort during their first cycle. 186 girls (62%) girls complained of abdominal pain during the time of menstruation. Most of girls had menstrual flow for 3-5 days (50%).

TABLE-3 depicts the knowledge amongst the girls about menstruation. 143(47.7%) of participants had some knowledge about menstruation before menarche, and the most common source of information was either mother(58 cases i.e. 40.5%) or teacher(34 cases i.e. 23.7%). 83% cases thought that menstruation is a physiological process and 7.3% cases thought it to be pathological. 164(55%) cases knew uterus to be the source of menstruation. 204(68%) cases said that their school performance was affected by menstrual cycles and 180(60%) cases

considered menstrual blood to be unhygienic.

TABLE-4 reviews the practices during menstruation. About 120(40%) cases used sanitary pads during menstruation. Amongst the girls using clothes, 70(52%) girls cleaned the clothes with soap and water. But majority of these girls dried the clothes inside the hostel (78%). Most of the girls (86 i.e. 52%) used dustbin for disposal of the used sanitary pads and 120(67%) girls disposed them by wrapping it in paper. Maximum number of girls (176) used water and soap to clean their external genitalia. Only 47% of the girls had toilet facilities at home.

TABLE-5 depicts the different types of restrictions imposed on the girls during the time of menstruation. 75% of the girls were not allowed to attend religious functions. 60% of them were not allowed to do household works. 20% of the girls were separated and 37% girls were not allowed to sleep on the routine bed. 7% girls were not allowed to go outside their house and 78.6% of girls would not touch the stored food during menstruation.

## DISCUSSION:

Our study reveals that the mean age of menarche is 11.7 years. This observation corroborates with studies done by Narayana et al, Dasgupta et al, Khanna et al and Ten VTA. 2,5,6,7 But this is lesser than that observed in the studies done by Shiela et al and Grover et al. 8,9 Awareness regarding menstruation and menarche is generally low in Indian culture. Our study showed that 47.7% of participants had prior knowledge about menstruation before menarche. This finding is better than the observation made by Subhash B Thakre et al where it was found to be only 40%. 10 But still this observation is not satisfactory, because maximum participants were ignorant about menstruation prior to puberty.

Mothers and teachers were the main source of information to the girls (40.5% and 23.7%) as compared to study done by Subhash B Thakre et al where mothers were first informants in 71.33% of cases. 10 This disparity in finding is possibly due to poor educational status of mothers and less communication between mothers and daughters regarding this issue. Our study finding is consistent with other studies done by Narayana et al and Dasgupta et al. 2,5

This survey show that 83% cases knew that menstruation is a physiological process. This is concordant with the study done by Dasgupta et al. 5 But this result is contrary to that of study done by Madhusudan et al where only 43.9% of subjects knew that menstruation is a physiological process. 11 This disparity is possibly due to less knowledge about physiology of menstruation in the rural areas when compared to urban population. 54.67% of subjects in the present survey knew uterus to be the source of menstrual bleeding. This is similar to study done by Narayana et al where one third of the subjects had this information. 2 This figure is better might be because of the role of both mothers and teachers as informants regarding menstruation, its causes and hygienic practices.

Regarding the practices followed during menstruation, only 40% of cases used sanitary pads while 60% girls were using clothes. Out of the girls using clothes, 52% of girls cleaned clothes with soap and water. 59% of girls used water and soap to clean their external genitalia. This is contrary to the finding seen by Bhattacharjee et al where 71.3% of girls used sanitary

napkins and 47.5% girls cleaned clothes with soap and water.<sup>12</sup> Less usage of sanitary napkins in our study is possibly due to poor economic status of our study population. But only 30.2% subjects as observed by Bhattacharjee et al cleaned their external genitalia properly. This is due to better hygienic practices education given to the girls in the residential college. 52% girls of the girls used dustbin for disposal of used pads. Similar findings were reported by Narayan et al, Mudey A B et al and Dasgupta et al.<sup>2,3,5</sup>

Place of storage of absorbent is equally important as storing the sanitary pads or clothes in bathrooms or damp places can harbor dust and insects. In the present study 40% of the girls stored the absorbent separately. Amongst them 16.7% of girls stored them in the bathroom. This rate is low as compared to the study done by Subhash B Thakre et al where it was found to be 49.8%.<sup>10</sup>

Only a small percentage of girls (13.8%) changed pads during college hours similar to the study by Subhash B Thakre et al (11.37%). The possible cause of this might be the lack of proper toilet facilities in the school.<sup>10</sup>

Considering the social factors associated with menstruation, it is seen that various restrictions are imposed on the girls during menstruation time due to the age old rituals in their communities. 74.67% of girls were not allowed to attend religious functions. This is similar to other studies.<sup>3, 5, 8</sup> 36.7% of girls slept on separate bed and 78.6% of girls did not touch stored food. 20% of girls were separated from rest of the family members. All these findings are corresponding to study done by Subhash B Thakre et al.<sup>10</sup> These restrictions are the result of ignorance and false perceptions about menstruation. These false beliefs also develop an altered attitude towards menstruation.

## CONCLUSION:

Menstrual hygiene is a matter that has to be dealt with at all levels. Our study revealed that most of the girls had some knowledge about menstruation, but the menstrual practices followed are not up to satisfactory level. Though the basic awareness regarding menstrual process is satisfactory in our study, but still many social taboos are linked with it. It is very essential that mothers should have appropriate awareness about menstruation and they should talk openly about this with their daughters. The role of schools and teachers is also equally important for acquiring correct knowledge and attitude towards menstruation. However many efforts have to be made to curtail the misbeliefs and longstanding unnecessary practices followed during menstrual periods. Menstrual waste disposal facilities and toilet facilities should be provided in schools and colleges so that absenteeism due to menstruation could be reduced. Education should be focused towards both girls and boys for the development of better understanding and attitude. Health policy makers should build up a way to tackle with these problems so that adolescent girls can have the access to healthy menstrual practices. Awareness has to be brought against misconceptions, restrictions and social taboos associated with menstruation to improve and promote better menstrual hygienic practices.

**REFERENCES:**

1. World Health Organisation. Programming for adolescent health and development. WHO Technical report series 886. 1999:1- 217. Available from [http://whqlibdoc.who.int/trs/WHO\\_TRS\\_886\(p1-p144\).pdf](http://whqlibdoc.who.int/trs/WHO_TRS_886(p1-p144).pdf).
2. Narayan KA, Srinivasa DK, Peltó PJ. Puberty rituals, reproductive knowledge and health of adolescent school girls in South India. *Asia-Pacific Population Journal*.2001; 16: 225-238.
3. Mudey AB, Keshwani N, Mudey GA, Goyal RC. A cross-sectional study on the awareness regarding safe and hygienic practices amongst school going adolescent girls in the rural areas of Wardha district. *Global Journal Of Health Science*.2010; 2(2):225-231.
4. Ghattargi CH, Deo DS. Preparation and Practices regarding Menstruation: A comparative study in rural and urban adolescent girls. *Indian Journal of Community Medicine*.2005; 30(1):10-14.
5. Dasgupta A, Sarkar M. Menstrual Hygiene: How Hygienic is the Adolescent Girl? *Indian Journal of Community Medicine*.2008; 33(2):77-80.
6. Khanna A, Goyal RS, Bhawsar R. Menstrual practices and reproductive problems: A study of adolescent girls in Rajasthan. *Journal of Health Management*. 2005; 7(1):91-97.
7. Ten V TA. Menstrual Hygiene: A neglected condition for the achievement of the millennium development goals. *Zotermeeer :Europe External policy Advisors*, 2007:pp. 1-24.
8. Shiela W, Malathi K, Premila S. Menstrual and Gynaecological Disorders in 500 school girls in Madras city. *J ObstetGynaecol India*.1993;40:557-71.
9. Grover V, Kannan AT, Indrayan A. Counselling: Effect of KAP against HIV/AIDS and STDs among a high risk group. In: Aggarwal OP, Sharma AK, Indrayan A, editors. *HIV/AIDS Research in India*. New Delhi: National AIDS Control Organisation. 1997:275-7.
10. Thakre S B, Thakre SS, Reddy M, Rathi N, Pathak K, Ughade S. Menstrual Hygiene: Knowledge and Practice among adolescent school girls of Saoner, Nagpur District. *J ClinDiagnRes*. 2011; 5:1027-33.
11. Madhusudan M, Chaluvraj T.S, Chaitra M.M, Ankita S, et al .Menstrual hygiene: Knowledge and Practice among secondary school girls of Hosakote, Rural Bangalore. *International Journal of Basic and Applied Medical Sciences*. 2014; 4(2):313-20.
12. Bhattacharjee S, Ray K, Biswas R, et al. Menstruation: Experiences of Adolescent Slum Dwelling Girls of Siliguri city, West Bengal, India. *Journal of Basic and Clinical Reproductive Sciences*. 2013; 2(2):85-91.

**RESULTS:****TABLE-1: SOCIO-DEMOGRAPHIC DETAILS OF STUDY PARTICIPANTS**

Characteristics	Number(n=300)	Percentage(%)
<b>1.Age( in years)</b>		
18	140	46.7
19	118	40
20	42	14
<b>2.Economic status</b>		
APL	220	73.4
BPL	80	26.7
<b>3.Education of parents</b>		
Literate	184	61
Illiterate	116	39
<b>4. TV at home</b>		
Yes	256	85
No	44	15

**TABLE-2: MENSTRUAL DETAILS**

Variables	Number(n=300)	Percentage (%)
<b>1.Age at menarche in years</b>		
11 or less	104	34.7
12	186	62
13	10	3.3
<b>2.Feeling at first cycle</b>		
Happy	18	6
Scared	96	32
Discomfort	164	54.7
Others	22	7.3
<b>3.Symptoms at the time of menstruation</b>		
Abdominal pain and backache	186	62
sleeplessness	38	12.7
Heavy bleeding	72	24
others	4	1.3
<b>4. Duration of flow (in days)</b>		
3-5	152	50.7
5-7	106	35.3
7-10	42	14

**TABLE-3: KNOWLEDGE ABOUT MENSTRUATION**

	Number(n=300)	Percentage (%)
<b>1.Awareness about menstruation before menarche</b>		
Yes	143	47.7
No	157	52.3
<b>2.Source of information</b>		
Mother	58	40.5
Teacher	34	23.7
Friend/sister	27	18.8
Media	20	14
Others(books, paper)	4	2.8
<b>3.What is menstruation</b>		
Physiological	249	83
Pathological	32	7.3
Don't know	19	4.7
<b>4.Organ from which blood comes</b>		
Uterus	164	54.7
Abdomen	84	28
Urethra/vagina	24	8
Don't know	28	9.3
<b>5. Menstruation affects school performance</b>		
Yes	204	68
No	96	32
<b>6. Is it unhygienic</b>		
Yes	180	60
No	120	40

**TABLE-4: PRACTICES DURING MENSTRUATION**

	Number(n=300)	Percentage (%)
<b>1.Absorbent used</b>		
Sanitary pad	120	40%
Old and washed cloth	135	45%
New cloth	45	15%
<b>2.Cleaning of cloths</b>		
Water only	65	48.2%
Soap and water	70	51.8%
<b>3.Place of drying</b>		
sunlight	30	22.2%
Inside hostel room	105	77.8%
<b>4.Storage of absorbent</b>		
Don't store	80	26.7%
Store with routine cloth	100	33.3%
Store separately	120	40%
a.In bathroom	50	16.7%
b.Inotherplaces	70	23.3
<b>5.Method of disposal</b>		
Dustbin	86	52%
Open field	58	35%
Toilets	15	9%
others	6	4%

<b>6.Wrap used for disposal</b>		
Paper	120	66.7%
Plastic	25	13.8%
Not wrapped	35	19.5%
<b>7.Material used to clean ext genitalia</b>		
Only water	106	35.3%
Soap+water	176	58.7%
Cloth	18	6%
<b>8.Attendence of college during menstruation</b>		
Yes	262	87.3%
no	38	12.7%
<b>9.Change of pad in college</b>		
Yes	36	13.8%
no	226	86.2%
<b>10.Toilet at home</b>		
Yes	140	46.7%
no	160	53.3%

TABLE-5: RESTRICTIONS DURING MENSTRUATION WHEN AT HOME

	YES	NO
<b>1.Attend religious function</b>	<b>224 (74.6%)</b>	<b>76 (25.4%)</b>
<b>2.Household work</b>	<b>180 (60%)</b>	<b>120 (40%)</b>
<b>3.Separated</b>	<b>60 (20%)</b>	<b>240 (80%)</b>
<b>4.Dont touch stored food</b>	<b>236 (78.6%)</b>	<b>64 (21.4%)</b>
<b>5.Don't sleep on routine bed</b>	<b>110 (36.7%)</b>	<b>190 (63.3%)</b>
<b>6.Go outside</b>	<b>280 (93%)</b>	<b>20 (7%)</b>

**How to cite the article:** Mohapatra I, Samantaray SR, Vivekanand A ,Soujanya B: Awareness of Menstrual Hygiene: Assessment of knowledge and practice of menstrual hygiene among adolescent college going girls of Nagunoor, Karimnagar: Perspectives in Medical Research 2019; 7(3): 22-29

**Sources of Support:** Nil, **Conflict of interest:** None declared