



# MENSTRUAL HYGIENE PRACTICES AMONG ADOLESCENT GIRLS RESIDING IN TRIBAL AND SOCIAL WELFARE HOSTEL IN ANDHRA PRADESH: A COMMUNITY BASED STUDY

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## ABSTRACT

**Introduction:** Puberty, which was considered as the time of change for the adolescents, was a challenge for young girls because of menstruation. Though it was a natural phenomenon, various myths surround it, because of which girls will be exposed to very little knowledge about menstruation. This study conducted to know the level of knowledge, attitude and practices during menstruation among the adolescent school girls in rural area.

**Methodology:** The study was among school going adolescent girls residing in tribal social welfare hostels in Kuppam from April to September 2015.

**Results:** The study reported that majority of the girls attained menarche at the age of 13 yrs, and 82.3% are having regular menstrual cycle. Sanitary pads usage during menstruation was seen in 78.5%, and disposal of absorbent was by throwing them into the dust bins in 58.0% people. Mother was the source of information about menstruation before menarche for most of them, and restrictions during menstrual period was seen among almost all of them.

**Conclusion:** Proper knowledge, attitude and hygienic practices in menstruation are not seen among the study subjects, for whom a suitable planned health education, and provision of adequate sanitary facilities was the need of the hour.

**Key words:** Adolescents, Menstruation, Sanitary pad, Health education

## INTRODUCTION

Menstruation is a natural phenomenon among matured females who experience shedding of blood for 1-7 days every month from the age of maturity until menopause.<sup>1</sup> Puberty is a time of change for all young people, but it is particularly a challenging factor for girls who are often unprepared for changes in their body, which can become a major obstacle to their education. In some parts of the world, two out of three girls reportedly have no idea of what was happening to them when they experienced menarche. This can have many negative effects on their physical and emotional devel-

opment, leading to a drop in self-esteem and poor performance at school.<sup>2</sup>

According to UNICEF census for 2015, in India, adolescents population was 239, 441 thousands which constitute 19% of the total population.<sup>3</sup> Of these, majority of the girls had little knowledge of menstruation and they think that menstruation contaminates the body and makes them unclean and dirty.<sup>4</sup> This can be due to lack of appropriate knowledge, which in turn can be attributed to the traditional Indian culture, in which open discussion on these issues is considered as stigma. As a result, they suffer intense mental stress due to suppression of feelings.<sup>5</sup>

Adolescent girls in particular should be encouraged towards practicing hygienic methods during menstruation like usage of sanitary pads etc. and they should get access to cleansanitary products to safe guard their health.<sup>6,7</sup>

Although many studies have reported menstrual practices among adolescent girls in India, very few were conducted among those who belong to most backward classes, scheduled caste and scheduled tribes. Kuppam mandal being a remote area of Andhra Pradesh, the present study aims at finding out the level of knowledge, attitudes and practices towards menstruation among the school going adolescent girls residing in social and tribal welfare hostel in Kuppam, which in turn can help in designing a suitable plan to inculcate healthy menstrual practices among the adolescent girls.

## MATERIALS AND METHODS:

A Cross Sectional study was conducted among adolescent girls aged 10-19years who were residing in the social and tribal welfare hostel in the Paramasamudram village of Kuppam Mandal of Chittoor District, Andhra Pradesh, from April to September 2015. Institutional Ethical committee approval was obtained before conducting the study.

A total of 583 adolescent girls were residing in the hostel studying in various classes from 5<sup>th</sup> to intermediate, out of which 293 were included in the study as they attained menarche. Permission from Assistant Social Welfare Officer and Assistant Tribal Welfare Officer was obtained for conducting the study and the wardens were intimated prior accordingly. The data was collected with the help of a pre-tested proforma which included variables like socio-demographic profile, knowledge about menstruation, the hygienic practices during menstruation, the sources of information regarding menstruation, type of absorbent which was used, its storage place, and the restricted activities practiced during menstruation.

## RESULTS:

Of the 293 study subjects, 46.1% were in the age group of 10 - 14 yrs, and remaining in 15 - 19 yrs group, as shown in Table 1. Majority of them were Hindus (83.3%), followed by Muslims (10.6%), and Christians (6.1%). Majority(36.8%) were in birth order of second or third. With respect to mother's education of the study participants 30% were illiterates, and middle school and higher secondary was almost 28% each. Mothers who were working and not working are almost equal, with the later being slightly higher (52.9%).

**Table 1: Socio-demographic characteristics of the study subjects (n = 293)**

Variable	Number (%)
Age(yrs)	
10 - 14	135 (46.1)
15 - 19	158 (53.9)
Religion	
Hindu	245 (83.3)
Muslim	31 (10.6)
Christian	17 (6.1)
Birth Order	
1 <sup>st</sup>	93 (31.9)
2 <sup>nd</sup> & 3 <sup>rd</sup>	108 (36.8)
Above 3 <sup>rd</sup>	92 (31.3)
Mother's Education	
Graduate	3 (1)
Intermediate	11 (3.8)
Higher Secondary	83 (28.3)
Middle School	84 (28.7)
Primary	24 (8.2)
Illiterate	88 (30)
Mother's Occupation	
Working	138 (47.1)
Housewife	155 (52.9)

**Table 2: Menstrual Profile of the study subjects**

Variable	Frequency (%)
Age at Menarche (yrs)	
10	2 (0.7)
11	14 (4.8)
12	59 (20.1)
13	136 (46.4)
14	66 (22.5)
15	14 (4.8)
16	2 (0.7)
Duration of Menstrual Cycle	
< 21 days	5 (1.7)
21- 35 days	258 (88.1)
> 35 days	30 (10.2)
Menstrual bleeding during each Cycle	
< 2 days	16 (5.5)
2 - 6 days	253 (86.3)
> 6 days	24 (8.2)
Menstrual Cycle Pattern	
Regular	241 (82.3)
Irregular	52 (17.7)

Table 2 depicts menstrual profile of the study participants. Most of them attained menarche at the age of 12 - 14 yrs, majority being at 13 yrs (46.4%). Duration of the menstrual cycle was 21- 35 days for most of them (88.1%), and bleeding was for 2 - 6 days during each cycle in 86.3% subjects. Menstrual cycle was regular among 82.3% girls.

With regard to various menstrual practices considered for the study, sanitary pad usage was highest among the materials used during menstruation (78.5%), followed by usage of new cloth (13%). 43% subjects used to change the absorbent once, 58.0% of them were throwing the absorbent in

**Table 3: Menstrual Practices among the subjects**

Variable	Frequency(%)
Material used during Menstruation	
Sanitary Pad	230 (78.5)
New Cloth	38 (13)
Old Cloth	25 (8.5)
Frequency of Absorbent Change	
Once a day	126 (43)
Twice a day	108 (36.9)
More than twice	59 (20.1)
Disposal method of Absorbent	
Cloth pieces reused	63 (21.5)
Thrown in Dust Bin	170 (58)
Thrown indiscriminately	60 (20.5)
Material used for cleaning External genitalia	
Only Water	243 (82.9)
Soap and Water	50 (17.1)
Place of drying absorbent (n=63)	
Inside Hostel room	10 (3.4)
Outside room without sunlight	11 (3.7)
Under Sunlight	42 (14.3)
Source of information before Menarche	
Mother	235 (80.2)
Sister	23 (7.8)
Friend	28 (9.6)
Others	7 (2.4)
Belief regarding causes of Menstruation	
Physiological	286 (97.6)
Curse of God	7 (2.4)

**Table 4: Restrictions practiced during Menstruation**

Practiced for	Frequency (%)
Attending Religious functions	153 (52.2)
Touching Sacred Books	34 (11.6)
Attending School	60 (20.5)
Playing/ Outing/ Cycling	28 (9.6)
Specific Food	5 (1.7)
Separated	13 (4.4)

**Table 5: Sociodemographic characteristics and Sanitary pad usage during menstruation**

Variable	Sanitary pad usage		p value*
	Yes	No	
Age in years			
10-14	106(79.6)**	27(20.4)	0.64
15-19	124(77.5)	36(22.5)	
Religion			
Hindu	203(82.8)	42(17.2)	<0.001
Others	27(56.2)	21(43.8)	
Birth Order			
1 <sup>st</sup>	63(67.7)	30(32.3)	0.007
2 <sup>nd</sup> and 3 <sup>rd</sup>	88(81.4)	20(18.6)	
Above 3 <sup>rd</sup>	79(85.8)	13(14.2)	
Mothers Education			
Literate	153(74.6)	52(25.4)	0.01
Illiterate	77(87.5)	11(12.5)	
Mothers occupation			
Working	119(86.2)	19(13.8)	0.002
Housewife	111(71.6)	44(28.4)	

(\*p<0.05 is considered as significant, \*\*figures in brackets indicates percentage)

dust bin and most of them are using only water for cleaning external genitalia (82.9%). Among those who were drying the absorbent, 14.3% were drying it under sunlight and., and only 17.1% are using soap and water for this. Majority of them believed that the cause of menstruation was physiological (97.6%), and most of them (80.2%) got the information about menstruation before menarche from their mothers (Table 3).

Of the various restrictions practiced during menstruation (Table 4), important ones were like attending religious functions which was seen among 52% of the study subjects. Others like restrictions in attending school (20.5%), touching sacred books (11.6%), playing or outing (9.6%), and keeping them separated (4.4%). Table 5 shows the association between various sociodemographic factors and usage of sanitary napkins. Study participant's religion, birth order and their mother's education and occupation was found to be statistically significant in relation to sanitary pad usage. We also observed that sanitary pad usage was more among higher age group but it was not significant.

## DISCUSSION

According to 2011 census data, there were 253 million adolescents, which is a transient phase of life requiring nutrition, education, counseling and guidance to ensure their development into healthy adults. Accordingly, Government of India under the Ministry of Health and Family Welfare launched Rashtriya Kishor Swasthya Karyakram (RKSK) on 7th January 2014.<sup>8</sup> Also, for the promotion of menstrual hygiene among adolescent girls, a scheme was introduced with the main objectives of increasing awareness on menstrual hygiene, increased access to and use of high quality sanitary napkins, particularly in rural areas, and to ensure safe disposal of sanitary napkins in an environmentally friendly manner.<sup>9</sup>

In the present study, majority of the girls attained menarche at the age of 13 yrs (46.4%), with a range of 10 - 16 yrs, comparable to studies from Gujarat<sup>6</sup>, and Nagpur<sup>10</sup>.

Regarding various aspects of menstruation, the duration of the menstrual cycle was 21- 35 days in 88.1%, bleeding was for 2 - 6 days during each cycle in 86.3%, and 82.3% are having regular menstrual cycle. These results are comparable to a study from Kheda<sup>11</sup>, in which the duration of the menstrual cycle was 21- 35 days in 76% people and same percent had regular menstrual cycle, whereas, it was 30 - 45 days (70.2%) in a study done in Jammu and Kashmir<sup>12</sup>.

Cause of menstruation was believed to be physiological by 86% of the girls in a study done in Singur,<sup>13</sup> whereas it was 97.6% in the present

study. In a comparative study between urban and rural adolescent girls done in Howrah,<sup>14</sup> girls with the knowledge of menstruation being a physiological process was only 60.3% and 54% respectively.

For almost 80% girls in the present study, mother was the source of information about menstruation before menarche; similar findings being reported in a study from Udipi<sup>15</sup>, other sources being friends, sisters, mass media etc as revealed in various other studies.

Sanitary pad usage during menstruation was seen in 78.5%, followed by usage of new cloth (13%). It was not without variations, as it ranged from 10%<sup>6</sup>, 39%<sup>11</sup>, to 30.8% and 60.5%<sup>10</sup> in a comparative study among rural and urban subjects respectively, which can be attributed to difference in sample size and study area settings. In our study mother's education and occupation, religion and birth order of the participants had an influence on sanitary pad usage as reported by studies from Varanasi<sup>16</sup> and Mumbai<sup>17</sup>. This can be attributed to higher levels of awareness and information from mothers and siblings.

Disposal of absorbent was by throwing them into the dust bins in 58.0% people, somewhat better percentage of people (69%) in urban areas prefer this method.<sup>14</sup> This can be attributed to the wide variety of options available in rural areas to dispose them like burying in the ground, burning along with domestic refuse etc.

Most of them are using only water for cleaning external genitalia (82.9%), and only 17.1% are using soap and water for this. In contrast, percentage of study population who used both soap and water for cleaning was less in some studies, i.e., only 40%,<sup>11</sup> 48%<sup>14</sup>, and 58%.<sup>10</sup> This can be due to the continuous availability of soap and water to all the girls in the welfare hostel.

Of the various restrictions surrounding menstruation, avoiding the girls from attending religious functions was seen among majority subjects (52%), where as it was 100% in Jammu study.<sup>12</sup> Others include not attending schools, not touching sacred books, and keeping them separated. Restriction in having certain types of food was also seen among few (1.7%). Similar findings were seen in many other studies.<sup>10, 14</sup> These are the result of various myths and ignorance among the people about menstruation.

## CONCLUSION

The present study discusses the various aspects of knowledge, attitude and practices among the girls in a welfare hostel during menstruation, demonstrating the immediate need for proper education

on menstruation, and also, providing adequate facilities to all the girls that promotes hygienic menstrual practices. As these adolescent girls are staying in residential hostel Teachers play an important role in providing care and support by educating them and clearing their worries making them self sufficient in dealing with hygienic practices during menstruation.

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