

## Original Research Article

# Determinants of menstrual hygiene among school going adolescent girls in urban areas of Hyderabad

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**Received:** 29 March 2019

**Revised:** 12 April 2019

**Accepted:** 16 April 2019

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## ABSTRACT

**Background:** The word adolescent is derived from the Latin word “adolescere”, which means to grow into maturity. The adolescent girls get debarred due to various social misconceptions, lack of privacy, illiteracy of parents, especially mother, low socioeconomic conditions, and lack of proper health awareness and education about this sensitive issue which ultimately results this age group into vulnerability to reproductive tract infections, which can be reduced by improving the knowledge about the menstrual hygiene.

**Methods:** A cross sectional study was conducted among school going adolescent girls during the month of November 2018. Data was collected using a questionnaire which includes socio-demographic variables and menstrual hygiene practices. Sample size of the study was 69 students. The assessment of knowledge was done as good knowledge (score: >5/10) poor knowledge (score <5/10). The of data and the. All the data collected was entered and analysed with MS excel software 2007.

**Results:** 28.1% girls were aware of menstruation prior to attainment of menarche.. Major source of information about menstruation is mother (53.6%). More than 80% of adolescent girls are using sanitary pads as an absorbent. Lack of disposal facility and lack of water supply are reasons for school absenteeism.

**Conclusions:** In this study the knowledge of menstruation hygiene among the study population is significantly associated with mother’s education and occupation.

**Keywords:** Menstruation hygiene, Menarche, Reproductive tract infections, Vulnerability

## INTRODUCTION

Menstrual hygiene is an essential aspect of hygiene for adolescent girls and women between menarche and menopause. Despite being an important issue concerning women and girls in the menstruating age group menstrual hygiene is often overlooked in the society. It continues to be amongst the most challenging development issues today. Not only do deep-rooted taboos, myths and misinformation create the illusion that menstruation is

inherently shameful but in countries like India, women and girls often lack access to hygienic sanitary materials and basic facilities Sanitary. Adolescence is a period between childhood and adulthood. World Health Organization (WHO) defines adolescents as individual between 10-19. The word adolescent is derived from the Latin word “adolescere”, which means to grow into maturity. Menarche is defined as onset on menstrual cycle. It is the hallmark of female pubertal development.<sup>1</sup>

Menstruation may be defined as a periodic and cyclical shedding of endometrium accompanied by loss of blood. It takes place at approximately 28-day intervals between the menarche (onset of menstruation) and cessation of menstruation is termed as Menopause.<sup>2</sup>

Menstruation is such an issue which is often clouded by various myths and misconceptions in our society.

In spite of a normal physiological phenomenon, this topic is not discussed openly. The adolescent girls get debarred due to various social misconceptions, lack of privacy, illiteracy of parents, especially mother, low socioeconomic conditions, and lack of proper health awareness and education about this sensitive issue which ultimately results this age group into vulnerability to reproductive tract infections, which can be reduced by improving the knowledge about the menstrual hygiene. Poor menstrual hygiene.

The reproductive health decisions of these generations will affect the health and wellbeing of their next generations and their community as this generation becomes the parents of next generation.

The restrictions like diet, cultural taboos are main reasons for adolescent girls not seeking help or discuss the issues during menstruation.<sup>3-5</sup>

### **Aim**

- To evaluate the menstrual hygiene practices among school going adolescent girls in urban area of Hyderabad.

### **Objectives**

- To study the socio demographic profile among adolescent girls in Government high schools in urban field practice area of Community medicine.
- To find out the factors associated with hygiene status of the study population.

## **METHODS**

**Study population:** School going adolescent girls (VI to X standard).

**Study area:** Government High school, Urban field practice area of Dept. of Community Medicine.

**Study design:** A cross sectional study

**Study variables:** Socio-demographic variables (age, caste, religion, parent's education, occupation, income), menstrual hygiene practices.

**Sample size:** 69 students.

### **Study period**

This study was conducted from 24-09-2018 to 29-09-2018.

### **Inclusion criteria**

Those students who attained menarche. Students who has given the consent and are willing to participate in the study.

### **Exclusion criteria**

Students who are not willing to participate in the study and who were seriously ill were excluded from the study.

### **Data collection**

By using pre designed and pre tested and pre coded schedule which includes socio demographic data, perception, knowledge and practices during menstrual cycle. Permission of the school principal was obtained before the initiating the study and permission from head of institution was taken. Ethical clearance: obtained from Institutional ethical committee. Health awareness regarding menstrual hygiene and practices was given by medical officer and interns to the study population.

Scoring system was made on the basis of the questions in questionnaire. The assessment of knowledge was done as good knowledge (score: >5/10) poor knowledge (score <5/10).

### **Data compilation and analysis**

All the data collected was entered and analyzed with MS excel software 2007. All tests were considered significant at p<0.05 level.

## **RESULTS**

In the present study 69 students have participated in the study. The majority of the participants are in the age group of 13-14 years (47.8%), 14-15 years (39.1%) followed by 15-16 years of age (13.0%). Majority of the participants are studying in 8<sup>th</sup> standard (29.0%), followed by 7<sup>th</sup> standard (23.2%). The majority of parents are illiterate. Only 28.1% girls were aware of menstruation prior to attainment of menarche. Maximum number of girls (47.8%) attained menarche between 13-14 years of age in the study. More than 50% of the participants are aware that menstruation is a normal physiological phenomenon, 37.7% are not aware that it is a physiological phenomenon and 8.7% said that it is a disease condition. And only 8.7% of the study participant is aware that menstrual blood originates from the uterus. Major source of information about menstruation is mother (53.6%) followed by TV/media (29.0%) More than 80% of adolescent girls are using sanitary pads as a absorbent. Majority of the study participants change the

absorbent for more than 4 times a day during cycle. In the study 8.7% and 10.1% were using only cloth and both the cloth and sanitary pad as absorbent respectively. Only 14.5% were reutilizing the cloth. Present study reveals that only 40% are the girls are maintain genital hygiene by cleaning for more four times in a day and only 20.3% were using soap and water for cleaning purpose. In this study, 58.0% were disposing the absorbent in dust bin, 21.7% in latrine and 14.5% in ground and 5.8% in discriminate. Majority (around 50%) of the study participant were restricted form religious activities during the menstruation period. Majority of the girls have to keep themselves absent from the school and the abdominal pain, Lack of disposal facility and lack of water supply are reasons for school absenteeism (Table 1 and 2).

**Table 1: Socio demographic factors and knowledge about menstruation among the study population (n=69).**

Variable	N	%
<b>Age in years</b>		
13-14	33	47.8
14-15	27	39.1
15-16	9	13.0
<b>Class of schooling</b>		
6.00	11	15.9
7.00	16	23.2
8.00	20	29.0
9.00	12	17.4
10.00	10	14.5
<b>Father's education</b>		
Illiterate	35	50.7
Primary schooling	9	13.0
secondary schooling	25	36.2
<b>Mother's education</b>		
Illiterate	55	79.7
Primary schooling	14	20.3
<b>Father's occupation</b>		
Unskilled worker	41	59.4
Semiskilled	23	33.3
Skilled	5	7.2
<b>Mother's occupation</b>		
Housewife	29	42.0
Unskilled worker	40	58.0
<b>Family income per month</b>		
5000-10000	51	73.9
10000-15000	18	26.1
<b>Knowledge about menstruation</b>		
Normal physiological phenomenon	37	53.6
Don't know	26	37.7
Disease	6	8.7
Don't know	43	62.3
Stomach	14	20.3
Urinary tract	6	8.7
Uterus	6	8.7

**Table 2: Knowledge, source of information and practices of menstrual hygiene among study population (n=69).**

Source of information	No	%
<b>Mother</b>	37	53.6
<b>Sister</b>	8	11.6
<b>Relatives</b>	3	4.3
<b>Teachers</b>	1	1.4
<b>TV / Media</b>	20	29.0
<b>Type of absorbent used</b>		
Only cloth	6	8.7
Both cloth and sanitary napkins	7	10.1
Only sanitary napkin	56	81.2
<b>Frequency of change of absorbent change per day</b>		
Less than 4 times	45	65.2
More than 4 times	24	34.8
Reusing of cloth as absorbent	10	14.5
<b>Cleaning of genitalia</b>		
Less than 4 times	41	59.4
More than 4 times	28	40.6
<b>Cleaning material using for cleaning of genitalia</b>		
Only water	55	79.7
Soap and water	14	20.3
<b>Disposal of absorbent</b>		
Indiscriminate	4	5.8
Latrine	15	21.7
In ground	10	14.5
Dust bin	40	58.0
<b>Restrictions</b>		
Religious activities	34	49.3
Shampooing hair	8	11.6
Wearing washed clothes	5	7.2
All the above	13	18.8
<b>Reasons for school absenteeism</b>		
Lack of disposal facility	15	21.7
Lack of continuous water supply	7	10.1
Abdominal pain and discomfort	13	18.8
Fear of leakage	10	14.5
Peer pressure	2	2.9
Socially withdrawn	1	1.4

In this study the knowledge of menstruation hygiene among the study population is significantly associated with mother's education and occupation (Table 3).

## DISCUSSION

The present shows that 28.1% girls were aware of menstruation prior to attainment of menarche. Study conducted by Gupta et al.<sup>6</sup>

Paria et al shows that 37.52% of girls were aware of menstruation before menarche.<sup>7</sup> Study shows 32.5% are aware of menstruation.<sup>1</sup>

**Table 3: Factor associate the knowledge of menstrual hygiene among the study population (n=69).**

Variable	Good knowledge (n=37)	Poor Knowledge (n=32)
	N (%)	N (%)
<b>Educational status of mothers</b>		
Illiterate (55)	24 (43.6)	31 (56.4)
Primary schooling (14)	13 (92.9)	1 (7.1)
Total (69)	37 (53.6)	32 (46.4)
P value	Pearson Chi-Square 10.871 <sup>a</sup> , df 1 p<0.001	
<b>Occupation of mothers</b>		
Housewives (29)	11 (37.9)	18 (62.1)
Unskilled workers (40)	26 (65.0)	14 (35.0)
Total (69)	37 (53.6)	32 (46.4)
P value	Pearson Chi-Square 4.953, df 1, p<0.026	

In this study the maximum number of girls (47.8%) attained menarche between 13-14 years of age in the study. Study conducted by Hemapriya et al.<sup>8</sup> Found that the maximum number of girls (53.8%) attained menarche between 12-14 years of age. Similar range of menarche age was observed by Shabnam et al.<sup>9</sup>

More than 50% of the participants are aware that menstruation is a normal physiological phenomenon, 37.7% are not aware that it is a physiological phenomenon and 8.7% said that it is a disease condition.

Results found in the study conducted in Rajasthan by Khanna et al where 86.25% girls believed it to be a physiological process and Dasgupta et al observed that 86.25% girls believed it to be a physiological process.<sup>1,10</sup>

In present study, only 8.7% of the study participant is aware that menstrual blood originates from the uterus.

Study conducted by Ray et al found that only 17.9% of the adolescent girls knew that uterus was the source of blood in menstruation.<sup>11</sup>

Present study reveals that major source of information about menstruation is mother (53.6%) followed by TV/media (29.0%).

Mother was the main source of information about menstruation.<sup>7</sup> Study done in Nagpur also show that mothers were the first informants for 71.33% of the girls.<sup>12</sup>

More than 80% of adolescent girls are using sanitary pads as absorbent and majority of the study participants change the absorbent for more than 4 times a day during cycle. In this study 8.7% and 10.7% were using only cloth and both the cloth and sanitary pad as absorbent respectively in the present study Findings of study 8

show that 89.2% were using pads as menstrual absorbent and the changing times of soaked absorbent were satisfactory (2-5 times in a day) in majority (65.3%) of the girls during menstruation, on other hand 5.8% girls mentioned they change according to the need. Study conducted in Punjab by Kamaljit et al reported that, majority of the girls (69%) used sanitary pad, whereas 23% used fresh cloth and 10% used old cloth, rag, cotton.<sup>13</sup>

Present study reveals that only 40% are the girls are maintain genital hygiene by cleaning for more four times in a day and only 20.3% were using soap and water for cleaning purpose. In study 8 cleaning of the genitals during menstruation was satisfactory (during micturition) in 67.9% whereas it was unsatisfactory (only during bath) in 12.2% of the girls, 8.8% and 11.2% girls stated that they cleaned less than and more than 3 times a day respectively.

In this study, 58.0% were disposing the absorbent in dust bin, 21.7% in latrine and 14.5% in ground and 5.8% in discriminate. Study 8 reports that disposing the used absorbent, majority of the girls (60.8%), burnt or buried their used menstrual absorbent, 29.1% girls threw it in the dust bin and 4.2% girls were washing and reusing the cloth material, whereas 6% girls disposed by flushing in the toilet.

Reusing the cloth material was reported in 7.4% girls by Shabnam et al, and 73.75% girls by and Dasgupta et al.<sup>1,9</sup>

Majority (around 50%) of the study participant were restricted form religious activities during the menstruation period. Shubhas et al showed that 73.64% and Dasgupta et al found that (85%) girls practiced different restrictions during menstruation.<sup>1,12</sup> Majority of the girls suffer from abdominal pain, and body pains and along with this reasons, lack of disposal facility, lack of water supply and various restrictions are reasons for school absenteeism.

Study 8 found that pain in abdomen was reported in 70.5% of the girls, followed by lower abdominal pain, muscle cramps, nausea or vomiting during menstruation

In this study the knowledge of menstruation hygiene among the study population is significantly associated with mother's education and occupation similar finding were observed in the study conducted by Sarkar.<sup>14</sup>

## CONCLUSION

In this study, the knowledge of menstruation hygiene, personal hygiene during menstrual hygiene, use of sanitary napkins and disposal of the absorbent was found to satisfactory in the study population whose mothers are well educated. It was found that the knowledge of menstruation hygiene among the study population is satisfactory (based on scoring system) and it is found to

statistically significantly with mother's education and occupation.

Hence, the students and the parents particularly mother should have a health awareness program regarding menstrual hygiene in the schools.

### ACKNOWLEDGEMENTS

We would like to thank Principal, Government High school, Masoorabad; Mr. Hari Krishna, MSW, Dept. of Community medicine, KAMSRC, LB Nagar, Hyderabad; Mr. NagaRaju, MSW, UHTC, Dept. of Community medicine, KAMSRC, LB Nagar, Hyderabad.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: The study was approved by the Institutional Ethics Committee*

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**Cite this article as:** Chajhlana SPS, Amaravadhi SR, Mazodi SD, Kolusu VS. Determinants of menstrual hygiene among school going adolescent girls in urban areas of Hyderabad. Int J Community Med Public Health 2019;6:2211-5.