

**MENSTRUAL HYGIENE PRACTICES AMONG ADOLESCENT GIRLS: A CROSS SECTIONAL STUDY**Bekkalale Chikkalingaiah Sowmya<sup>1</sup>, Shashikala Manjunatha<sup>2</sup>, Jayanth Kumar<sup>3</sup>**HOW TO CITE THIS ARTICLE:**

Bekkalale Chikkalingaiah Sowmya, Shashikala Manjunatha, Jayanth Kumar. "Menstrual Hygiene Practices among Adolescent Girls: A Cross Sectional Study". Journal of Evolution of Medical and Dental Sciences 2014; Vol. 3, Issue 28, July 14; Page: 7955-7961, DOI: 10.14260/jemds/2014/2996

**ABSTRACT: BACKGROUND:** Menstruation has often been dealt with secrecy in many cultures. Such perceptions coupled with poor and inadequate sanitary facilities have often kept girls from not attending schools especially during periods of menstruation. There is gross lack of information on menstrual management among adolescent girls; most of these girls seek information about menstruation from their peers who do not know better. Adolescence being a time of tremendous opportunity, and at the same time also a time of heightened vulnerabilities, it is imperative to empower adolescent girls with adequate information and skills on crucial issues like menstrual hygiene and its management. **AIM:** To know the knowledge and menstrual hygiene practices of adolescent girls. **MATERIAL & METHODS:** Across sectional study was conducted among 210 adolescent girls in a rural field practice area of Rajarajeswari Medical College & Hospital. Data on socio-economic variables and menstrual characteristics were collected using pre-tested questionnaires. **RESULTS:** 87.6% of the girls were aware about menstruation prior to the attainment of menarche. Mothers were the first informants in about 56.5% girls. Overall 51.5% adolescent girls were using sanitary napkins as menstrual absorbent, while 45.6% were using used cloths. Regarding practices, for cleaning of used cloths 88.9% girls used both soap and water. Regarding restrictions practiced, 97.6% girls practiced different restrictions during menstruation. **CONCLUSION:** There is a need to educate the girls about menstruation, its importance and hygiene maintenance; so as to enable them to lead a healthy reproductive life in future.

**KEYWORDS:** Adolescent girl, menstrual hygiene, sanitary pad.

**INTRODUCTION:** Adolescence in girls signifies the transition from girlhood to womanhood. One fifth of world population is between 10 and 19 years old amounting to over a billion young people 85% of whom lives in developing countries. Menstruation is a phenomenon unique to the females. The onset of menstruation is one of the most important changes occurring among the girls during the adolescent years. The first menstruation (menarche) occurs between 11 and 15 years with a mean of 13 years.

Menstrual Hygiene is an issue that every girl and woman has to deal with once she enters adolescence around the age of 12yrs and until she reaches the menopause somewhere in her 40's. Overall, a woman spends approximately 2,100 days menstruating which is equivalent to almost six years of her life.<sup>1,2</sup> Menstruation is a monthly occurrence that requires access to appropriate materials and facilities, without which, females suffer from poor menstrual hygiene which restricts their movement and self-confidence.<sup>3</sup>

Hygiene-related practices of women during menstruation are of considerable importance, as it has a health impact in terms of increased vulnerability to reproductive tract infections (RTI). Women having better knowledge regarding menstrual hygiene and safe practices are less vulnerable

## ORIGINAL ARTICLE

---

to RTI and its consequences. Therefore, increased knowledge about menstruation right from childhood may escalate safe practices and may help in mitigating the suffering of millions of women.<sup>1</sup>

Good menstrual hygiene is therefore crucial for the health, education and dignity of girls and women.

In several cultures there are (cultural and or religious) taboos concerning blood, menstruating girls and women and menstrual hygiene. In recent years importance of health counseling for adolescents has been appreciated but there are no large scale community based studies to assess awareness about menarche and reproduction in Indian adolescent girls. In India problems are more difficult and complicated because of marked socioeconomic diversity. This is an important sanitation issue which has been in the closet and still there is a long standing need to openly discuss it.

With the above background, this study was undertaken to elicit the knowledge on source of information regarding menstruation, restrictions & customs/rituals practiced during menstruation among the study population.

### **METHODOLOGY:**

**Type of Study:** Community-based cross-sectional observational study.

**Study Setting:** The present study was undertaken among the adolescent girls in Hegadagere sub center, a rural field practice area of Rajarajeswari Medical College & Hospital, Bangalore.

**Study Subjects:** Adolescent girls between the age group 10-19yrs.

### **Inclusion criteria:**

1. All adolescent girls who are willing to give informed consent to participate in the study.

### **Exclusion criteria:**

1. All the adolescent girls who are not willing to give informed consent to participate in the study.
2. All the adolescent girls who are mentally challenged.

**Study Duration:** Total duration of one month.

**Sample Size:** 210. All the adolescent girls who were in Hegadagere sub-center area.

**Study Instrument:** A pre-designed, pre-tested questionnaire.

**Method of data Collection:** Pilot study was done to know the feasibility of the study and any requirement to modify the questionnaire. The participants were explained regarding the purpose of the study. Verbal informed consent was taken prior to the data collection. The participants who gave consent was interviewed by house to house survey with the help of a pre- designed, structured and open-ended questionnaire included topics relating to awareness about menstruation, hygiene practiced during menstruation and restricted activities practiced during menstruation. The study

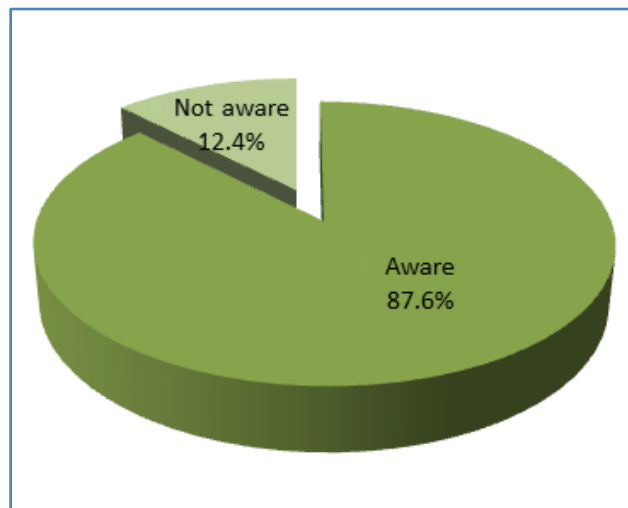
## ORIGINAL ARTICLE

variables include general information, questions regarding the knowledge and practice of menstrual hygiene. Institutional Ethical committee clearance was taken prior to the study.

**Statistical Analysis:** Data obtained from the study was entered in MS excel sheet and analyzed statistically by simple proportions using statistical package for social science (SPSS) package version 19.

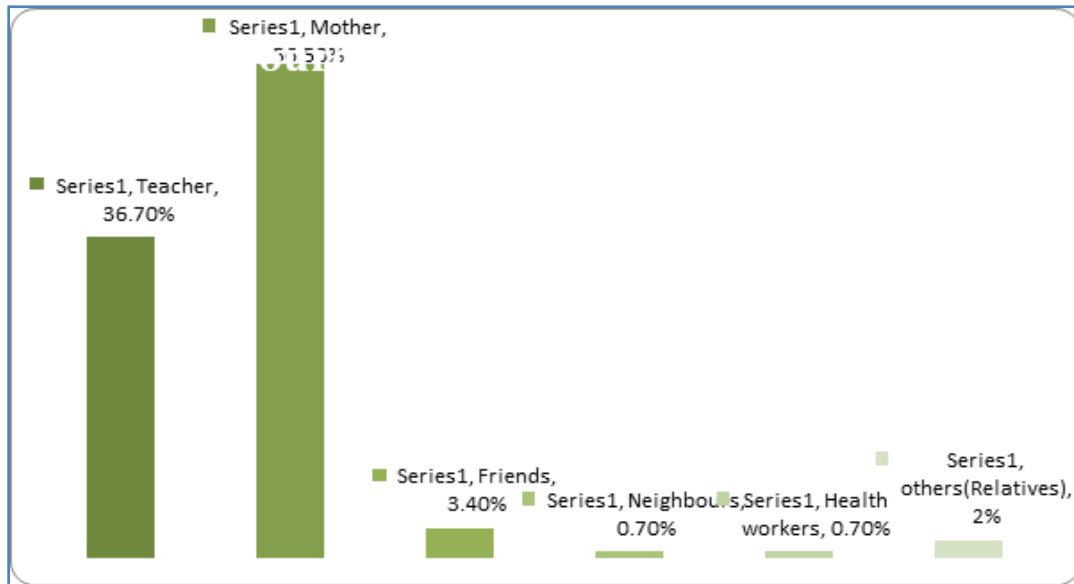
**RESULTS:** This study shows that the age of menstruating girls ranged from 14 to 17 years, maximum (76.25%) number of girls being between 14 and 15 years of age group. Among 210 respondents in the present study, 174 (82.9%) were Hindus, whereas only four (1.9%) girls were Muslims and others were 32 (15.2%). One hundred and twenty eight (61.0%) girls belong to nuclear family, 75 (35.7%) to joint and only 7 (3.3%) to three generation family.

Overall 51.5% adolescent girls were using sanitary napkins as menstrual absorbent, while 45.6% were using used cloths. 87.6% of the girls were aware about menstruation prior to the attainment of menarche. Mothers were the first informants in about 56.5% girls. Regarding practices, for cleaning of used cloths 88.9% girls used both soap and water. Regarding restrictions practiced, 97.6% girls practiced different restrictions during menstruation.



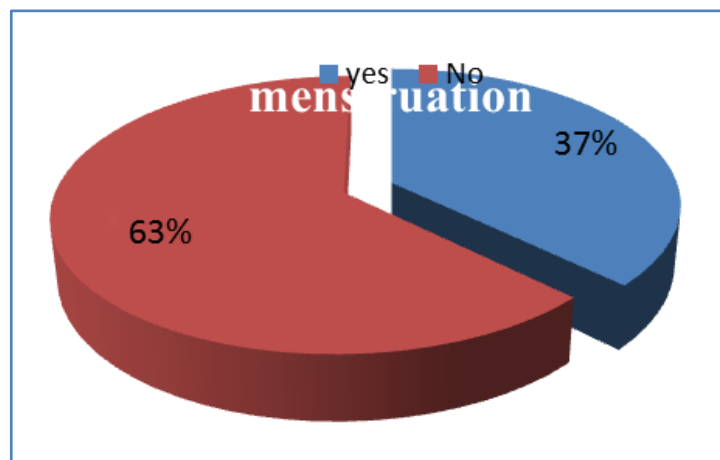
**Fig. 1: Graph showing knowledge regarding menstruation before attaining menarche**

Fig. 1 shows that 184 (87.6%) girls were aware about menstruation prior to attainment of menarche.



**Fig 2: Graph showing source of knowledge regarding menstruation**

Among 184 respondents, mother was the first informant in case of 83 (56.50%) girls. Other sources of information were teachers and friends in case of 54 (36.7%) girls and 5 (3.4%) girls, respectively.



**Fig 3: Graph showing practice of adolescent girls with respect to taking bath daily during menstruation**

Depicting the practices during menstruation only 63% of them took daily bath.

## ORIGINAL ARTICLE

Absorbents used during menstruation	Frequency	Percent
Fresh cloth	10	6.25%
Sanitary pads	18	11.25%
Used cloth	68	42.5%
Both cloth and pads	64	40%
<b>Total</b>	<b>160</b>	<b>100</b>

**Table 1: Distribution of study with respect to the absorbents used during Menstruation (n=160)**

Shown that 18 (11.25%) girls used sanitary pads during menstruation, 68 (42.5%) girls used old cloth pieces, 10 (6.25%) girls used new cloth pieces, and 64 (40%) girls used both cloth pieces and sanitary pads during menstruation.

Restriction practiced during menstruation	Frequency	Percent
Did not attend any religious occasion	84	49.4
Did not eat certain foods	13	7.6
Did not play	29	17.1
Did not perform any household work	32	18.8
Did not attend school	8	4.7
Did not practice any restriction	4	2.4
<b>Total</b>	<b>170</b>	<b>100</b>

**Table 2: Distribution of study subjects with respect to the restriction practiced during menstruation (n=170)**

Regarding different types of restrictions practiced during menstruation only 4 (2.4%) girls did not practice any restriction. One hundred and sixty six (97.6%) girls practiced different restrictions during menstruation. Among them, 84 (49.4%) girls did not attend any religious occasion, 13 (7.6%) girls did not eat certain foods such as sour foods, banana, radish and palm. Twenty nine (17.1%) girls did not play, 32 (18.8%) girls did not perform any household work, and 8 (4.7%) girls did not attend school.

**DISCUSSION:** Adolescence is a period when physical growth and maturation are accompanied by mental and psychological development. The current billion strong generations of 10-19years old will be the largest generation in history to make transition from childhood to adulthood. Reproductive health needs of adolescents have long been neglected but in the last 10years, importance of information on reproduction and sexuality is being increasingly emphasized.

The 1994 International Conference on Population and 1995 Fourth World Conference on women held in Beijing recommended educational services for adolescents in friendly environment. In depth studies are badly needed to know and fulfill the reproductive health needs of adolescents. A three tier grid approach to improvise adolescent reproductive health care is proposed:

## ORIGINAL ARTICLE

---

Grid I - Identify the problem of adolescents in India.

Grid II - Identify existing facilities catering to teenage reproductive health program.

Grid III - Formulate project plan, research and training program.

The present study is an attempt to fill lacunas in Grid I. The most diverse spectrum of socioeconomic variation is found in India. In this context the observations in the present study reveal significance of socioeconomic factor on level of awareness and source of information on facts of growing up and on reproduction among Indian adolescent girls. Our study emphasizes that major source of information for adolescent physical change and menstrual problems is mother or elder relative, followed by books, television, and teachers.

But majority of girls have only partial or incomplete knowledge of facts on menarche and on physical changes. It is obvious that sources of information are not adequate and there is a need for further education.

Menstruation is a biological event imbued with social, cultural and personal significance (Marván et al. 2003). In general, it is observed that characteristics related to menstrual cycle show deviations during onset and conclusion of the reproductive phase of the life (Treloar et al. 1967; Sanyal and Ray 2008) Furthermore, studies show that factors such as socio-economic status, place of residence, marital status, ethnicity, body mass index and smoking habit affect cycle length, regularity in periods, premenstrual problems, duration of discharge and painful periods.<sup>4</sup>

Abhay Bhusaheb Mudey et al<sup>5</sup> noted that commercial educational material is an important source of information on menstruation but does not give accurate knowledge and does not deal with girl's emotional needs and anxiety.

Juya R et al<sup>6</sup> found that 64.5% girls were aware about menstruation prior to the attainment of menarche. Awareness among rural girls was significantly more compared to urban girls. Overall 38.4% adolescent girls were using sanitary napkins as menstrual absorbent, while 30% were using new cloth every time.

Drakshayani Devi and Venkata-Ramaiah<sup>1</sup> in a study on menstrual hygiene among rural adolescent girls observed that majority of girls were lacking in care and hygiene during menstruation.

A cluster sampling technique study was done on menstrual hygiene among adolescent school girls. They found that mass media were the main source of information about menstrual hygiene followed by mothers but a large majority of girls said they needed more information.<sup>7</sup>

In our study majority of girls self-cared during menstruation. Regarding reproductive facts, the present study signifies that now-a-days, television is the most important source of information on sexuality, pregnancy, contraception, AIDS and STD, followed by books, friends and elders.

**CONCLUSION:** Although knowledge was better than practice, both were not satisfactory. So, the girls should be educated about the significance of menstruation, use of proper sanitary pads or absorbents and its proper disposal. This can be achieved by giving them proper training and health education by teachers, family members, health workers, and media so that there won't be any misconception to the adolescent girls regarding menstrual hygiene.

### REFERENCES:

1. Drakshayani Devi K, Venkata Ramaiah P. "A study on menstrual hygiene among rural adolescent girls". Indian J Med Sci. 1994; 48:139-43.

## ORIGINAL ARTICLE

2. El- Gilany AH, Badawi K. "Menstrual hygiene among adolescent schoolgirls in Mansoura, Egypt". *Reprod Health Matters*. 2005; 13:147-52.
3. Deo DS, Ghattargi CH. "Perceptions and practices regarding menstruation: a comparative study in urban and rural adolescent girls". *Indian J Community Med*. 2005; 30:33-4.
4. Subha Ray et.al "Menstrual characteristics: A study of the adolescents of rural and urban West Bengal, India"; *Annals of Human Biology*, September-October 2010; 37(5): 668-681.
5. Abhay Bhausahab Mudey, Naveeta Kesharwani, Gargi Abhay Mudey Ramchandra C. Goyal. "A cross-sectional study on awareness regarding safe and Hygienic Practices amongst School Going Adolescent Girls in Rural Area of Wardha District, India". *Global Journal of Health Science* 2010 October; Vol.2, No.2: 225-231.
6. Juyal R, Kandpal SD, Semwal J, Negi KS "Practices of menstrual hygiene among adolescent girls in a district of Uttarakhand"; *Indian Journal of Community Health*, 2012;24: 2.
7. Khanna A, Goyal RS, Bhawsar R. "Menstrual practices and reproductive problems: a study of adolescent girls in Rajasthan". *J Health Manag*. 2005; 7: 91-107.

### AUTHORS:

1. Bekkalale Chikkalingaiah Sowmya
2. Shashikala Manjunatha
3. Jayanth Kumar

### PARTICULARS OF CONTRIBUTORS:

1. Post Graduate, Department of Community Medicine, RRMC & H, Bangalore.
2. Professor and HOD, Department of Community Medicine, RRMC & H, Bangalore.
3. Professor, Department of Community Medicine, RRMC & H, Bangalore.

### NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Sowmya B. C,  
W/o Girish,  
#483, Mountain Road,  
Jayanagar, 1<sup>st</sup> Block,  
Bangalore-560011.  
Email: drsowmyagirish@gmail.com

Date of Submission: 26/06/2014.  
Date of Peer Review: 27/06/2014.  
Date of Acceptance: 02/07/2014.  
Date of Publishing: 14/07/2014.