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### STUDY OF MENSTRUAL HYGIENIC PRACTICES AMONG THE ADOLESCENT GIRLS IN RURAL AREA

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# ABSTRACT

Introduction: WHO defines adolescence as period between 10-19 years. Menarche is a milestone in a woman's life as it denotes the start of reproductive capacity but there is gross lack of information on menstrual preparedness and management among adolescent girls. Women with better knowledge of menstrual hygiene and safe practices are less vulnerable to reproductive tract infection and its consequences.

Aim and Objectives: 1.To study of menstrual hygiene status among adolescent girls in rural area. 2. To study availability of facilities to maintain menstrual hygiene.

Material and Methods: Community based cross-sectional study. One village Kusgaon from rural field practice area was randomly selected based on feasibility and all adolescent girls who have attended menarche were included in the study.

Result: Out of the total 190 participants, 58.4% of the adolescents were using only sanitary napkins during menses. 24.2% girls had no toilet facility and 34.2% had open bathrooms. 138 girls restricted religious work during menstruation followed by school absenteeism, not playing during menses.

Conclusion and recommendations: Though the use of sanitary napkins is increased among the rural adolescent girls, availability of the toilet and bathroom facility is still poor.

Key Words: Adolescence, Menstrual hygiene, Menstrual practices

#### **INTRODUCTION**

WHO defines adolescence as period between 10 yrs-19yrs<sup>1</sup> Adolescent girls are about 1/5<sup>th</sup> of total female population in world.<sup>2</sup> Menarche is a milestone in a woman's life as it denotes the start of reproductive capacity but there is gross lack of information on menstrual preparedness and management among adolescent girls.3

Different studies had shown that poor menstrual hygiene was having higher risk of morbidities related to genito-urinary tract. Women with better knowledge of menstrual hygiene and safe menstrual practices are less vulnerable to reproductive tract infection and its consequences.<sup>4</sup>

Menstrual practices are clouded by taboos and cultural restrictions even today, resulting in adolescent girls remaining ignorant of the scientific facts and hygienic health practices, necessary for maintaining positive reproductive health.<sup>5</sup> So the present study was planned to study status of hygiene and practices regarding menstruation among adolescent girls.

#### MATERIAL AND METHODS:

A Community based cross-sectional study carried out in one village from rural field practice area of the medical college in the western part of Maharashtra. Approval of the Ethical Committee of college was taken prior to the study. Pilot study was done and necessary corrections were done. Kusgaon village was selected based on feasibility and approachability from the RHTC and population of this village is 2484. As per NFHS 3 survey<sup>6</sup>, total population of the adolescents is about 20%, so adolescent girls in Kusgaon village approximately 10% of total population i.e.248. Adolescent girls between 10-19 yrs of age and who has attended menarche were included in the study i.e. 190 adolescent girls were interviewed. Written informed consent was taken and privacy was maintained while interviewing the participants. A pre designed and pretested questionnaire was used to interview the participants. Data entered in Microsoft excel sheet and analyzed using Epi Info version 7.1.4.0

### RESULTS

Total 190 adolescent girls were included in the study. The average age of the participant is about 17.04 years with SD  $\pm 2$  years. Out of 190, maximum girls i.e. 33% attended the menarche at 14 years of age followed by 30% at 13 years and average age at menarche was 13.28 years with SD of  $\pm 1.06$  years.

Of the total girls, 73% were having regular menses while 27% girls complained about irregular menses, 68% of the participants experienced dysmenorrhoea during menses.

Table 1 shows that maximum adolescent girls got the information about menstruation from mother i.e. 42. 63% followed by school teacher 17.89%

It was observed that maximum 58.4% adolescent girls were using sanitary pads and 28.4% were using cloth during menstruation whereas 13.2% girls were using both cloth as well as sanitary nap-kins during menstruation.

It is seen that maximum 49 (62%) of the girls out of 79 who were using cloth were drying them inside the bathroom followed by inside the house, similar cloth was used for maximum for 3 cycles by 57(72%) of the girls. The girls who were using sanitary napkins, maximum i.e. 61% girls changed it twice a day whereas 38.8% girls changed napkins  $\geq$ 3 times a day. Regarding the way and place of disposal of the sanitary napkin, most of the user were wrapping in the paper or plastic bag and disposing in the dustbins 72(64%) and rest 34 % were disposing unhygienically.

Among the study population, 75.8% had toilet facility and 62.6% had closed bathroom facilities whereas24.2% had no toilets and 34.2% had open bathrooms at their home.

The practices restricted during menstrual cycles were restricting religious work in 138 girls followed by avoiding going to school, and restricting playing. (More than one response from the participants)

Table 1: Source of information about menstrualcycle among the adolescent girls

Source	Girls (%)
Mother	81 ( 42.6)
Sister	27 (14.2)
Friend	22 (11.6)
School teacher	34 (17.9)
Other	26 (13.7)

## Table 2: Practices of menstrual hygiene amongthe adolescent girls

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Practices of Hygiene	Girls (%)	
Place where cloth used are dried: (n=79)		
Inside house	19 (24.1)	
Outside house	11 (13.9)	
Inside bathroom	49 (62.0)	
Reuse of same cloth for how many cycles: (n=79)		
1-3	57 (72.2)	
4-6	18 (22.8)	
> 6	4 (5.0)	
No. of time Sanitary napkins changed in a day: (n=111)		
2	68 (61.2)	
3	34 (32.4)	
≥4	7 (6.4)	
Way of disposal of sanitary napkins: (n=111)		
Wrapped in paper	79 (71.2)	
Wrapped in plastic bag	27 (24.3)	
Not wrapped	5 (4.5)	
Place of disposal of sanitary napkins: (n=111)		
Dustbin	72 (64.8)	
Open space	23 (20.7)	
Burned	5 (4.5)	
Thrown in water collection	11 (10)	

## Table 3: Practices restricted during menstruationamong adolescent girls

Activity	Girls (%)	
Religious work	138 (72.60)	
Household work	26 (13.7)	
Going to school	35 (18.4)	
Playing	29 (15.3)	
Eating certain food	5 (2.6)	
(Participants had given more than one response)		

(Participants had given more than one response)

#### DISCUSSION

In a study carried out by Jogdand and Yerpude<sup>7</sup> in 2011, found that number of girls 72.77% girls attained menarche in the age ranged between 12-14 years and similar findings were observed in the present study and in a study carried out by Narayana et al.<sup>8</sup>

In our study, we found that majority of girls got information about menstruation from their mothers followed by teacher which suggests still mother and the teacher are the main source of information for adolescents in rural area even in era of mass media. Another study by Singh et al<sup>9</sup> found that mother was first source of information in 64.9% girls. In our study, 28.42% of the girls were using cloth whereas 58.45% girls using sanitary napkins during menstruation so more than half of the girls were using napkins, Similar study carried out by Varma et al<sup>10</sup> in 2011 found that majority of girls (87.3%) used old plain cloth during menstruation and only 10.6% used commercially available sanitary napkin. In comparison to above study, our study finding definitely showing increase in the use of sanitary napkins which is a good practice and it may because of more awareness through media and marketing.

In our study girls who were using cloth were drying them inside the bathroom followed by inside the house, whereas similar cloth was used for 3 cycles by 72% of the girls. Another study by Shanbag et al<sup>11</sup> shows large proportion of the girls dried these washed clothes in the sun (68.4%), but about 16.4% dried them inside the house. Majority 71.7% girls reused these clothes for 1 – 2 months, 20.4% for 3 - 4 months and 7.9% for 5 - 6 months. This practices because lack of sunlight for drying cloth, repeatedly using the same cloth can lead to reproductive tract infections.

Among the girls who were using sanitary napkins, 61% changed it twice a day and those who changed more than 3 times were 38.8%. Similar observations were found in a study by Shanbag et al<sup>11</sup> which revealed that 39.8% changed sanitary pad or cloth twice a day,29.5% three times a day and 21.7% once a day. Ray S et al<sup>12</sup> in their study reported use of pond 101(53),garden 76(40),landfill 9(5), latrine 4(2) for disposal of sanitary napkins .This suggest that there is improvement in the way of disposal of sanitary napkin by the rural girls over the period of time.

In our study it is noted non availability of the bathroom and toilet facility which hinders the menstrual hygiene as well as personal hygiene.

A number of studies <sup>2,10,13</sup> reported different type of restrictions observed during menstruation similar to present findings. In a study conducted by Jogdand and Yerpude<sup>7</sup> in south India has similar finding that 78.99% girls were not allowed to attend religious occasions. 22.97% and 20.63% girls respectively were restricted from doing routine household work and playing. Similar observations were noted in the present study.

#### CONCLUSIONS

This study reveals that though use of sanitary napkins has increased, menstrual hygiene is not very satisfactory among a large proportion of non-user adolescent girls. We observed in our study that 24.2% adolescents still not having toilet facilities at their home to maintain the menstrual hygiene.

The role of the mothers in imparting knowledge on menstruation was important factor that was observed in this study.

#### RECOMMENDATIONS

The mothers of young girls should be educated with menstrual health hygiene, and be empowered with necessary skills to communicate with and transfer the information to their children. Health talks in schools can be helpful to improve menstrual hygiene practices. Sanitary napkins can be made available at cheap rate so that majority of them will use it during menstruation. Dustbins need to be provided at public places and schools to dispose off the sanitary napkins.

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#### REFERENCES

- World Health Organization Programming for adolescent health and development. WHO Technical Report Series No.886, 1996
- Drakshayani DK, Venkata RP. A study on menstrual hygiene among rural adolescent girls. Ind J Med Sci 1994; 48(6):139-43
- Dasgupta A, Sarkar M. Menstrual hygiene: How hygienic is adolescent girl? Indian J Community Med 2008; 33(2):77-80
- Paul, D., A Report of an ICMR Funded Research Project: Knowledge and Practices of Adolescent Girls Regarding Reproductive Health with special Emphasis on Hygiene during Menstruation. New Delhi. National Institute of Public Cooperation and Child Development (NIPCCD), 2007
- Rajaretnam T, Hallad JS. "Menarche, menstrual problems and reproductive tract infections among adolescents in the rural and urban areas of northern Karnataka in India", European population Conference 1-4 September 2010; Vienna Austria
- Indian Institute of population sciences and Macrointernational, 2007. National Family Health Survey 3, 2005-06: Key Indicators, Mumbai IIPS. Available from http://www.nfhsindia.org/nfhs3\_national\_report.html
- 7. Jogdand K, Yerpude P. A community based study on menstrual hygiene among adolescent girls. Indian Journal of Maternal and Child health 2011; 13(3):2-6
- Narayana KA, Srinivasa DK, Petlo PJ. Puberty rituals, reproductive knowledge and health of adolescent school girls in south India. Asia Pacific Population Journal 2001; 16(2):225-38

- 9. Singh SP, Singh M, Arora M, Sen P. Knowledge assessment regarding puberty and menstruation among school adolescent girls of district Varanasi. Indian J Preventive Social Medicine 2006; 37(1,2): 2
- Verma PB, Pandya CM, Ramanuj VA, Singh MP. Menstrual Pattern of Adolescent School Girls of Bhavnagar (Gujarat). NJIRM 2011; 2(1):38-40
- **11.** Shanbhag D, Shilpa R, D'Souza N, Josephine P, Singh J, Goud BR. Perceptions regarding menstruation and Practices during menstrual cycles among high school going adolescent girls inresource limited settings around Banga-

lore city, Karnataka,India. Int Journal of Collaborative Research on Internal Medicine and Public health 2012; 4(7): 1353-1362

- 12. Ray S, Dasgupta A. Determinants of menstrual hygiene among Adolescent girls: a multivariate analysis. NJCM 2012; 3: 294-299
- Balasubramanian P. Health needs of poor unmarried adolescent girls-A community based study in rural Tamilnadu. Indian Journal of Population Education 2005; March-June: 18-33