

Menstrual hygiene practices among adolescent schoolgirls of rural Mangalore, Karnataka

Sandhya Rani Javalkar¹, Akshaya K M²

¹Department of Community Medicine, JJM Medical College, Davangere, Karnataka, India, ²Department of Community Medicine, Yenepoya Medical College, Deralakatte, Mangalore, Karnataka, India

Correspondence to: Sandhya Rani Javalkar, E-mail: sandhyaranijavalkar@gmail.com

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ABSTRACT


Background: Adolescence represents one of the critical transitions in life and is characterized by a tremendous pace in growth and changes. Despite the fact that menstruation is a healthy biological process, the issue of menstruation is approached with hesitance and wrong information because of deep-rooted cultural taboos. **Objectives:** (1) The objective of this study was to assess the status of menstrual hygiene among adolescent girls, (2) to elicit the rituals and restrictions during menstruation, and (3) to study the common problems related to menstruation. **Materials and Methods:** A cross-sectional study was conducted among schoolgoing adolescent girl students in rural Mangalore, 116 girls participated in the study. Data were collected by interview method using a predesigned semi-structured questionnaire to obtain information on menstrual hygiene practices, restrictions and common problems during menstruation. **Results:** Only 68.1% of the study participants perceived menstruation as a normal body process and 55.2% of girls had knowledge about the importance of menstrual hygiene. More than half of the participants believed that sanitary pads are ideal to be used during menstruation, but only 30.2% of them used only sanitary pads. Majority of them (55.2%) reported that they have restrictions during menstruation. Pain abdomen (64.7%) was a common problem during menstruation, others being head ache, back ache, weakness, and feeling sad. **Conclusion:** The need of the hour is adolescent girls to have accurate and adequate information about menstruation and menstrual hygiene.

KEY WORDS: Adolescent Girls; Menstruation; Menstrual Hygiene

INTRODUCTION

The World Health Organization identifies adolescence as the period of growth and development that occurs after childhood and before adulthood, in the age group of 10-19 years. It represents one of the critical transitions in the life span and is characterized by a tremendous pace in growth and changes.^[1] Despite the fact that menstruation

is a healthy biological process, the issue of menstruation is approached with hesitance and wrong information because of deep-rooted cultural taboos.^[2] Menstrual hygiene is a key issue for girls, consistent with their need for privacy, dignity, and self-respect.^[2] Studies reveal that there is low level of knowledge about menstruation and its related issues among adolescent girls.^[3] Social prohibitions and negative attitude of parents in discussing the related issues openly have blocked the access of adolescent girls to the right kind of information, especially in the rural and tribal communities.^[4] The reproductive health of adolescent girls and management of menstrual hygiene have a great impact on their quality of life.^[5] To manage menstruation hygienically and with dignity, there is a need to have a greater awareness of good menstrual hygiene practices. Women having a better knowledge regarding menstrual hygiene and safe menstrual

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practices are less vulnerable to reproductive tract infections and its consequences.^[6]

There is a strong need to address adolescent girls regarding issues related to menstruation which are imposed upon them. Hence, this study was undertaken with the following objectives: (1) To assess the status of menstrual hygiene among adolescent girls, (2) to elicit the rituals and restrictions during menstruation, and (3) to study common problems related to menstruation.

MATERIALS AND METHODS

A cross-sectional study was conducted among adolescent schoolgirls aged between 11 and 18 years studying in two schools (one private and one government) of Harekala village, Mangalore, Dakshina Kannada, Karnataka, which is in the rural field practice area of Department of Community Medicine, Yenepoya Medical College, during the months of September and October 2013. Census method of sampling was used where all the girl students aged between 11 and 18 years who have attained menarche and willing to participate in the study were included from the schools, giving us a sample size of 116 girl students.

Data were collected by interview method using a pre-designed semi-structured questionnaire. The nature of information which has to be furnished by the study participants was explained by the investigators. The questionnaire included questions on source of information regarding menstruation, age at menarche, practices related to hygiene during menstruation, social and religious restrictions including restrictions at home/society, restrictions to attend school, and the common complaints during menstruation. In this study, the type of ration card possessed by the family was taken as proxy for economic status as above poverty line or below poverty line.

The study was initiated after obtaining approval from the Institutional Ethics Committee, Yenepoya University. Necessary permission to conduct the study was obtained from the head of the institution of the participating schools. Written informed consent was obtained from the parents of the students participating in the study after informing the nature of the information to be collected from the students and the purpose of the study. Assent was obtained from the students after explaining the nature and objectives of the study in the local language (Kannada).

At the end of the study, a health education program was arranged for the participants to address the wrong beliefs/practices and nurture the right menstrual hygiene practices.

Data were compiled in an Excel worksheet, and Statistical Package for Social Sciences version 16.0 was used to analyze

the data of this study. Descriptive statistics were reported as mean (standard deviation) for continuous variables and frequencies (percentage) for categorical variables.

RESULTS

A total of 116 adolescent girls participated in this study. The age of the participants ranged from 11 to 18 years, with a mean age of 14.4 years. Majority of them (56%) belonged to early adolescent age group (11-14 years). The mean age of menarche was 12.58 (± 1.15) years. Among the respondents, 84.4% were Muslims and 15.6% were Hindus. Majority of them (56.9%) lived in a nuclear family and 61.2% belonged to below poverty line families. Nearly 76.7% of the mothers of the participants were educated up to high school.

Only 68.1% of the study participants perceived menstruation as a normal body process. Majority of the respondents (70.7%) stated that they had knowledge about menstruation before menarche and mother (63.4%) was the prime source of information. About half (55.2%) of the study participants had knowledge about the importance of menstrual hygiene. However, a majority of the study respondents (68.1%) had no knowledge about organ causing bleeding during menstruation.

More than half of the participants, i.e., 65 (56%) stated that they believed that sanitary pad is an ideal sanitary material to be used during menstruation, but only 35 (30.2%) of them used only sanitary pads as sanitary material. Half of the respondents did not change sanitary pad/cloth in school due to lack of privacy (Table 1).

About the rituals practiced at menarche, majority (83.6%) responded that there were no rituals practiced at menarche, but 55.2% of them reported that they have restrictions during menstruation. Among the study respondents, 31% stated that they had dietary restrictions toward specific fruits (papaya, pineapple) and spicy food. Few (5.2%) girls stated that they have restrictions to attend school during menstruation (Table 2).

Among the total respondents, 1.7% had highly irregular cycle and majority (64.7%) complained of pain abdomen. Other common problems associated with menstruation were head ache (24.1%), back ache (37.9%), weakness (31.9%), and feeling sad (6%) (Table 3).

Major barriers for information were that the girls were too shy/introvert (69%) and 15.5% were not allowed to talk about it. Only 49.1% of the girls were aware under what conditions they need to visit a doctor during menstruation. Around 86.2% of the respondents were not aware of the health-related schemes by the Government of India for adolescent girls.

Table 1: Practices related to menstrual hygiene among adolescent schoolgirls at Harekala, Mangalore (N=116)

Variable	N (%)
Sanitary material used	
Cloth	15 (13.8)
Sanitary pad	35 (30.2)
Cloth and sanitary pad	65 (56)
Knowledge about ideal sanitary material to be used	
Cloth	45 (38.8)
Sanitary pad	65 (56)
Others	6 (5.2)
Clothes/pads per day	
≤2/day	49 (42.2)
>2/day	67 (57.7)
Change sanitary pad/cloth in school	
Yes	57 (49.1)
No	59 (50.9)
Cleaning external genitalia during menstruation	
Satisfactory	88 (75.8)
Unsatisfactory	28 (24.2)
Materials used to clean external genitalia	
Only water	32 (27.6)
Soap and water	71 (61.2)
Water with antiseptic solution	13 (11.2)
Storage of menstrual clothes/pads	
Bathroom	32 (27.6)
Routine clothes	62 (53.4)
Do not store	19 (16.4)
Others	3 (2.6)
Disposal of sanitary pads	
Wrap in paper and throw in routine waste	80 (80)
Burning	16 (16)
Flushing	2 (2)
Others	2 (2)

Table 2: Rituals and restrictions practiced during menstruation among adolescent schoolgirls at Harekala, Mangalore (N=116)

Variable	N (%)
Rituals practiced at menarche	
Isolated from family members	2 (1.7)
Social gathering at home	17 (14.6)
No rituals practiced	97 (83.6)
Restrictions during menstruation	
Yes	64 (55.2)
No	52 (44.9)
Restrictions practiced during menstruation (N=64)	
Restriction to attend school	5 (4.3)
Restriction to play outside	20 (17.2)
Restriction to enter religious places	39 (33.6)

Table 3: Common problems during menstruation among adolescent schoolgirls at Harekala, Mangalore (N=116)

Variable	N (%)
Duration of cycle (days)	
>35	18 (15.5)
28-30	70 (60.3)
<25	26 (22.4)
Highly irregular	2 (1.7)
Duration of blood flow (days)	
<2	12 (10.3)
3-5	81 (69.3)
>5	22 (19.9)
Highly irregular	1 (0.9)
Amount of blood loss	
Soak up to 1 pad/day	22 (19)
2-3 pads/day	80 (69)
>4 pads/day	14 (12)
Pain abdomen	
Present	75 (64.7)
Absent	41 (35.3)
Share problems regarding menstruation	
Mother	62 (53.4)
Sister	18 (15.5)
Friend	36 (31.0)

DISCUSSION

The mean age of menarche of the study participants was 12.58 (±1.15) years and was similar to the other studies.^[7,8] Our study observed that 70% of the girls were aware about menstruation before attaining menarche, which was higher compared to the studies conducted by Jogdand and Yerpude^[6] and Thakare^[8] where only 36.19% and 36.95% of the girls were aware of this fact. In our study, mother was the prime source of information for 63.4% of the respondents, similar to other studies.^[5,7,8] Educational status of mother played an important role in menstrual hygiene practices of the girls. The higher literacy status of mother plays a vital role in mothers talking to their daughters regarding significance, hygiene practices, and a healthy attitude toward menstruation.^[8]

In the present study, 68% perceived menstruation to be a physiological process which is higher compared to 18.35% reported by a similar study.^[6] The probable reason may be that majority of girls gained information about menstruation before attaining menarche, the prime source of information being mother before attaining menarche and in the process would have some basic knowledge about menstruation. Only 55.2% of them were aware about the importance of menstrual hygiene, it is also very unfortunate to note that 68.1% of girls were not aware of the organ causing bleeding during menstruation. Thakare et al.^[8] reported that 76% of girls were not aware of organ causing bleeding during menstruation.

In the present study, only 5.3% of the girls skipped attending school during menstruation which is much lower to 43.2% in another study.^[9] This can be attributed to various factors including facilities available at school and restrictions imposed by the family. In the present study, it was also observed that 50.9% of them do not change the sanitary pads in school. Studies^[8,9] showed that 86.6% and 45.5% of participants, respectively, did not change pads in school and this may be due to lack of knowledge of healthy practices and/or lack of privacy and facilities at school.

Majority of the respondents were aware that a sanitary pad is the ideal sanitary material to be used, but only 30.2% of them practiced it. Girls used both cloth and sanitary pads, the clothes were reused after washing them in soap and water. The sanitary pads were mostly disposed with routine waste, burning or flushing. A similar study showed that majority of the girls preferred using cloth pieces rather than sanitary pads.^[7] Other researchers, in their studies, also reported that majority of the girls used cotton clothes and reused them after washing.^[10,11] The type of absorbent used is of primary concern since reuse of the material could be a cause of infection if not properly cleaned and stored.^[8] The place of storage of pads/clothes is equally important. In this study, most of the respondents stored their pads/clothes with routine clothes and only 27.6% of them stored in bathroom. It was noted in a study that girls hide the menstrual clothes in some secret unhygienic place till the next menstrual period to keep away from the prying eyes.^[7] We even found that cleaning of external genitalia was unsatisfactory (cleaning of external genitalia nil or <2 times) among 24.7% of girls which was comparatively lower than another study (66.15%).^[7]

In our study, it was observed that 55.2% of participants reported to have restrictions during menstruation including restrictions to attend school, enter religious place, playing outside, and dietary restrictions due to the different rituals in their communities. These are mostly practiced due to ignorance and false perceptions regarding menstruation and were consistent with those of others.^[6-8]

Regarding problems during menstruation, majority of the respondents (64.7%) complained of pain abdomen. Other common problems associated with menstruation were head ache (24.1%), back ache (37.9%), weakness (31.9%), and feeling sad (6%). Further, similar menstrual problems such as pain abdomen, fatigue, muscle stiffness, restlessness, and irritability among adolescents were reported by various studies.^[5,12]

Strength and Limitations

Strength

This study shows that the rural adolescent girls have poor knowledge about menstruation; menstrual hygiene practices

are influenced by various sociocultural factors such as family, friends, and privacy at school toilets. At the end of the study, a health education program was arranged for the participants to address the wrong beliefs/practices and nurture the right menstrual hygiene practices.

Limitations

This study was conducted among adolescent schoolgirls, among whom few were shy/hesitant to answer the questions regarding menstruation and menstrual hygiene practices; influenced by friends/social desirability, some girls may state that they practice menstrual hygiene but do otherwise.

This study was conducted in a rural area; study participants showed socially and culturally bound restrictions that are traditionally followed in their locality, hence it cannot be generalized to all girls from rural Mangalore.

CONCLUSION

Despite the fact that menstruation is a healthy biological process, the issue of menstruation is still a challenge for rural adolescent girls. This study revealed that menstrual hygiene practices are often not optimal for proper hygiene among adolescent girls in rural area. The most common problem during menstruation is pain abdomen, associated with back ache and weakness.

The need of the hour is that our adolescent girls should have accurate and adequate information about menstruation. All mothers/family members irrespective of their educational status should be counseled to break their inhibitions and discuss about menstruation with their daughters/adolescent girls much before the age of menarche. More hard work will be needed to change the attitude of the community toward a menstruating girl and nullifying all the false beliefs and restrictions.

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