



# MENSTRUAL HYGIENE PRACTICES AND KNOWLEDGE AMONG HIGH SCHOOL GIRLS OF RURAL KOLAR

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## ABSTRACT

**Introduction:** Poor Menstrual hygiene among women of developing countries is an insufficiently acknowledged problem. Objectives were to know practices among school girls, their knowledge and facilities available at school.

**Methodology:** A cross sectional study was conducted in July 2011 to October 2011 at Govt High school, Bangarpet, Kolar. 171 Girls participated in the study. A structured questionnaire was applied to obtain information on Menstrual hygiene and practices. Focussed group discussion(FGD) was also conducted. Health education on information regarding menstrual hygiene was provided after the study.

**Results:** Mean age was 14.2 years among these girls 88 of them had attend menarche. 48.8 % of them used both sanitary pads and cloth as menstrual absorbent, 63.6% did not have knowledge about menstruation before attaining menarche, 72.7 %, 2.2%, had restrictions for religious occasions, for going to school respectively during menstruation. 24.24% did not change absorbent during school hours. 45.45% changed in bathroom, 30.3% went home.

**Conclusion:** Hygiene practices and knowledge were inadequate. It can be improved if adequate facilities are provided for girls at school. Information on reproductive health needs to be provided to girls before attaining menarche.

**Key Words:** Adolescent girls, Menstrual hygiene, Menstruation, Sanitary pads, Taboo

## INTRODUCTION

In India 25% of the population were adolescents in 2011 and the world had about 1.8 billion adolescents and young adults between the ages 10 – 24 years.<sup>1</sup> This age group is quite large for any given population.

Puberty is the time of change from child to adolescence which culminates in a few years into adulthood. It is a natural physiologic process involving the sexual hormones in the body. Menarche is the first menstruation that occurs due to shedding of uterine mucosa and is considered a sign of puberty in females. Once established, every mature female menstruates on the average 3-5 days (minimum 2 days, maximum 7 days) each month until menopause.<sup>2</sup> Menstrual hygiene deals with the special

health care needs and requirements of women during monthly menstruation or menstrual cycle.<sup>3</sup>

Although adolescence is a healthy period of life, many adolescents are often less informed, less experienced, and less comfortable accessing reproductive health information and services than adults.<sup>4</sup> In many of the developing countries, a silent and secret culture prevails regarding menstruation and its practice. The young girls lack adequate knowledge regarding the menstrual hygiene. This leads to unhealthy practices during their monthly cycle.

Learning about menstrual hygiene is a vital aspect of health education for adolescent girls as patterns that are developed in adolescence are likely to persist into adult life. It is on this idea that this study

was initiated in a rural population of a developing country like ours, and this study will try to highlight the existing practices and bring about necessary change in the health needs of the women in reproductive age group.

**OBJECTIVES**

1. To know the Menstrual hygiene practices followed among high school in girls of Rural Kolar. 2. To know their knowledge, beliefs and taboos regarding menstruation. 3. To know the facilities available for girls at school for maintaining adequate menstrual hygiene.

**METHODOLOGY**

It was a Cross sectional study conducted from July 2011 to October 2011 among adolescent girls in the age group of 13-16 years. The adolescent girls studying in Government High school, Kyasamballi village, Bangarpet Taluk, Kolar were included for this study. A total of 171 adolescent girls were in the school and among them 72 adolescent girls had attained menarche and were included for the study. A written informed consent form was given and all the girls who gave consent were included in the study. The permission was taken from the School Principal to conduct the study.

The data was collected using a structured pre tested self-administered questionnaire. The questionnaire was prepared in local language Kannada and was distributed to all the adolescent girls in the school. The questionnaire was framed to collect information regarding menstrual hygiene practices, knowledge about menstrual cycles and privacy facilities available at school for girls for maintenance of adequate menstrual hygiene. A Focus Group Discussion (FGD) including a group of 15 adolescent girls was also conducted to collect the same information. The team conducting the FGD included a moderator and two assistants. The assistants noted down all the findings discussed during the FGD. After administering the questionnaire and FGD all the adolescent girls were made to assemble at the school function hall. Health education about adequate menstrual hygiene practices was provided to all the adolescent girls.

The Ethical clearance was obtained from the Institutional ethical Committee to conduct the study. The data was entered into Microsoft office excel worksheet and analysed as frequency and proportions. All continuous data were expressed as mean and standard deviation. The data is presented as tables and graphs.

**RESULTS**

Mean age of 171 girls studied was 14.2 years (+0.90) among these girls 88 of them had attained menarche. Mean age at menarche was 13.4 years (+0.79).

Majority of girls that is 48.6 % of them used both sanitary pads and cloth as menstrual absorbent. Only 22.2% of girls used sanitary pad alone as absorbent and 9.8% of girls told they used the old cloth as absorbent.

**Table 1: Type of absorbent used during menstrual cycles among adolescent girls**

Type of absorbent used (n=72)	Frequency (%)
Sanitary pad	16 (22.2)
New cloth	14 (19.4)
Old cloth	07 (9.8)
Both sanitary pad and cloth	35 (48.6)

**Table 2: Hygiene practices during menstrual cycles among adolescent girls**

Hygiene practices during menses (n=72)	Satisfactory* (%)	Unsatisfactory** (%)
Taking bath	52 (72.2)	20 (27.8)
Cleaning of external genitalia	49 (68.0)	23 (32.0)
Frequency of changing absorbent	59 (81.9)	13 (18.1)

Satisfactory\*: daily taking bath and >= 2 times cleaning genitalia and changing absorbent per day.

Unsatisfactory\*\*: Not taking bath daily, < 2 times cleaning genitalia and changing absorbent per day

**Table 3: Knowledge regarding menstrual hygiene among adolescent girls**

Major informative source regarding menstruation (n=72)	Frequency (%)
Mother	38 (52.7)
Sister	18 (25.0)
Friends	09 (12.6)
Grand mother	02 (2.8)
None	05 (6.9)

**Table 4: Restrictions practiced during menstrual cycles among adolescent girls**

Restrictions practiced during menstruation (n=72)	Yes (%)	No (%)
Playing	11 (15.2)	61 (84.8)
Going to temple	52 (72.2)	20 (27.8)
Going to school	02 (2.8)	70 (97.2)
Food stuffs	44 (61.2)	28 (38.8)

**Table 5: Facilities available at school for changing absorbent during menstrual cycles**

Facilities at school (n=72)	Frequency (%)
School bathroom	33 (45.8)
Went home and changed	22 (30.6)
No facilities, did not change	17 (23.6)

A majority of 72.2% girls said they take bath during menses and 68% said they clean the external genitalia whenever they changed the absorbent. 81.9% changed pad/cloths 2 times per day which is considered satisfactory.

Majority of girls that is 46 (63.8%) did not have knowledge about menstruation before attaining menarche. A majority of 52.7% girls said the mother was the major informative about menstrual hygiene practices.

52 (72.2%), 2 (2.8%) had restrictions for participating in religious occasions, for going to school respectively during menstruation. Restrictions were followed for milk, milk products, fruits like mango, guava, sweets.

17 (23.6%) told they do not have adequate facilities at school, 22 (30.6%) went home in afternoon for changing absorbent missing afternoon classes.

## DISCUSSION

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>5</sup> It is a physiological process, which starts in menarche and the cycle repeats every month in a normal process. The average age of females attaining menarche is about 12 - 15 years. These females are in their adolescent age group.

Menstruation itself is a taboo. It is not something to be discussed with anybody especially in some communities in developing countries. Many of the girls who start menstruation at school have no idea or knowledge about what is going on inside their body. Parents also find it difficult to engage their daughter to teach on this topic even though it is also their responsibility. Remarkable is also that the education by parents concerning reproductive health, sexuality and all related issues is considered almost everywhere as a "no-go" area.<sup>6</sup>

Menstruation has its own social problems. It brings along rules, restrictions, and changed expectations. Most common finding is the restrictions on the women during menstruation. They are not allowed freely inside their homes. They are not allowed to touch anyone as they are considered as impure. They cannot visit any temple, or pray or cook for the family. They are isolated in a separate room for the menstrual days. These superstitions exist even today in educated population in developing countries. The restrictions are more common in rural women than urban. In our study majority of girls that is 72.2% of them said they have restrictions for going to temple. These taboos, perceptions and practices are deep-rooted so much; the health providers and law makers are indifferent to them.

Research confirms that the onset of puberty leads to significant changes in school participation among girls.<sup>7</sup> School girls abstain from school for few days to avoid staining and embarrassment. They fall behind their studies due to absenteeism. In communities at rural and backward areas girls stop school at menarche, and in few years they are married off. Interestingly in this study only 2.8% of the girls didn't come to school during menstruation. Provided the sanitation facilities are good, most of the girls tend to attend school during menstrual cycles.

Mothers are the first source of information for the pubertal females. The information that is passed on from generation to generation is often incomplete, based of myths, and instilling negative and confusing perceptions about own body. Other women in the family, sisters, teachers and friends also form the source of the information. The educated mothers are more likely to discuss menstruation freely among the daughters. In our study mothers formed the major informative source for most of the girls, about 52.7%.

Along with its social problems are the health problems. Hygiene related practices of women during menstruation are of considerable importance as it affects health by increasing vulnerability to infection especially the infections of urinary tract and perineum.<sup>8</sup> These infections can arise because of poor hygienic practices among the young girls.

Mostly the girls and women in the rural India still use rags made from old torn sarees and these are made reusable by washing. A study from India reported that a majority of the rural school girls who used old clothes, sanitized the materials by boiling and drying them before reuse.<sup>9,10</sup>

Many times they are used before drying creating a perfect medium for the bacterial contamination. Also the reusable pads have to be changed frequently as they are not good absorbents. It can be a sustainable option provided they are adequately washed and dried in sunlight. They have to be changed every 3 - 4 hours as their absorbent capacity is low.

The disposable sanitary napkins are advised at present time. These have good absorbent capacity and are not used again. The chances of contracting infections are less. They are to be safely disposed failing which they can be a source of infection to others. The important drawback of these sanitary napkins is the cost. It may be pretty expensive for a family from low socioeconomic status to afford them every month. These napkins have the potential to reduce the restrictions on the women. They can attend to their routine work and girls can attend school, without fear of soiling, odour and

staining on the clothes. The place where women change their pads are also significant. The availability of clean toilets in school and home is a boon for them. Maintaining self-hygiene by taking bath and keeping themselves clean is important. In our study only 22.2% of the girls used only disposable sanitary napkins and upto half of the girls used both cloth napkins and disposable napkins. More than two thirds of the girls practiced satisfactory hygiene like taking bath, cleaning themselves and changing pads regularly.

Prior awareness regarding menarche and menstruation among girls is generally low in most of the cultures.<sup>11</sup> It was evident that only 36.95% of the participants were aware of menstruation before menarche in a study by Subhash B Thakre et al<sup>11</sup>. Similarly in our study 36.2% of the girls had knowledge about menstruation before the onset of menarche. Prior information about menstruation has been reported to prepare the girl child mentally to accept the change in a constructive way and help her to develop better attitude.<sup>12, 13</sup>

In a study from Nigeria, on adolescent school girls, 94% of the girls had some knowledge about sanitary products used for menstrual hygiene, and 88% had a good practice of menstrual hygiene.<sup>14</sup> In our study more than two thirds of the girls had good menstrual hygiene practice.

Socio economic status of girls is an important factor in acquiring the essential knowledge about safe menstrual hygiene. Higher socio economic status girls are more knowledgeable and adopted safer practices compared to lower socio economic status girls. Poverty, illiteracy, unemployment and ignorance are more likely to contribute to unsafe practices.

This study highlights the necessity of adolescent girls to have more accurate knowledge about reproductive system, the cycle of menstruation, its role in women's health. They have to be educated about safe menstrual hygiene and its practice. Classroom teaching for girl students by teachers is very effective method. Training of mothers by small workshops will bring about the necessary change. More efforts are needed in removing false beliefs and superstitions. The availability of low cost sanitary napkins is to be made in all places. Self-preparation of safe sanitary napkins in low socioeconomic population is helpful. Parents should be made to acknowledge the need to support their children at school with sanitary menstrual absorbents in addition to other basic hygienic products.<sup>14</sup>

An appropriate and safe place for change and wash is necessary. This consists of a dedicated private place, in schools and other places where they

are not disturbed and can wash their menstrual blood and clean themselves and wash their hands with soap and water. They should be able to discard the used napkins hygienically and safely. These types of hygienic places should be made available in future in all public places like malls, markets, transport hubs, educational institutions and work places. In our study in school girls, less than half of the girls (45.8%) felt that the facilities in school was adequate.

A recent study conducted in France revealed that adolescent girls do not see menstruation as a major milestone on the path to adulthood, but rather as a commonplace event in a more global process. Rather than a sign of femininity, menstruation seems to be a sign of good health.<sup>15</sup>

Instead of seeing as a changeover to adulthood, the girls should be able to understand that menstruation is a normal physiological process that every girl undergoes, and should never be a cause for fear or stigma in the society. The efforts in this direction and understanding adolescence and its progress help to halt early marriages and its adverse effects, especially in a society where girls are considered mature to marry after their first period. In turn leads to better women health, education, employment and women empowerment.

Break the silence that surrounds the topic of menstruation. This allows girls to discuss with family members and friends, so that all the fear and embarrassment are nullified and they are treated as normal growing children. Address the need for change in attitude of society towards the girls who are in their normal phase of development. Advocate for improvements in water, sanitation and hygiene facilities in every community. The role of teachers in schools to make the girls understand that menstruation is a normal process, and guidance in managing their school and studies help in long way of women education. Providing information in schools about personal and menstrual hygiene lies within the boundary of sexual education, to boys and girls and also to male and female teachers.

## CONCLUSION

Menstruation is still considered a subject of taboo with its false beliefs due to ignorance. Hygiene practices and knowledge were inadequate. Menstrual hygiene practices have shown marginal improvement in the usage of clean sanitary napkins. Facilities for changing pads and menstrual cleaning have to be provided in schools and workplaces adequately in safe and hygienic washrooms. Information on reproductive health needs to be provided to girls before attaining menarche. Health

education for girls regarding menstruation and its safe practice from teachers and mothers are going to improve the confidence. Encouraging the mothers to discuss with their daughters and abolish the myths, taboo and stigma associated with menstruation will improve the overall women health, education and empowerment. Policy makers, health professionals, women rights activists and environmentalists have a responsibility towards achieving this goal.

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