

# Knowledge, Attitude and Practices of Menstruation in Adolescents: A Cross Sectional study in an urban school in Maharashtra, India

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## ABSTRACT

### Objectives

The present study was done to assess the Knowledge, attitude and practices about menstruation in young adolescent girls aged 11-14 years.

### Methods

A self-designed pre-validated self-filled questionnaire was used to collect data from students of class 6,7,8 of a public school catering to children of middle and lower-middle class households in an urban area of Maharashtra.

### Results and conclusions

Despite being from an urban area, misconceptions as to the source of bleeding in menses still persist. Many restrictions still persist on girls during menstruation. This knowledge gap needs to be assessed and addressed to mitigate anxiety and confusion.

**Key-words:** adolescents, menstruation, misconceptions, awareness.

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## INTRODUCTION

Adolescence is the age between 10-19 years of age. Menstruation is a very significant change occurring in girls of this age group. The age at which menarche is attained by a girl is variable from person to person and is influenced by multiple factors like genetics, heredity, diet, lifestyle, nutritional status, overall health and ethnicity. Menstruation is normal physiology, but the public attitude towards menstruation is variable from region to region. Many myths and misconceptions still remain around the practices associated with menstruation, some may be beneficial but many are not.(1). In many parts of India menstruation is considered as a curse from God with legendary Vedic origins.(2) Young girls at puberty undergo numerous bodily and mental changes which come with their own share of questions and curiosity. Socio-cultural taboos and the secrecy around these practices add on to the confusion that is created in these young minds. Menstrual education is a vital part of adolescent health education. However, health education programs for young girls do not always entirely address menstrual hygiene, practices and disorders.(13) The WHO as well as UNICEF recommend developing culturally appropriate menstrual health education and hygiene programs for adolescent girls. To develop such programs a realistic understanding of the prevailing knowledge, misconceptions and knowledge gap needs to be identified. The present study was done to assess the Knowledge, attitude and practices about menstruation in young adolescent girls aged 11-14 years.

## Methodology

A descriptive cross-sectional study was conducted in a Public school catering to children of middle and lower-middle class households in an urban area in Maharashtra among the female students of Class 6 to 8. Study duration was 6 months. Approval was obtained from the Institutional Ethics Committee of Terna Medical College.

Inclusion criteria:

All girl students of classes 6,7,8 of Terna Public School Nerul who were willing and whose parents gave written informed consent for the study.

Exclusion criteria

Girls less than 11 years or more than 15 years of age

and those who were not willing for consent.

Study tool

A self-designed pre-validated self-filled questionnaire was used to collect data from students.

Permission was taken from the Principal of the school. Class teachers of class 6 to 8 were explained about the objectives and nature of the study and the questionnaire. Students were informed about the study and asked to bring signed written informed consent forms from their parents. Strict confidentiality was maintained and such was explained. After the consent was taken, the questionnaire was distributed and students were asked to self-fill it. After collection of the questionnaire, a short lecture was taken and students were explained about proper menstrual behaviour and practices. A total of 123 girls participated in our study. It was a convenience sample: 123 girl students of class 6,7 and 8 were present on that day and had got the signed consent form from their parents.

Data was analysed using statistical software: SPSSv19.

## Results and discussion

The mean age at menarche in our study was 11.89 years with SD 1.08(minimum age 9 years, maximum 14 years). 102 girls understood menstruation to be a physiological process whereas 13 girls believed it to be a curse from God, 1 as a disease and 7 believed it to be a result of eating bad food. This aligns with the study by Chawla et al. on the mythical origins of menstrual taboos.(2) 39 girls( 31.7%) were aware about the process of menstruation before attaining menarche themselves. This finding aligns with the study by Thakre et al, where only 36.95% of girls were aware of menstruation before it occurred. (3) In comparison, the study by Yasmin et al found higher awareness levels, with 42% of girls knowing about menstruation before menarche.(4) Mother was the primary source of information (n=110,89.4%) followed by friends (n=13), which agrees with studies by Anne et al where mother was primary information provider in 53.6%.(5). 28 girls did not know the organ from where bleeding occurred. 30 girls believed bleeding occurred from the stomach, 2 from kidneys highlighting a knowledge gap (FIGURE 1).



Understanding of Menstrual Blood Source Among Adolescent Girls

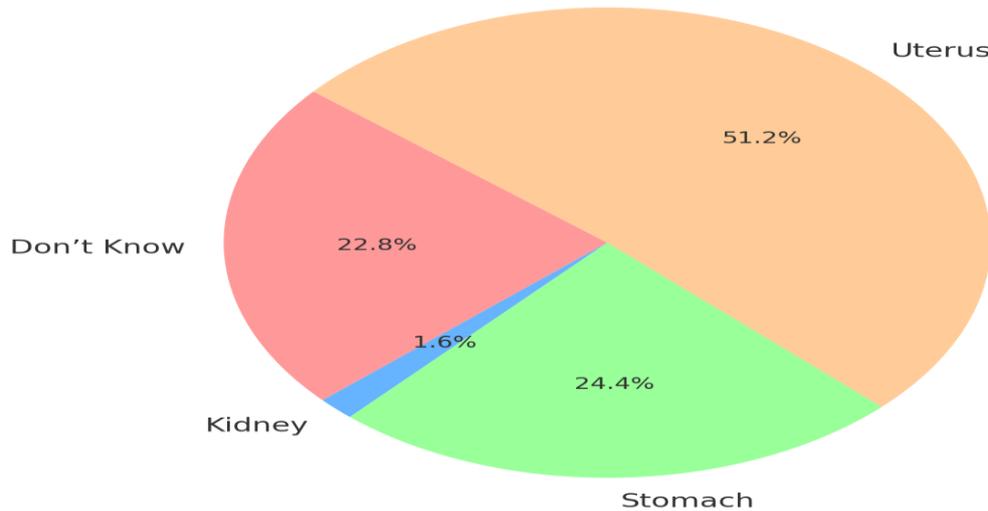


Figure - 1: Knowledge about source of bleeding

The majority of girls used sanitary pads as absorbent material (n=117, 95.1%), though 5 girls used cloth and 1 girl answered as tissue paper. Most girls were aware of the proper mode of disposal of pads (n=111).

Similar practices were reported by Ramachandra (6) in their study from Bangalore India. The frequency of changing pads was very variable with 88 girls changing more than 3 times per day.

Table – 1: Problems faced by girls during menstruation

	Number	Percentage
<b>Don't like to stand up in class</b>		
No	55	44.7
Yes	68	55.3
<b>Don't like to play outside</b>		
No	68	55.3
Yes	55	44.7
<b>Don't like to come to school</b>		
No	66	53.7
Yes	57	46.3
<b>Don't like to walk or run</b>		
No	66	53.7
Yes	57	46.3
<b>Don't like to do any housework at home</b>		
No	60	48.8
Yes	63	51.2
<b>Not able to concentrate on studies</b>		
No	60	48.8
Yes	63	51.2

57.7% of girls were not allowed to enter religious

places (n=71). Many other restrictions also existed like



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not being allowed to enter the kitchen (n=35), not eating certain foods (n=40), not allowed to play any sports (n=40) and not being allowed to sleep in their own bed (n=41). These studies align with various

studies by Puri et al (7) and Ten VT (8) about restrictions on religious activities on Indian girls during menses. Dietary restrictions on girls was also reported in various other studies in India.(7,9)

Table – 2: Restrictions on girls during menstruation

Variables	No. of Adolescent Girls	Percentage
<b>Do not enter kitchen</b>		
No	88	71.5
Yes	35	28.5
<b>Certain Food restrictions</b>		
No	83	67.5
Yes	40	32.5
<b>Do not enter religious places</b>		
No	52	42.3
Yes	71	57.7
<b>Do not Play Sports</b>		
No	83	67.5
Yes	40	32.5

Regarding playing and exercising during menstruation, studies reveal that restrictions do exist worldwide mainly due to believing that playing can increase the pain. Whereas actually exercise releases

serotonin, a neurotransmitter that makes one feel happier and helps to reduce dysmenorrhea.(10,11,12) 96 girls felt pain during menstruation (78%), 64 felt annoyed and 74 felt anger ( 60.2%) (FIGURE 2).

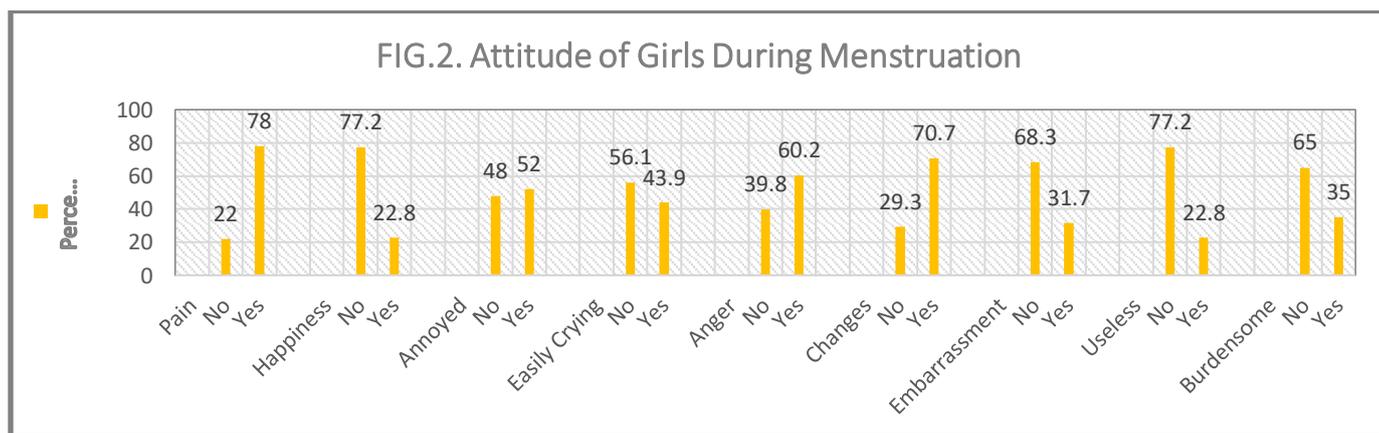


Figure2: Attitude of girls during menstruation

70.7% girls (n=87) feel that changes in the body during menarche are necessary. Still 31.7% respondents (n=39) feel embarrassed and 22.8% (n=28) girls feel that the changes are useless. 43 girls in our study (35%) feel that menstruation is burdensome. These

misconceptions about essential changes highlight the lack of knowledge and also the factor that girls need to be comfortable with family members or teachers to clarify their doubts. So that physiological changes do not become burdensome. Similar findings were



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reported by Chote et al. (13) about students having many doubts and the influence of societal myths and taboos in relation to menstrual practices.

**CONCLUSION**

In our study most participants were aware of menstruation being a normal physiological process. Though most girls agreed there was a lack of knowledge about menstruation before themselves attaining menarche. Despite being from an urban area, misconceptions as to the source of bleeding in menses still persist. This knowledge gap needs to be assessed and addressed to mitigate anxiety and confusion. Sanitary pads are the commonest used absorbent media. There is still a lack of awareness about the frequency with which these should be changed. Many students still face problems doing

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their day to day activities during menstruation. Despite being in an urban area, many households still put restrictions upon girls during the time of menses. A lot of work still needs to be done to increase awareness among girls and their families. Schools and teachers definitely have a role in spreading knowledge about menstrual awareness. Girls facing difficulties need to be encouraged to seek help from family, teachers and doctors if need be, so that menstruation does not disrupt their pace of life or interfere in their learning. Parents, adolescent care providers, and policy makers in developing countries should advocate for comprehensive sexuality education and resources (e.g., low-cost sanitary pads and school facilities) to promote menstrual health and hygiene promotion.



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