## **Original Research Article**

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# A cross sectional study of knowledge, attitude and practices regarding menstrual hygiene among ashram school adolescent girls in field practice area of tertiary health care hospital in Navi Mumbai

Jayesh Gosavi, Deepa H. Velankar\*, Sumedha Joshi, Sumit Wasnik, Sudarshan Ramaswamy

Department of Community Medicine, D. Y. Patil School of Medicine, Nerul, Navi Mumbai, Maharashtra, India

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\*Correspondence: Dr. Deepa H. Velankar, E-mail: dveankar@gmail.com

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#### **ABSTRACT**

**Background:** Adolescent girls often lack knowledge regarding menstruation which may be associated with taboos and myths existing in our traditional society which has a negative implication for women's health, particularly their menstrual hygiene. Aim of the current study is to investigate existing knowledge, attitude and practices regarding menstruation and to assess the source of information, beliefs, misconceptions and restrictions related to menstruation among adolescent school girls.

**Methods:** The study was undertaken among all adolescent girls of 7<sup>th</sup> to 10<sup>th</sup> standard of ashram school in September 2018 to Oct 2018 by pre-designed, close ended questionnaire and the data was analysed.

**Results:** Out of the 100 girls who had attained menarche, all participants used sanitary pads as it was provided by school. Maximum girls had positive attitude towards menstruation, 58% girls got information about menstruation from their teacher. For cleaning of genitals during menstruation 58% girls used water and soap, 7% used water and antiseptic and 35% used water only. Method of adsorbent disposal was reported as burn (51%) and burial (44%). 42% and 49% of girls were not allowed to do household activities and kitchen work respectively. 95% and 63% of girls weren't allowed to go to temple and do sport activities respectively.

**Conclusions:** In the study, it was observed that among the adolescent ashram school girls, the knowledge of menstruation was good and the practices were optimal for proper hygiene but superstitious beliefs and taboos affect their day to day activity during menstruation.

Keywords: Adolescent girls, Menarche, Menstrual hygiene, Restricted practices, Hygiene, Knowledge, Attitude

## INTRODUCTION

The WHO defines adolescents as individuals between 10 and 19 years of age. Adolescent girls constitute about one fifth population of the world. Adolescence in girls has been recognized as a special period which signifies the transition from girlhood to womanhood. The onset of menarche, is a life changing event for girls across the world. Adolescent girls often lack knowledge regarding reproductive health including menstruation which can be

due to socio cultural barriers in which they grow up. Isolation of menstruating girls and restrictions being imposed on them in the family, have reinforced a negative attitude towards this phenomenon.<sup>3</sup> The hygiene-related practices of girls in the adolescent period during menstruation can have an adverse effect on their health.<sup>4</sup> The event of menarche may be associated with taboos and myths existing in our traditional society which have a negative implication on women's health, especially their menstrual hygiene.<sup>5</sup> Studies have shown that girls lack

knowledge about menstruation and poor menstrual hygiene is a risk factor for reproductive tract infection and cervical neoplasia.<sup>6,7</sup> Good hygienic practices such as the use of sanitary pads and adequate washing of genital area are essential during menstruation. Women and girls of the reproductive age group need access to clean, soft, absorbent sanitary products which can in the long run, protect their health.<sup>8</sup> Menstrual hygiene and management will directly contribute to MDG-2 on universal education, MDG-3 on gender equality and women empowerment. 9 In India menstruation is generally considered unclean.<sup>10</sup> About 113 million adolescent girls in the India, are particularly vulnerable at the onset of menarche. At this time they need a safe environment that offers protection and guidance to ensure that their basic health, well-being and educational opportunities are realised. Yet a recent survey found that in 14,724 government schools only 53% had a separate and usable girl's toilets. 11 At home the situation also needs to improve as 132 million households do not have a toilet (2015), leaving adolescent girls and women to face the indignity of open air defecation. However, safe and effective 'MHM' is a trigger for better and stronger development for adolescent girls and women.<sup>12</sup>

Current study would help to find out the existing knowledge, attitude and practices regarding menstruation; and also assess the source of information, beliefs, misconceptions and restrictions related to menstruation among adolescent school girls.

#### **METHODS**

## Study type, duration and location

Current study is a cross sectional KAP study conducted at ashram school located in a field practice area of department of community medicine attached to a tertiary hospital, Nerul, Navi Mumbai from August 2018 to September 2018.

## Inclusion criteria

Girl students of  $7^{\text{th}}$ ,  $8^{\text{th}}$ ,  $9^{\text{th}}$  and  $10^{\text{th}}$  standard were included in the study.

#### Exclusion criteria

Girls who have not yet attained menarche and girls who were not willing to participate were excluded frpm the study.

#### Study design

The focus of current study was to find out knowledge, attitude and practices regarding menstrual hygiene among adolescent girls attending ashram school attached to the field practice area of tertiary hospital.

#### Procedure

Sampling for current study was done through universal sampling technique, after obtaining permission from the school authority, the class teachers and physical education teachers were explained about the objectives of the study. A good rapport was built up with the girls and their written consent was obtained. The participants were made comfortable by maintaining anonymity in the questionnaire administered to them. They were also informed about the confidentiality of the information collected so as to get more reliable answers from them. The pre-designed, pretested, structured, self administered and close ended questionnaire included topics which were related to the awareness about menstruation, the sources of information regarding menstruation, the hygienic practices during menstruation, the restricted activities during menstruation, the demographic information including family details, parent's education, occupation, housing conditions, house type, toilet facility, and water supply in the toilet were enquired and then documented. The chronological age and the age at menarche were also elucidated. Data were entered into Microsoft Excel and then transferred to SPSS 20.0 version software. Descriptive statistics like frequency, mean, standard deviation and percentage were used for analyzing the data.

## **RESULTS**

In current study, maximum students are from lower socioeconomic status. On an average almost 80% parents are illiterate (Table 1).

Table 1: Socio-demography details (n=100).

Standard	N	Caste	N	Socioeconomic status	N	Education	Father	Mother
7	30	ST	88	Lower-middle	9	Illiterate	78	83
8	29	OBC	7	Upper-lower	3	Primary	3	3
9	20	OPEN	5	Lower	88	Secondary	12	10
10	21					Higher education	7	4

Knowledge wise students had clear picture about menstruation. Maximum students had scientific knowledge about menstruation (Figure 1).

Teachers were observed to be taking call to give scientific information about menstruation (Figure 2). Due to teacher involvement and scientific knowledge, all students showed positive attitude towards menstruation (Figure 3). Teacher involvement made students comfortable during

menstrual phase. Due to scientific knowledge, availability of medication and sanitary pad school missing percentage among students during menstrual phase is almost less than 5% (Figure 4). In schools due to teacher involvement and scientific knowledge students showed positive attitude towards menstruation. But due to low literacy rate among parents, taboos and low scientific knowledge maximum students are still facing the problems in their day to day work while at home (Figure 5). Regarding Cleaning of genitals, they are following scientific practice but methods of disposal of soiled sanitary pad need to improve. School need to give scientific knowledge and alternative proper arrangement for sanitary pad disposal in school campus (Figure 6 and 7).

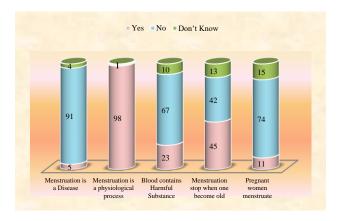


Figure 1: Knowledge regarding menstruation.

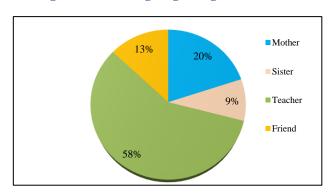


Figure 2: Source of information.

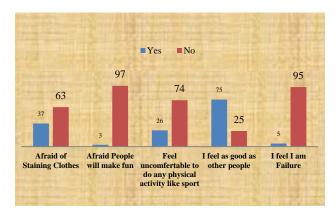


Figure 3: Attitude towards menstruation.

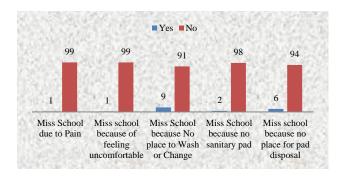


Figure 4: Reason of missing school during menstruation.

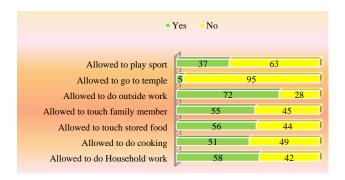


Figure 5: Socio-cultural practices.

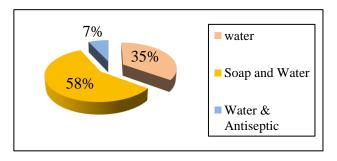


Figure 6: Materials used for cleaning genitals.

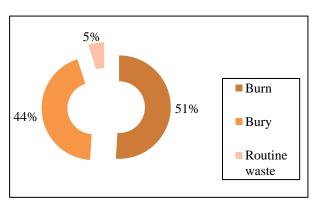


Figure 7: Methods used for adsorbent disposal.

## **DISCUSSION**

The hygiene-related practices of adolescent girls related to menstruation can have an effect on their health. The event of menarche may be associated with taboos and myths existing in our traditional society which have a negative impact on women's health, particularly their menstrual hygiene. <sup>13</sup> It was observed from current study findings that the mean age of girls was 14.9 years and the mean age at menarche was 12.9 years which is similar to the study by Bharathalakshmi et al. <sup>2</sup> Distribution of SES was as per Kuppuswamy scale.

Girls residing in ashram school were having good knowledge about the physiological process of menstruation. It was observed through current study that 98% of the girls believed that menstruation is a physiological process, whereas in a similar study of Gupta et al 86.25% believed menstruation as a physiological process.<sup>4</sup>

It was observed that teachers (58%) were the main source of information in ashram school which is similar to the study of Salve et al.<sup>14</sup> In contradiction to our findings, a study of Ramachandra et al showed that mothers are the main source of information and in a study done by Juyal et al in Uttarakhand, friends were the first source of information in 31.8% of girls.<sup>15,16</sup>

Current study findings revealed that girls from ashram school exhibited positive attitude towards menstruation and because of positive attitude percentage of missing school during menstruation phase is very less. Even though girls had good knowledge and positive attitude towards menstruation, they reported to face a lot of sociocultural restrictions during menstruation. 63% girls were not allowed to play sport, 95% girls were not allowed to go to the temple, 28% girls were not allowed to do outside work and 44% girls were not allow to touch stored food. Cooking and household activities were also restricted in 49% and 42% of girls.

It was observed in current investigation that girls were aware about importance of cleanliness during menstruation. 58 % girls were using soap and water for cleaning their genitals which is similar to the study of Thakre et al. 17 In the present study, it was observed that the use of sanitary napkin was 100% as the school provided sanitary napkin to all the menstruating girls. Other studies like Kamath et al and Ray et al showed that majority of girls (77.4 %) were using sanitary pad during menstruation. 18 Though there was 100% use of sanitary napkin during menstruation, girls did not have a clear idea about proper disposal of the same.

#### **CONCLUSION**

It was observed through current study that among the adolescent ashram school girls, the knowledge on menstruation was good and the practices were optimal for proper hygiene. A variety of factors are known to affect menstrual behaviours, the most influential ones being economic status, residential status (urban and rural), Superstition beliefs and taboos. Awareness regarding the need for information on healthy menstrual practices is

very important. It is essential to design a mechanism to address and for the access of healthy menstrual practices. Similar type of study should be conducted which will be helpful in achieving the goal of universal primary education and will also be a step towards ensuring environmental sustainability which is another millennium development goal.

#### Recommendations

It is important to train teachers at least one female teacher to provide psycho-social support to adolescent girls in school; and provide regular menstrual hygiene promotion classes in every school. Access to a clean and well-maintained toilet and availability of water and soap is essential. A secure place to store sanitary napkin between menstrual cycles. Arrangement of proper disposal of sanitary napkins should be provided. Education regarding proper disposal should be provided.

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Institutional Ethics Committee

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