Knowledge, attitude and practices regarding menstrual hygiene among adolescent school girls in Thandalam, Tamil Nadu

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Article History:
Received on: 12 Aug 2020
Revised on: 13 Sep 2020
Accepted on: 14 Sep 2020

Keywords:
Menstrual hygiene, awareness, adolescent girls, reproductive tract

ABSTRACT

The topic of menstrual hygiene has been highly stigmatised in India due to which girls tend to lack awareness regarding various scientific and practical aspects of menstruation. This lack of awareness among adolescent girls regarding menstrual hygiene can lead to negative impacts on their reproductive health. This study aimed to assess the knowledge, attitude and practices regarding menstrual hygiene among school-going adolescent girls. A cross-sectional study using a pre-validated questionnaire was conducted among 168 adolescent school-going girls and found that only 37.3% of the study participants were aware of menstruation before attaining menarche. Only 25.3% of study participants either slept or ate separately from their family members while menstruating. All participants were using sanitary pads and disposed of them after usage indicating no reuse. Proper wrapping and disposal of pads in closed garbage bins was followed by 97% of study participants. A significant association between awareness of the cause of menstruation and the higher class of study was established. Though knowledge about menstruation before attaining menarche is meagre, the practices and attitude regarding were reasonable compared to other studies, mainly attributed to awareness and help received after menarche.

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ISSN: 0975-7538
DOI: https://doi.org/10.26452/ijrps.v11iSPL4.4358

INTRODUCTION

Adolescence is a particularly important period where an individual undergoes a lot of physical, hormonal and psychological changes and a transition from childhood to adulthood occurs. Individuals between the age group, 10 – 19 years, are considered as adolescents.

India is also home to one of the largest adolescent population in the world. In girls, menstruation is one of the most important and defining aspects of attaining puberty. This underlines the importance of creating awareness and rooting out stigmas that surround menstrual hygiene.

A lack of awareness of menstrual hygiene from a young age paves the way for unsafe practices which predisposes to Genital tract infections. Hence it is the need of the hour to destigmatise menstruation and to provide accurate information regarding menstruation to girls even before they attain menarche so that they can equip safe menstrual practices.

Most of the girls receive information about menstruation from their parent, peers, teachers or media and holy books. This information can often tend to be scientifically inaccurate and lead to a vast information gap among adolescent girls which can affect their menstrual hygiene practices (Patle and Kubde,
Table 1: Knowledge of subjects regarding menstrual hygiene

| S.No | Questions                                                                 | Frequency | Percentage |
|------|---------------------------------------------------------------------------|-----------|------------|
| 1.   | Aware of menstruation before attaining menarche                           |           |            |
|      | Yes                                                                       | 56        | 37.3%      |
|      | No                                                                        | 94        | 62.7%      |
| 2.   | Source of information about menstruation                                  |           |            |
|      | mother                                                                    | 123       | 82%        |
|      | teacher                                                                   | 5         | 3.3%       |
|      | siblings                                                                  | 11        | 7.3%       |
|      | friends                                                                   | 10        | 6.6%       |
|      | Father                                                                    | 1         | 0.7%       |
| 3.   | Knows average age of attaining menarche                                   |           |            |
|      | Yes                                                                       | 141       | 94%        |
|      | No                                                                        | 9         | 6%         |
| 4.   | Was taught about menstrual hygiene in school                              |           |            |
|      | Yes                                                                       | 62        | 41.3%      |
|      | No                                                                        | 88        | 58.7%      |
| 5.   | Aware of the cause of menstruation                                        |           |            |
|      | Yes                                                                       | 56        | 37.3%      |
|      | No                                                                        | 94        | 62.7%      |
| 6.   | Thinks menstruation is a disease.                                         |           |            |
|      | Yes                                                                       | 2         | 1.3%       |
|      | No                                                                        | 148       | 98.7%      |
| 7.   | Menstruation can be accompanied by pain.                                  |           |            |
|      | Yes                                                                       | 140       | 93.3%      |
|      | No                                                                        | 10        | 6.7%       |
| 8.   | Thinks heavy physical activity during menstruation is harmful.            |           |            |
|      | Yes                                                                       | 131       | 87.3%      |
|      | No                                                                        | 19        | 12.7%      |
| 9.   | Knows how to use sanitary napkin properly                                 |           |            |
|      | Yes                                                                       | 148       | 98.7%      |
|      | No                                                                        | 2         | 1.3%       |
| 10.  | Knows how to dispose of the used sanitary napkin                          |           |            |
|      | Yes                                                                       | 148       | 98.7%      |
|      | No                                                                        | 2         | 1.3%       |
| 11.  | Aware that menstrual blood is unhygienic                                  |           |            |
|      | Yes                                                                       | 138       | 92%        |
|      | No                                                                        | 12        | 8%         |
| 12.  | Aware that nutritional diet is essential during menstruation              |           |            |
|      | Yes                                                                       | 118       | 78.7%      |
|      | No                                                                        | 32        | 21.3%      |
Also, a deep-seated taboo exists among adolescent girls regarding menstruation, and many of them have the notion that menstruation is dirty and impure. The stigma around menstruation and cultural restrictions lead to the adoption of unsafe hygiene practices and also leads to social isolation and restriction of women during menstruation in many communities (Deo and Ghattargi, 2005). These practices tend to take a toll on the physical and mental health of adolescent girls (Bharatwaj et al., 2014). Women brought up with lack of awareness regarding menstrual hygiene, tend to suffer from infections and other complaints of the reproductive tract because of unhygienic practices. Owing to the existing taboo, these women often refuse even to visit the doctor and get treated for these conditions. Therefore, educating adolescent girls about menstrual hygiene practices from a young age helps promote the adoption of safe hygiene practices and less occurrence of Reproductive tract infections in the adolescent age group and after that. Creating awareness will also alleviate the taboos and myths surrounding menstruation and allow women to discuss their issues openly without embarrassment. Hence, this study aims to assess the knowledge, attitude and practice regarding menstrual hygiene among adolescent school-going girls in Thandalam, Tamil Nadu.

### Aim and Objectives

To assess the knowledge, attitude and practice regarding menstrual hygiene among adolescent school girls in Thandalam, Tamil Nadu.

### METHODOLOGY

This is a cross-sectional study which was conducted in a school in Thandalam among adolescent girls from Grade 8 – 12 in February 2020. A pre-tested validated questionnaire was used to assess the demographic details, knowledge, attitude and practices regarding menstrual hygiene among the selected students. One hundred sixty-eight subjects were enrolled. Prior informed consent was obtained, and the objectives of the study were explained to all the subjects. Students who haven’t attained menarche and those who were not willing to participate were excluded from the study. Eighteen students were excluded because of gross incomplete data. The collected data were analysed, tabulated, and analytical comparisons were made using previously collected statistics. Association between selected variables and KAP were measured using the Chi-square test.

### RESULTS

A total student population of 168 girls were given a questionnaire. About 18 forms were rejected as they were filled incompletely. One hundred fifty forms were analysed. The study involved 150 girls with an

### Table 2: Attitude of subjects regarding menstrual hygiene

| S.No | Questions                                               | Frequency | Frequency (%) |
|------|---------------------------------------------------------|-----------|---------------|
| 1.   | Comfortable talking/discussing menstruation             | 142       | 94.7%         |
|      | yes                                                     | 142       | 94.7%         |
|      | no                                                      | 8         | 5.3%          |
| 2.   | Avoids praying/ contact with family members during menstruation | 25       | 16.7%         |
|      | yes                                                     | 25        | 16.7%         |
|      | no                                                      | 125       | 83.3%         |
| 3.   | Eats or sleeps separately during menstruation           | 38        | 25.3%         |
|      | yes                                                     | 38        | 25.3%         |
|      | no                                                      | 112       | 74.7%         |
| 4.   | Comfortable visiting doctor with complaints of the reproductive tract | 105     | 70%           |
|      | yes                                                     | 105       | 70%           |
|      | no                                                      | 45        | 30%           |
| 5.   | Follows dietary restrictions during menstruation        | 13        | 8.7%          |
|      | yes                                                     | 13        | 8.7%          |
|      | no                                                      | 137       | 91.3%         |
| 6.   | Comfortable using the school restroom for changing the sanitary napkin | 120     | 80%           |
|      | yes                                                     | 120       | 80%           |
|      | no                                                      | 30        | 20%           |
Table 3: Practices of subjects regarding menstrual hygiene

| S.No. | Questions                                                                 | Frequency |
|-------|---------------------------------------------------------------------------|-----------|
| 1.    | The material used during menstruation                                     |           |
|       | Sanitary pad                                                             | 150       | 100%      |
|       | Cloth                                                                     | 0         | 0%        |
| 2.    | Disposing of the sanitary pad/cloth                                       |           |
|       | Appropriately wrapped and disposed of in a closed garbage can             | 146       | 97.3%     |
|       | Burning                                                                   | 4         | 2.7%      |
| 3.    | Pads changed per day of menstruation                                     |           |
|       | <2 pads                                                                   | 8         | 5.3%      |
|       | 2-3 pads                                                                  | 102       | 68%       |
|       | >3 pads                                                                   | 40        | 26.7%     |
| 4.    | Washes and dries private parts every time they change the sanitary napkin |           |
|       | Yes                                                                       | 146       | 97.3%     |
|       | No                                                                        | 4         | 2.7%      |
| 5.    | Usage of soap/medicated formulae/antiseptics to wash private parts while menstruating |           |
|       | Yes                                                                       | 106       | 70.7%     |
|       | No                                                                        | 44        | 29.3%     |
| 6.    | Washes hands after handling sanitary napkins                              |           |
|       | Yes                                                                       | 150       | 100%      |
|       | No                                                                        | 0         | 0%        |
| 7.    | Uses soap/antiseptics to wash hands after handling sanitary napkin        |           |
|       | Yes                                                                       | 142       | 94.7%     |
|       | No                                                                        | 8         | 5.3%      |
| 8.    | Visits doctor when experiencing unusual symptoms while menstruating      |           |
|       | Yes                                                                       | 14        | 9.3%      |
|       | No                                                                        | 136       | 90.7%     |
| 9.    | Takes medication to relieve pain/cramps associated with menstruation      |           |
|       | Yes                                                                       | 1         | 0.7%      |
|       | No                                                                        | 149       | 99.3%     |

Table 4: Association between class of the student and awareness about cause of menstruation

| Class of student | Aware of cause | Unaware of cause |
|------------------|----------------|------------------|
| 8th – 10th       | 20             | 56               |
| 11th – 12th      | 36             | 38               |
age range between 13 years and 18 years, with an average of 15.5 years. 82.8% of girls had at least one of their parents educated, and all girls were unmarried. 64.3% of girls were from nuclear family and rest 35.7% from joint family. P-value = .005. Hence, there is a significant association between the class of the student and awareness about the cause of menstruation. P-value < .05 was considered significant.

**DISCUSSION**

Studies on KAP regarding menstrual hygiene have been conducted nationwide, and results have been recorded in the past. This study shows that only 37.3% of students were aware of menstruation before attaining menarche, similar to the study conducted in the urban area of Meerut (Katiyar et al., 2013). In the current study, 82% of students mentioned their mothers as the primary source of information regarding menstruation. In contrast, a study conducted in a rural area of Varanasi found sisters to be the primary source of information (Kumar et al., 2016) [Table 1].

But other studies in different regions also found mothers to be the main informant (Jailkhani, 2014; Thakre et al., 2011). The possible explanation might be that educated mothers and sisters may have an awareness of practice and knowledge of menstruation, and they may have provided materials for their daughters about care during menstruation. 74.7% of students admitted that they don't sleep or eat separately when they are menstruating, which demonstrates a positive attitude towards menstruation [Table 2]. This is in line with the study conducted in an urban area in Delhi, where the majority of women displayed a positive attitude in this regard (Goel et al., 2018).

In the current study, all students were using sanitary pads, and all of them disposed of the used pads. Contrary to the results in this study, a study done among adolescent school girls in a rural area in Nepal found that 94% of students used sanitary pad, but only 11.3% disposed of it (Adhikari et al., 2007). Proper wrapping and disposal of a used sanitary pad in closed garbage bin were seen in 97% of students who were found higher to a study where only 57.7% of students followed a similar disposal method (Dasgupta and Sarkar, 2008). Another study also showed similar results were 93.3% of students followed satisfactory disposal of used sanitary napkins (Madhumitha and Maiya, 2019). In the present study, only 5.3% of students changed less than two sanitary pads per day contrary to the comparative study done in a rural area of West Bengal, where, in 30.45% of girls the frequency of changing pads was only one a day (Paria et al., 2014). In the current study, good washing of genitals was seen in 97.3% students while changing sanitary napkins and 100% students practised good washing of hands while handling sanitary napkins contrary to the study done in adolescent school girls in Nepal where only 38.85% girls practised satisfactory washing of genitals (Thakre et al., 2011). This kind of hygiene practices in the present study was prevalent because of awareness created by school administration through programs and mothers and sisters [Table 3].

Also, the current study showed a significant association between the class of the student and awareness about the cause of menstruation. Girls belonging to grade 11 and 12 had significantly higher awareness about the cause of menstruation [Table 4].

**CONCLUSION**

In rural areas, due to inadequate knowledge of menstrual hygiene, many unnecessary restrictions on young girls were placed, and they face many health problems and complaints, which were either ignored or managed inappropriately. The role of the health sector was almost negligible in giving information on the management of health problems to these adolescent girls. The knowledge, awareness and practices regarding menstrual hygiene in the present study were found to be good compared to the studies conducted in different rural regions of the country. The good knowledge score could be due to the exposure of these girls to the media and awareness camps or because of the comfort level in discussing it amongst themselves. This study showed that mothers or sisters were educated enough to teach their girls regarding menstruation. A possible explanation for this similarity maybe that girls discuss menstruation and its hygiene with their friends and peers openly. The mass media play a prominent role in the dissemination of reproductive health information, including menstruation. Start of hygiene camps also plays an important role. Though this study showed good results, further research on knowledge and practice of menstruation among different schools involving both urban and rural areas and comparing them might throw more light on the subject.

**Conflict of Interest**

The authors declare that they have no conflict of interest for this study.

**Funding Support**

The authors declare that they have no funding support for this study.
REFERENCES

Adhikari, P., Kadel, B., Dhungel, S. I., Mandal, A. 2007. Knowledge and practice regarding menstrual hygiene in rural adolescent girls of Nepal. *Kathmandu Univ Med J (KUMJ)*, 5(3):382–386.

Bharatwaj, R. S., Vijaya, K., Sindu, T. 2014. Psychosocial impact related to physiological changes preceding, at and following menarche among adolescent girls. *International Journal of Clinical Surgical Advances*, 2(1):42–53.

Dasgupta, A., Sarkar, M. 2008. Menstrual hygiene: How hygienic is the adolescent girl? *Indian Journal of Community Medicine*, 33(2):77–80.

Deo, D. S., Ghattargi, C. H. 2005. Perceptions and Practices Regarding Menstruation: A Comparative Study in Urban and Rural Adolescent Girls. *Indian Journal of Community Medicine*, 30(1):1–2.

Goel, P., Kumar, R., Meena, G. S., Garg, S. 2018. Association of sociodemographic characteristics with KAP regarding menstrual hygiene among women in an urban area in Delhi. *Tropical Journal of Obstetrics and Gynaecology*, 35(2):158–164.

Jailkhani, S. M. 2014. Patterns and problems of menstruation among the adolescent girls residing in Athe Urban Slum. *Sch J Appl Med Sci*, 2(2A):529–563.

Katiyar, K., Chopra, H., Garg, S. K., Bajpai, S. K., Bano, T., Jain, S., Kumar, A. 2013. KAP study of menstrual problems in adolescent females in an urban area of Meerut. *Indian J Community Health*, 25(3):217–237.

Kumar, A., Kansal, S., Singh, S. 2016. Menstrual hygiene practices in context of schooling: A community study among rural adolescent girls in Varanasi. *Indian Journal of Community Medicine*, 41(1):39–44.

Madhumitha, M., Maiya, G. 2019. Knowledge-Attitude-And-Practice-Of-Menstrual-Hygiene-Among-Adolescent-School-Going-Girls-In-Thirumazhisai-Tamil-Nadu. *Paripex-Indian Journal of Research*, 8(11):112–114.

Paria, B., Bhattacharyya, A., Das, S. 2014. A comparative study on menstrual hygiene among urban and rural adolescent girls of West Bengal. *Journal of Family Medicine and Primary Care*, 3(4):413–417.

Patle, R., Kubde, S. 2014. Comparative study on menstrual hygiene in rural and urban adolescent girls. *International Journal of Medical Science and Public Health*, 3(2):129–132.

Thakre, S. B., Sushama, S., Thakre, Reddy, M., Rathi, N., Pathak, K. 2011. Menstrual hygiene: Knowledge and practice among adolescent school girls of Saoner, Nagpur District. *J Clin Diagn Res*, 5(5):1027–1060.