The study was done to assess the knowledge of the girls about menstruation and study practices followed, problems faced, describe facilities available in schools to help girls maintain menstrual hygiene or their lack thereof and their menstrual health needs.
ABSTRACT
RESEARCH QUESTION: The study was done to assess the knowledge of the girls about menstruation and study practices followed, problems faced, describe facilities available in schools to help girls maintain menstrual hygiene or their lack thereof and their menstrual health needs.

METHODOLOGY: The study was carried out among 325 adolescent girls, aged 12-15, studying in two urban schools of Pondicherry. Data was collected using a pre-tested self-administered structured questionnaire and analyzed with SPSS software.

RESULTS: The study showed that the general knowledge about the organ-source, cause of menstruation and effects on health were poor. The practices during menstruation were satisfactory with almost all girls using sanitary napkins and maintaining good personal hygiene. The schools in which the survey was done had good toilet facilities for the girls; however there was no facility to provide free/low-cost pads. The most common problem faced by the girls during menstruation was abdominal pain which led to lack of concentration in classes and sometimes even absenteeism from school. The main needs mentioned by the girls were creating awareness about menstruation, providing low-cost/free pads and clean toilets.

KEYWORDS: Menstrual health, adolescent girls, practices, needs assessment

INTRODUCTION
For an adolescent girl, menarche implies restrictions on her movement, fewer interactions with boys and men, and more active participation in household chores. In many parts of the developing world, a culture of silence surrounds the topic of menstruation. Ceremonies like ‘coming of age’ in the form of Manjal Neer Aatu Vizha, is popular in Tamil Nadu & Pondicherry, South India, however very little attention is paid to informing the girls about the ‘facts of life’ of Menstruation. Several misconceptions, superstitions, poor socio-economic conditions and physical infrastructure continue to influence practices related to menstruation.

In India, the Economic Survey done in 2009-2010 indicates that the Gross Enrolment Ratio (GER) at classes I-V (6-11 years) is 112.6 for girls, it falls to 74.4 in classes VI-VIII (11-14 years). A contributory factor has been the lack of adequate toilet facilities at schools, lack of access to modern menstrual hygiene products and reluctance of parents to send adolescent girls to school on account of menstrual health issues. Against this background, the study was undertaken with the objectives of studying the knowledge and practices regarding menstruation among adolescent school girls in Pondicherry, to describe facilities available in school to help adolescent girls maintain menstrual hygiene and difficulties, if any, faced by them and to study needs of adolescent girls to maintain menstrual hygiene.
METHODOLOGY
A descriptive study was done among 325 girls of classes VIII-X in two co-education schools of urban Pondicherry. Ethical clearance was obtained from the Institute Ethics Committee. Verbal consent was taken from the respective school principals. A pretested self-administered structured questionnaire was used. The girls were briefed about the purpose of the study and questionnaire was explained. Confidentiality of information was ensured. At the end of the study, a menstrual health education session was conducted in both the schools. Data was analyzed using SPSS software.

OBSERVATIONS
Age of the respondents ranged from 12 to 15, with majority of them (48.3%) being 13 years of age. Thirty percent of the mothers of the respondents had been educated till Higher Secondary level, followed by Secondary school (28%), Graduation (27%) and Primary-Middle school (7%). Age at menarche of the respondents ranged from 9 to 14, with a mean of 11.75 years.

Knowledge about menstruation
Only one-third of girls said they knew about menstruation prior to attainment of menarche. Mother was the source of information about menstruation in 66% of girls, followed by friends (16%). Only 7% girls said school teacher was the informant.

Only 38% of girls correctly answered that the uterus is the source of menstrual blood, nearly 28% had wrong ideas that urinary bladder and stomach are the organs involved in the process of menstruation. Two-third of the girls knew that menstruation is a normal part of growing up, while some (6%) held incorrect ideas that menstruation is a symptom of disease. Majority (87%) of the girls held the notion that menstruation doesn’t have any effect on health of girls.

Practices during menstruation
Almost all (94.8%) the girls surveyed said they used sanitary napkins as the absorbent material during menstruation. 2% said they reuse cloth after washing and drying it in the sun. When asked about the best absorbent material that can be used during menstruation, 88% girls said sanitary napkins. Eighty-two percent of the girls changed pads less than 3 times a day.

Facilities in school & problems faced
Both the schools in which the survey was conducted had separate toilets for girls. One-fourth of girls said their school did not have covered bins for disposal and 36% said that the bins present in the toilets were not cleared regularly. When asked about the method of disposal when bins were not present/ not cleared, the most common response was ‘keep it in a corner’, followed by ‘throw it out of the window’, ‘put it into the toilet’ and ‘take it home in a cover’.

The girls were asked what they would do if they unexpectedly get periods during school hours, 62% were found to be not equipped to deal with the situation, with responses like ‘don’t know what to do’ (9%), ‘go back home’ (8%), ‘call parents’ (3%), ‘buy a pad from nearby shops’ (3%) and ‘I will cry’ (1%). Both the schools surveyed didn’t have a facility to provide free/low-cost pads to girl students.

Problems faced in the school by the girl students were most commonly abdominal pain, followed by inability to concentrate in class. Some said they felt shy and embarrassed when boys were around; staining of dress was also a frequently encountered problem. Nearly 11%
of respondents said they absented from school during menstruation. The most common reason cited was abdominal pain.

The major felt needs of the girls were clean toilets (39.5%) and provision of low-cost sanitary napkins in schools (22.5%) Table 1.

**DISCUSSION**

The mean age at menarche in the present study was found to be 11.75 years, while earlier studies showed a range of 12.7 to 13.2 years. Nearly two-third of the girls in the present study said they did not know about the process of menstruation before their first experience. Majority identified mother as the source of information about menstruation, while school teacher was the informant in a mere 7% of girls as in earlier studies. It was found that the girls’ knowledge of anatomy and process of menstruation is poor. Older girls, expectedly, were more aware about the organ-source. Similar findings were reported by Narayan et al in a study carried out in Pondicherry. This poor knowledge can be attributed to the fact that much of the information imparted to the girl by her family members is in the form of restrictions on her movements, along with superstitions about her polluting touch; and the focus is not on telling the girl about the physiology, hygienic management of menstruation and reproductive issues. Though such information is a part of school curriculum, it is not sufficiently imparted to the girls by the teachers who feel reserved to talk explicitly about such issues.

Six percent of girls in this study were found to have wrong notion that menstruation is a symptom of disease. This erroneous information being the result of half-baked knowledge obtained from peers, uneducated mothers and television. Similar finding was reported in a study done in Nigeria.

It is a matter of great concern that majority (87%) of the girls did not know that menstruation can lead to anaemia without adequate nutrition & that infection is likely if genital hygiene is not maintained. It is imperative that adolescent girls be made aware of this fact and its consequences later in life.

Almost all (95%) the girls used sanitary napkins as the absorbent material during periods, this maybe a reflection of their socio-economic status. In this study, when asked about the best material to be used as absorbent material during periods, one respondent said ‘cloth is the best to use as it has been used by our elders for generations’. While such attitude prevails even amongst school going girls, unawareness of the community on such issues needs to be considered while planning adolescent health programmes.

It was found that 12% girls absented themselves from school during their periods; the most common reason being abdominal pain. More than physical absence, the study found that more than half the girls reported lack of concentration during classes due to constant fear of staining of dress and embarrassment. They also said difficulty in participating in Physical Education Training (PET) classes and called for more understanding from the PET instructors’ side in this aspect. The girls were found to be ill-equipped to deal with unexpected periods in school. Some measures to facilitate changing of pads in schools suggested by students included keeping dustbins, old newspapers and soap in toilet for cleaning themselves. Twenty percent of the girls asked for providing free/low-cost pads in schools.
CONCLUSIONS:
This study highlights the need for sensitivity on the part of schools to address this health issue of girls by creating awareness about menstrual hygiene, mainly with the help of lady teachers, or taking steps like providing low-cost pads to students, installing sanitary napkin vending machines and method for disposal.

REFERENCES:


Table 1 - Needs felt by the girls regarding maintenance of menstrual hygiene in school

<table>
<thead>
<tr>
<th>Needs Felt</th>
<th>Number</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating Awareness</td>
<td>34</td>
<td>18.6</td>
</tr>
<tr>
<td>Clean toilets with Dustbin &amp; water</td>
<td>72</td>
<td>39.5</td>
</tr>
<tr>
<td>Lady teachers should be more helpful</td>
<td>14</td>
<td>7.6</td>
</tr>
<tr>
<td>Low cost pads to school girls</td>
<td>41</td>
<td>22.5</td>
</tr>
<tr>
<td>Old newspapers in toilet</td>
<td>6</td>
<td>3.2</td>
</tr>
<tr>
<td>Soap in toilet</td>
<td>10</td>
<td>5.4</td>
</tr>
<tr>
<td>Teachers should not scold us for not carrying pads</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Tell us what food to take during periods</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Give time off during periods</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>No need for more facilities</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total number of responses</strong></td>
<td>182</td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>