Effectiveness of planned teaching programme on knowledge regarding menstrual hygiene among adolescent girls

Rita Thapa, Sijo Koshy, Shivangi M Patel, Shivani V Patel, Shraddha K Patel, Sina S Patel and Sonal J Patel

Abstract
Objective: The study was conducted to assess the effectiveness of planned teaching programme on knowledge regarding menstrual hygiene among adolescent girls in selected village of Waghadia taluka.
Setting: The study was conducted in selected village of Waghadia taluka.
Design: A pre experimental one group pretest post-test design was used.
Sampling technique: The samples of this study are selected by using simple random sampling technique.
Sample: The sample for present study comprises of 60 adolescent girls from selected village of Waghadia taluka.
Tools for data collection: The structured questionnaire was used as an instrument to measure the level of knowledge regarding menstrual hygiene among adolescent girls.
Findings & Results: The finding of pre-test data showed that majority 78.3% of adolescent girls had inadequate knowledge and 21.7% of the sample had moderate knowledge. Findings of post-test data showed that majority 63.3% of the sample had adequate knowledge and 36.7% of the sample had moderate knowledge. The mean post-test knowledge score (23.10) also was higher than the mean pretest score (8.97). The comparison of pretest and post-test knowledge scores of adolescent girls shows the obtained ‘t’ value 25.51 is greater than the table value at 0.05 (2.00) level of significance. Therefore ‘t’ value is found to be significant indicating that there is a significant difference between pretest and post-test knowledge of adolescent girls. Chi-square test was calculated to find out the association between the demographic variables and the level of knowledge regarding menstrual hygiene among adolescent girls of selected village of Waghadia taluka. The findings indicates that all the variables such as Educational level ($\chi^2=6.56$), Family class ($\chi^2=8.10$), Age of menarche ($\chi^2=12.50$) were found to be significant at 0.05 level of significance. Thus it can be interpreted that there is a significant association between pre-test level of knowledge among adolescent girls with their selected demographic variables such as educational level, family class, age of menarche.
Conclusion: So we can conclude that the planned teaching program on knowledge regarding menstrual hygiene has shown its impact as there is remarkable increase in the knowledge of adolescent girls regarding menstrual hygiene after providing planned teaching program.

Keywords: Assess, effectiveness, planned teaching programme, menstrual hygiene, adolescent girls

1. Introduction
Adolescence in girls has been recognized as a turbulent period which signifies the transition from girlhood to womanhood and considered as a land mark of female puberty. This transitional period is marked with the onset of “menarche” which is generally accepted by young girls, as a sign of maturity. However some girls show negative responses such as shame, fear, anxiety and depression. Onset of menstruation is one of the most important changes occurring among the girls during the adolescence.

Menstruation is amongst the most difficult topics in the study of fishy. The magnitude of this knowledge is apparent by the detriment caused by the ignorance of it. Attentiveness to these rulings is vital because of the consequences they have on rulings of purification, prayer, reading the Quran, fasting, spiritual retreat, pilgrimage, reaching puberty, marital relations, divorce, waiting period after divorce, and others. Familiarity with these rulings is essential; otherwise forbidden acts are done without even realizing it.
Need of the Study
In order to grow as women, girls have to live healthy, productive and dignified lives. Good practices are essential that they are able to manage menstrual bleeding effectively. This requires access to appropriate water, sanitation and hygiene services, including clean water for washing clothes used to absorb menstrual bleed and having a place to dry them, having somewhere private place to change clothes or disposable sanitary pads, facilities to dispose of used clothes and pads access to information to understand the menstrual cycle and how to manage menstruation hygienically.

World Health Organization estimates that each year there are over 340 million new cases of sexually transmitted infections in which 75–85% occur in developing countries. In India alone, 40 million new cases emerge each year.

Objectives
- To assess the existing knowledge of adolescent girls regarding menstrual hygiene by pre-test.
- To plan and administer the planned teaching programme.
- To evaluate the effectiveness of structured teaching programme on knowledge of adolescent girls regarding menstrual hygiene.
- To assess the association between pre-test knowledge of adolescent girls regarding menstrual hygiene with their selected socio-demographic variables

Hypothesis
$H_1$: There will be significant difference between pre-test and post-test knowledge of adolescent girls regarding menstrual hygiene.
$H_2$: There will be significant association between pre-test knowledge of adolescent girls with their selected socio-demographic variables.

Material and Methods
Research Design: One group pre-test post-test research design, which belongs to pre-experimental design, was selected for this study.

Setting: The study was conducted in selected village of Waghodia taluka.

Population: The population selected for this study consisted of adolescent girls at the selected village of Waghodia taluka was.

Sample: The sample size constitutes 60 adolescent girls, from selected village of Waghodia taluka.

Sampling Technique: The samples of this study were selected by using simple random sampling technique.

Tool for data collection: The research tool was developed in English after an extensive of literature and experts opinion it was translated in to Gujarati by language experts. A self-reported structured questionnaire was used for collection of data. Questionnaire is considered to be the most efficient and objective method which is quick and generally inexpensive means of obtaining data from large number of respondents.

Data analysis: The demographic variables were organized by using descriptive measures (frequency and percentage). The association between the level of knowledge and the selected demographic variables were assessed by chi-square test.

Finding and Results
Findings of demographic characteristics
Half of the subjects were (96.7%) in the age group of 16-18 years, followed by (3.3%) in the age group of 12-14 years. Majority of the subjects were (48.3%) primary followed by (46.7%) secondary and (5.0%) graduate. Majority of the subjects were having family class (48.3%) middle class, (26.7%) lower class, and followed by (25.0%) upper class. Majority of the subjects were age at menstruation starting (46.7%) age group of 10-12, (31.7%) age group of 12-15, (11.6%) age group of 15-18, (10%) age group of 5-10. Regards of place of living, all the subjects were (100%) living at home. Regards of source of information about the menstrual hygiene, half of the subjects were (25%) having knowledge followed by (75%) not having knowledge.

Analysis of pre-test and post-test knowledge scores of adolescent girls regarding menstrual hygiene
The finding of pre-test data showed that majority 78.3% of adolescent girls had inadequate knowledge and 21.7% of the sample had moderate knowledge. Findings of post-test data showed that majority 63.3% of the sample had adequate knowledge and 36.7% of the sample had moderate knowledge.

Effectiveness of planned teaching program on knowledge regarding menstrual hygiene among adolescent girls
Finding related to knowledge of adolescent girls regarding menstrual hygiene. reveal that the mean knowledge score of pre-test to be 8.97 and for post-test to be 23.10 with pre-test SD of 4.4 and post-test SD of 2.5 and significant increase in knowledge about menstrual hygiene with T value is 25.51 at $P <0.05$ level. The comparison of pretest and post-test knowledge scores of adolescent girls shows the obtained ‘t’ value 25.51 is greater than the table value at 0.05 (2.00) level of significance. Therefore ‘t’ value is found to be significant indicating that there is a significant difference between pretest and post-test knowledge of adolescent girls.

![Fig 1: Over all Pre-test and Post-test mean knowledge scores on menstrual hygiene.](image)

Association between Demographic variables and Pre and Post-test Knowledge level on menstrual hygiene
The findings indicates that all the variables such as Educational level ($\chi^2$=6.56), Family class ($\chi^2$=8.10), Age of
menarche ($\chi^2 = 12.50$) were found to be significant at 0.05 level of significance. Thus it can be interpreted that there is a significant association between pre-test level of knowledge among adolescent girls with their selected demographic variables such as educational level, family class, age of menarche.

**Table 1: Association between Demographic variables and Pre-test Knowledge level on menstrual hygiene**

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Sample</th>
<th>Knowledge Level</th>
<th>$\chi^2$ Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td><strong>Age group (years)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-14</td>
<td>2</td>
<td>2</td>
<td>100.0</td>
<td>0</td>
</tr>
<tr>
<td>16-18</td>
<td>58</td>
<td>45</td>
<td>77.6</td>
<td>13</td>
</tr>
<tr>
<td><strong>Educational level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>29</td>
<td>26</td>
<td>89.7</td>
<td>3</td>
</tr>
<tr>
<td>Secondary</td>
<td>28</td>
<td>20</td>
<td>71.4</td>
<td>8</td>
</tr>
<tr>
<td>Graduate</td>
<td>3</td>
<td>1</td>
<td>33.3</td>
<td>2</td>
</tr>
<tr>
<td><strong>Family class</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper</td>
<td>15</td>
<td>8</td>
<td>53.3</td>
<td>7</td>
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<tr>
<td>Middle</td>
<td>29</td>
<td>24</td>
<td>82.8</td>
<td>5</td>
</tr>
<tr>
<td>Lower</td>
<td>16</td>
<td>15</td>
<td>93.8</td>
<td>1</td>
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<td><strong>Age of Menarche (years)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-10</td>
<td>6</td>
<td>6</td>
<td>100.0</td>
<td>0</td>
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<td>10-12</td>
<td>28</td>
<td>23</td>
<td>82.1</td>
<td>5</td>
</tr>
<tr>
<td>12-15</td>
<td>19</td>
<td>16</td>
<td>84.2</td>
<td>3</td>
</tr>
<tr>
<td>15-18</td>
<td>7</td>
<td>2</td>
<td>28.6</td>
<td>5</td>
</tr>
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<td><strong>Exposure to Previous information on Menstrual hygiene</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Yes</td>
<td>15</td>
<td>12</td>
<td>80.0</td>
<td>3</td>
</tr>
<tr>
<td>No</td>
<td>45</td>
<td>35</td>
<td>77.8</td>
<td>10</td>
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<tr>
<td><strong>Combined</strong></td>
<td>60</td>
<td>47</td>
<td>78.3</td>
<td>13</td>
</tr>
</tbody>
</table>

* Significant at 5% Level, NS: Non-significant

**Conclusion**

The present study assessed the knowledge regarding menstrual hygiene among adolescent girls residing at Waghodia taluka and found that the majority of girls had inadequate knowledge related to menstrual hygiene. After planned teaching programme on immunization there was significant improvement on knowledge of the adolescent girls regarding menstrual hygiene. The study concluded that the planned health education programme was effective in improving knowledge of adolescent girls regarding menstrual hygiene.

**References**

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