A descriptive study to assess the effectiveness of planned health teaching programme on menstrual hygiene among adolescent girls in selected community area

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Abstract

Introduction: Adolescence is a transitional phase of growth and development between childhood and adulthood. The world health organization (WHO) defines an adolescent as any person between ages 10 & 19. This age range falls within WHO’s definition of young people, which refers to individuals between ages 10 and 24.

Aim: The aim of the study was to assess the effectiveness of planned health teaching among adolescent girls in selected community area.

Method: A quantitative approach with descriptive research design was adopted for the present study. A non-equivalent pre-test post-test control quasi experimental research design was used. Simple random sampling techniques were used and sample size is 60. Among that 30 samples were in experimental group and 30 were control group. A self – structured questionnaire was used to collect the demographic data and the existing level of knowledge on menstrual hygiene among adolescent girls.

Result: In that 80% in experimental group had inadequate knowledge in pre-test after planned health teaching only 4% had inadequate knowledge in post-test. There was significant improvement in mean post-test knowledge score (12.13) in experimental group which was higher than that of the control group (5.83) (t value = 8.52, \( p < 0.05 \)). Also 66.6% adolescent girls in experimental group had poor practice in pre-test, after planned health teaching 33.3% had good self-reported practices and 50% had moderate practices in experimental group. There was an improvement in mean post-test practices score of the experimental group (6.6) which was higher than mean post-test practice score (3.37) in control group (t value = 7.83, \( p < 0.001 \)). There was a highly significant positive relationship between the post-test level of knowledge and the post-test level of practice of adolescent girls. The obtained ‘r’ value was 0.54 is significant at 0.05 level.

Conclusion: Hence the findings of the present study concluded that, planned health teaching programme is an effective teaching strategy in improving the knowledge and practices of adolescent girls related to menstrual health.

Keywords: Effectiveness, planned health teaching programme, knowledge, menstruation

Introduction

Menarche is a milestone in a woman’s life as it denotes the start of reproductive capacity. Unfortunately, however, there is gross lack of information on menstrual preparedness and management among adolescent girls, a situation made worse by the shyness and embarrassment with which discussions about menstruation is treated [1]. Adolescence in girls signifies the transition from girlhood to womanhood. Good menstrual hygiene is crucial for the health, education, and dignity of girls and women [2].

WHO has defined Adolescence as the period between 10-19 years of life. 1 Adolescent girl constitute about 1/5th total female population in the world. Adolescence in girls has been recognized as a special period which signifies the transition from girlhood to womanhood [3]. Good hygienic practices such as the use of sanitary pads and adequate washing of the genital area are essential during menstruation. Women and girls of the reproductive age need access to clean and soft, absorbent sanitary products which can in the long run, protect their health. Hygiene-related practices of women during menstruation are of considerable importance, as it has a health impact in terms of increased vulnerability to reproductive tract infections [3]. Adolescent girls often lack knowledge regarding reproductive health including menstruation which can be due to socio-cultural barriers in which they grow up. These differences create various problems for the adolescent girls. The need of the hour for girls is to have the information, education and an enabling environment to cope with menstruation issues [4].
Menstruation is a physiological phenomenon which is unique to females that begins in adolescence. It is monthly uterine bleeding for 4-5 days coming regularly every 28 days. Normally females get 13 menses in a year and around 400 menses in her reproductive life. The first menstruation is termed as “menarche”. The age of menarche is between 10-16 years in India [3].

Menstrual hygiene management should be an imperative part of healthcare. The United Nations defines adequate menstrual hygiene management as “women and adolescent girls using a clean menstrual management material to absorb or collect blood that can be changed in privacy as often as necessary for the duration of the menstruation period, using soap and water for washing the body as required, and having access to facilities to dispose of used menstrual management materials” [6].

Knowledge about menstruation and menstrual hygiene is critical to the dignity and well-being of girls and women in genera. Regardless of culture, age, and marital status, adolescents need basic, accurate and complete information as regards their body structure and functions, as well other sexual and reproductive health issues. Poorly informed choices and practices have potential for long-term deep negative effects on their reproductive health [7]. Adolescence is a phase of rapid growth and development during which time, physical, physiological, and behavioural changes occur. They constitute more than 1.2 billion worldwide [8]. Poor menstrual hygiene practices influence school girls’ dignity, well-being and health, school-absenteeism, academic performance, and school dropout in developing countries [9].

Methods and materials
A quantitative research approach with quasi experimental research design was used to conduct the study. After obtaining ethical clearance the formal permission was obtained from the village panchayat officer. 60 samples were recruited by using simple random sampling technique in which 30 of them were in control group and 30 were in experimental group. The criteria for sample selection was adolescent girls who between the age group of 12-15 years and had attained menarche and the exclusion criteria for the study participants were adolescent girls who are not able to read Tamil and English. A self-structured questionnaire was used to assess the menstrual hygiene and reassessed after intervention and the data was analysed using descriptive and inferential statistics.

Results and discussion
Section - A: Description of the demographic variables of experimental and control group: Among the 60 samples regarding to Age in years of 93.3% of adolescent girls in experimental group and 93.3% of adolescent girls in control group were between 12-13 years. With regard to age at menarche of the adolescent girls that 76.7% in experimental group and 53.3% of adolescent girls in control group were between 10-12 years. With regards to the educational status majority of adolescent girls that is 53.3% in experimental group and 40% in control group had studied in 9th and 8th std. Regarding educational status of the parents 46.7% in experimental group had illiterate, 36.7% of the parents in control group had elementary education. With regards to the occupation of the parents 86.7% in experimental group and 90% parents in control group were coolies. With regard to the family income of the adolescent girls 70% in experimental group and 83.3% of adolescent girls family monthly income in control group were being below 8000. With regard to the religion of the adolescent girls 86.7% in experimental group and 66.7% adolescent girls religion is Hindu in control group. Any prior information regarding menarche of the adolescent girls depicted that 80% in experimental group and 83.3% of adolescent girls in control group were not aware about prior information regarding menarche.

Section - B: Assessment of pretest level and posttest level of knowledge on menstrual hygiene, among the experimental and control group.

Table 1: Frequency and percentage distribution of pretest level and posttest level of knowledge on menstrual hygiene, among the experimental and control group

<table>
<thead>
<tr>
<th>Level of knowledge</th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate</td>
<td>24 (80%)</td>
<td>22 (73.3%)</td>
</tr>
<tr>
<td>Moderately adequate</td>
<td>6 (20%)</td>
<td>8 (26.7%)</td>
</tr>
<tr>
<td>Adequate</td>
<td></td>
<td>30 (100%)</td>
</tr>
</tbody>
</table>

The table 1 show that in the pre-test only a less number of participants (20%) had moderately adequate knowledge and majority (80%) had inadequate knowledge in experimental group whereas the participants (26.7%) had moderately adequate knowledge and nearly all participants (73.3%) had inadequate knowledge in the control group. In the post-test (30%) participants had adequate knowledge, more than half (56.7%) had moderate knowledge and less number of participants (13.3%) had inadequate knowledge in experimental group whereas nearly half (26.7%) had moderately adequate knowledge and majority (73.3%) inadequate knowledge in the control group.

Fig 1: Distribution of adolescent girls based on pre test post test level of knowledge in experimental group

Fig 2: Distribution of adolescent girls based on pre test post test level of knowledge in control group
Section - C

Table 2: Comparison of mean pre-test knowledge score and mean post-test knowledge score of adolescent girls in experimental group.

<table>
<thead>
<tr>
<th>Test</th>
<th>N</th>
<th>Mean</th>
<th>M.D</th>
<th>SD</th>
<th>“t” Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre test</td>
<td>30</td>
<td>5.8</td>
<td>6.33</td>
<td>2.6</td>
<td>10.77</td>
</tr>
<tr>
<td>Post test</td>
<td>30</td>
<td>12.13</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 predicts that the mean post-test knowledge score of the adolescent girls (12.13) is higher than their mean pre-test knowledge score (5.8). The obtained ‘t’ value at df (6.33) is (10.77) which is highly significant at 0.001 level. Since the obtained ‘t’ value is higher than the table value, the researcher rejects the null hypothesis and accepts the research hypothesis.

The finding shows that the planned health teaching programme has a significant effect in increasing the level of knowledge of adolescent girls regarding menstrual health.

Section – D

Table 3: Comparison of mean post-test knowledge score of adolescent girls in experimental group and mean post-test knowledge score in control group.

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
<th>&quot;t&quot; Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>12.13</td>
<td>3.5</td>
<td>8.52</td>
</tr>
<tr>
<td>Control group</td>
<td>5.83</td>
<td>2.04</td>
<td></td>
</tr>
</tbody>
</table>

To find out if there is any difference between the mean post-test level of knowledge of adolescent girls in experimental group who had received planned health teaching programme and the post-test level of knowledge in control group.

Section - E

There will be no association between pre-test knowledge score among adolescent girls who had received video assisted teaching programme regarding menstrual health and selected demographic variables such as age in years, age of menarche, educational status of the student, educational status of the parents, occupation of parents, type of family, family monthly income, religion, any prior information regarding menstruation.

Present study findings are supported by Anushree et al. (2013) had done a descriptive survey approach study on menstrual hygiene among adolescent girls in Mangalore. The finding of the study revealed that there was significant association between the level of knowledge in religion ($p<0.05$) and the mother occupation ($p<0.05$). There was no significant association between the level of knowledge related to menstrual hygiene in age, education, family type, occupation of the father, family income, age at first menstruation, pre-existing knowledge and source of information ($p>0.05$). This study supports the finding of the present study [10]. There was no significant association between the pre-test level of knowledge and demographic variables such as age in years, age of menarche, educational status of the student, educational status of the parents, occupation of parents, type of family, family monthly income, religion, any prior information regarding menstruation except educational status of the student.

Conclusion

The findings of the present study revealed that, level of knowledge on menstrual hygiene among adolescent girls was inadequate and moderate and after the intervention, knowledge improved significantly and conclude that health education about menstruation and menstrual hygiene should be incorporated in each school’s curriculum so that students can manage their menstruation hygienically.

Acknowledgement

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Conflict of interest

Authors declare no conflict of interest.

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References