A pre-experimental study to find out an impact of constructive teaching program on knowledge regarding reproductive health among rural adolescent girls

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Abstract
Background: Good reproductive health is a state of complete physical, mental and social well-being in all matters relating to the reproductive system. Human beings are beings, it means human beings are capable to reproduce and able to maintain reproductive health.

Objective-1: To assess the existing knowledge regarding reproductive health among rural adolescent girls by giving pre-test. 2) To implement the constructive teaching program (CTP). 3) To evaluate the effectiveness of constructive teaching program regarding reproductive health by giving posttest. 4) To find out an association between pre-test knowledge scores of rural adolescent girls regarding reproductive health with their selected demographic variables.

Material and Methods: A study was conducted to assess the effectiveness of constructive teaching program on knowledge regarding reproductive health among 30 adolescent girls of selected rural PU colleges of Dharwad district. The research design used for the study was pre-experimental, one group, pre-test, post-test design. The demographic Performa were collected from the rural adolescent girls by using structured knowledge questionnaire. Data obtained in these areas were analyzed using descriptive and inferential statistics.

Results: The study revealed that, in pre-test the knowledge scores of rural girls were 23.34% had good knowledge, 50% of them had an average knowledge and 26.6% of them had poor knowledge. Where as in post test, 100% of them had an excellent awareness and none of them belonged to the category of neither an average nor poor. The paired ‘t’ value was 27.5* which was more than that of value of tabulated. Hence the formed hypothesis was accepted.

Conclusion: So the study proved and concluded that the constructive teaching program was an excellent tool in improving the knowledge of rural adolescent girls.

Keywords: Reproductive health, knowledge, rural adolescent girls, constructive teaching program

Introduction

“Throw away all weakness, Tell your body that it is strong, Tell your mind it is strong and have unbounded faith and hope in yourself”

- Swami Vivekananda

Adolescence, an age of opportunity. An adolescent is defined as an individual aged between 10-19 years by the UN. Adolescent period is unique period where there is physiological, psychological, social, emotional, adaptation. Adolescents are considered as demographic force. More than 22% of India’s population is in the adolescent age group of 10–19 years, 12% are in the 10–14 year age group and 10% in the 15–19 year age group. Adolescents are adjusting to new body image, starting the process of separating from their parents and recognizing that they have a separate identity. The adolescents thinking and behavior are strongly affected by peers and these thinking and behavior patterns will lead to high risk behavior among adolescent girls which have adverse effect on the overall development and well-being of youth, or that might hinder their future success and development. The high risk behavior includes both immediate physical injury as well as behavior with cumulative negative effects these includes having antisocial romantic partners, becoming pregnant and giving birth as teen, anxiety, depression, eating disorder, drug use, delinquency, and violence which have serious effects on their reproductive health. They lack knowledge in taking care of their reproductive health.
Good reproductive health is a state of complete physical, mental and social well-being in all matters relating to the reproductive system. Human beings are beings, it means human beings are capable to reproduce and able to maintain reproductive health.

**Problem statement.**
“A pre-experimental study to find out an impact of constructive teaching program on knowledge regarding reproductive health among rural adolescent girls”.

**Objectives of the study**
1. To assess the existing knowledge regarding reproductive health among rural adolescent girls by giving pre-test.
2. To implement constructive teaching program (CTP).
3. To evaluate the effectiveness of constructive teaching program regarding reproductive health by giving post-test.
4. To find out an association between pre-test knowledge scores of rural adolescent girls regarding reproductive health with their selected demographic variables.

**Hypotheses**
*H*₁: The mean post-test knowledge scores of rural adolescent girls of selected Pre University colleges regarding reproductive health who will be exposed to CTP will be significantly higher than the mean pre-test knowledge scores at 0.05 level of significance.

*H*₂: There will be statistical association between pre-test knowledge scores of rural adolescent girls regarding reproductive health who have been exposed to CTP with their selected demographic variables at 0.05 level of significance.

**Materials and methods**
- **Research approach:** Evaluative research approach.
- **Research design:** Pre-experimental, one group pretest, posttest.
- **Variables under study:**
  - **Independent variable:** Constructive Teaching Program on reproductive health.
  - **Dependent variable:** Knowledge of rural adolescent girls regarding reproductive health.
  - **Research setting:** Rural Government PU College, Byahatti, Dharwad district.
  - **Research population:** The target population of the study was rural adolescent girls from rural PU College.
  - **Sample:** rural adolescent girls from Government PU College, Byahatti, Dharwad district were selected.

**Sample size**
- **Sample:** 30 rural adolescent girls from rural Pre-University College.
- **Sampling technique:** probability: Simple random sampling technique.

**Criteria for selection of samples**
The criteria for selection of samples in this study involves

- **Inclusion criteria**
  - Present during the time of data collection.
  - Willing and interested to participate
  - Who knows English and Kannada language

- **Exclusion criteria**
  - Rural adolescent girls who were sick during the time of data collection.
  - Who were not at all co-operative during the research data collection.

**Description of the tool**
**Section-I: Socio-Demographic Data**
**Section-II:** Structured Knowledge Questionnaire which contains totally 48 items, and those were in turn divided under the following parts.
- **Part A:** 04 items constructed based on introduction to adolescent.
- **Part B:** 05 items were on anatomy and physiology of female reproductive system.
- **Part C:** 10 items prepared on menstrual health and hygiene.
- **Part D:** 06 items were plotted based on high risk sexual behaviors.
- **Part E:** 10 items were prepared on Sexually Transmitted Diseases (STDs and Reproductive Tract Infections (RTIs).
- **Part F:** 09 items were constructed on the bases of pregnancy/conception.
- **Part G:** 04 items were prepared as regards with importance of Nutrition.

**Results**
The data presented under the following sections:
- **Section I:** Distribution of sample characteristics according to demographic variables of respondents.
- **Section II:** Analysis and interpretation of knowledge scores of subjects regarding Reproductive health.
- **Section III:** Testing hypotheses.

**Table 1:** Frequency and percentage distribution of rural adolescent girls according to their socio-demographic variables

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Demographic Variables</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Age (In Year)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. 17 years</td>
<td>11</td>
<td>36.66</td>
<td></td>
</tr>
<tr>
<td>b. 18 years</td>
<td>13</td>
<td>43.34</td>
<td></td>
</tr>
<tr>
<td>c. 19 years</td>
<td>06</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Course of the study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. P.U.C I Year</td>
<td>13</td>
<td>43.44</td>
<td></td>
</tr>
<tr>
<td>b. P.U.C II Year</td>
<td>17</td>
<td>56.66</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Religion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Hindu</td>
<td>23</td>
<td>76.66</td>
<td></td>
</tr>
<tr>
<td>b. Muslim</td>
<td>06</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>c. Christian</td>
<td>01</td>
<td>3.34</td>
<td></td>
</tr>
</tbody>
</table>
Section II: Analysis and interpretation of knowledge scores of subjects who have exposed to Constructive Teaching Program regarding reproductive health

Table 2: Mean, median, mode, standard deviation and range of knowledge score of subjects regarding reproductive health

<table>
<thead>
<tr>
<th>Area of Analysis</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Standard Deviation</th>
<th>Range (H-L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>3.88</td>
<td>13</td>
</tr>
<tr>
<td>Post-test</td>
<td>36.7</td>
<td>38</td>
<td>38</td>
<td>4.34</td>
<td>17</td>
</tr>
<tr>
<td>Difference</td>
<td>20.7</td>
<td>22</td>
<td>22</td>
<td>0.46</td>
<td>04</td>
</tr>
</tbody>
</table>

Graph 1: Column dividend graph showing Mean, Median, Mode, Standard deviation and Range of rural adolescent girls
Table 3: Frequency and percentage distribution of knowledge scores of subjects regarding Reproductive health

<table>
<thead>
<tr>
<th>Knowledge score</th>
<th>Pre-test</th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>Good</td>
<td>07</td>
<td>23.34%</td>
</tr>
<tr>
<td>Average</td>
<td>15</td>
<td>50%</td>
</tr>
<tr>
<td>Poor</td>
<td>08</td>
<td>26.66%</td>
</tr>
</tbody>
</table>

Graph 2: The cone diagram represents the distribution of the subjects according to their level of knowledge scores

Section III: Testing of hypotheses

H₁: The mean post-test knowledge scores of rural adolescent girls of selected Pre University colleges regarding reproductive health who will be exposed to CTP will be significantly higher than the mean pre-test knowledge scores at 0.05 level of significance.

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean difference (d)</th>
<th>Standard error of difference</th>
<th>Paired 't' Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Girls</td>
<td>20.7</td>
<td>1.05</td>
<td>25.75*</td>
</tr>
</tbody>
</table>

* Significant at 0.05 level

H₂: There will be statistical association between pre-test knowledge scores of rural adolescent girls regarding reproductive health with their selected demographic variables at 0.05 level of significance.

The calculated chi-square values were greater than the table value in two variables those were, Occupation of Father and Age at Menarche. Hence in these two variables there was statistical association. Hence H₂ was accepted. Where as in the variables like age, Course of the study, Religion, Educational Status of the Mother, Educational Status of the Father, Occupation of Mother and Source of Information, the calculated chi-square value was lesser than the table value. Hence H₂ was rejected in these variables.

Discussion

The overall pretest knowledge scores of rural adolescent girls revealed that majority of subjects 15 (50%) had an average knowledge, 08 (26.66%) had poor knowledge and 07 (23.34%) had good knowledge in pre-test, where as in post-test, all 30 (100%) of them had good knowledge regarding reproductive health. The facts analyzed were found matched with to the findings of the research under taken by Dasgupta A, Sarkar M, who observed that most of the adolescent girls 81(84.4%) had poor knowledge, 15 (15.6%) had average knowledge and none of them had good knowledge regarding reproductive health in pretest, where as in posttest, majority 89 (92.7%) of the subjects had awesome grasping power, 06 (6.25%) held with a mainstream insight and 1(1.04%) had poor knowledge.

Recommendations

On the basis of study findings the following recommendations have laid:
- A same kind of quest can be carried out for huge study representatives for a lengthier period of time; hence broader generalizations would be done.
- A similar audit study would be replicated in different settings.
- A similar study can be conducted on attitude of rural adolescent girls towards selected aspects of reproductive health.
- A comparative study can be done between rural High school and PUC girls.
Conclusion
Based on the findings of the study, the following conclusions were drawn

1. The overall general pre-test knowledge level regarding reproductive health was an average among the rural adolescent girls.

2. The post-test knowledge scores of girls who were exposed to constructive teaching program showed significantly improvement in the level of knowledge regarding reproductive health.

3. The overall information from the study suggested that constructive teaching program was more.

References


