Effectiveness of planned teaching programme on pre-eclampsia for primigravida women in a selected community at Mangalore

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Abstract:
A study to assess the effectiveness of planned teaching programme on pre-eclampsia for primigravida women in a selected community at Mangalore was undertaken with 30 samples. The research approach was pre-experimental approach with one group pre-test post-test design. Purposive sampling technique was used to select the samples. The study findings revealed that in the pre-test knowledge assessment the mean percentage of response was (32.23%) and in the post-test the mean percentage was (84.9%). Further effectiveness of planned teaching programme was tested by inferential statistics using paired “t” test. A very significant (P< 0.001) difference was found between pre-test and post-test knowledge scores of the respondents indicating an increase in knowledge after planned teaching programme. Thus, planned teaching programme was found to be effective in improving the knowledge of primigravida women regarding pre-eclampsia.

Key words: Primigravida, Pre-eclampsia, Planned teaching programme

Introduction:
According to World Health Organization estimates, about 5,10,000 maternal deaths occurred globally during year 2002. In India, the maternal mortality rate as per the annual report (2000) is 407 per 100,000 live births. The maternal mortality rate in India due to direct obstetric complications is 80% of which eclampsia accounts for 12% of deaths. Hypertension is one of the common medical complications of pregnancy and contributes significantly to maternal and perinatal morbidity and mortality. The identification of this clinical entity and effective management play a significant role in the outcome of pregnancy both for the mother and the baby. In the developing countries with inadequately cared pregnancy, this entity on many occasions remains undetected till major complications supervene. Pregnancy induced hypertension is recognized as the leading cause of maternal mortality. Pre-eclampsia is one of the hypertensive disorders of pregnancy; pre-eclampsia cannot be entirely prevented but can be halted at a mild stage by quality antenatal care. The early recognition of elevated blood pressure in pregnancy has been noted as the most critical step in preventing maternal deaths associated with pre-eclampsia and eclampsia. Early detection of hypertension and appropriate management of the pregnancy may improve the outcome for both the mother and the foetus.

The objectives of the study were-
- To determine the knowledge of primigravida women regarding pre-eclampsia as measured by structured knowledge questionnaire.
- To conduct a planned teaching programme on pre-eclampsia for primigravida women.
- To evaluate the effectiveness of planned teaching programme on pre-
eclampsia for primigravida women in terms of gain in knowledge score.

Materials & Methods:

Hypothesis was tested at 0.001 level of significance

\( H_1 \): The mean post-test knowledge score of primigravida women will be significantly higher than the mean pre-test knowledge score.

Conceptual framework-
The conceptual framework was based on the critical thinking of nursing practice with Orem’s self-care deficit theory, which emanates from four cognitive structural operations, that is diagnostic, prescriptive, regulatory and control operations/phase.

Methodology:

- **Research Design**: One group pre-test post-test design with pre-experimental approach.

- **Population**: Primigravida women who visited the Primary Health Centre.

- **Sample and Sampling technique**: The sample consisted of 30 primigravida women who visited the Primary Health Centre of Kuppepadavu community and were selected by using purposive sampling technique.

- **Setting**: Primary Health Centre that belonged to the Kuppepadavu community area.

Description of the tool:

- **Part I**: Consisted of demographic data (6) items

- **Part II**: Consisted of structured knowledge questionnaire on pre-eclampsia (30) items

Section A : Meaning and risk factors of pre-eclampsia

Section B : Signs and symptoms and complications

Section C : Diagnostic measures and antenatal care-high risk for pre-eclampsia

Process of data collection:
The pre-test was conducted on thirty primigravida women using structured knowledge questionnaire. The time taken to conduct the pre-test was 25 minutes. The planned teaching programme was conducted on the same day respectively. The duration of each session was one hour and the post-test was conducted on the seventh day to evaluate the effectiveness of planned teaching programme.

Results:

Descriptive and inferential statistics were used for data analysis.

- Findings of the demographic variables revealed that highest percentage (77%) of the samples belonged to the age group of 20-27 years, (63%) were Muslims, (60%) had primary education, (67%) were housewives, and (57%) had a monthly income of Rs. 1000-2000.

- In the pre-test, the highest percentage (63%) of the samples had poor knowledge and only (37%) had average knowledge regarding pre-eclampsia.

- The mean percentage of knowledge score in the pre-test was (32.23%) with mean + SD of 9.67 ± 3.79 and the mean percentage of knowledge score in the post-test was (84.9%) with mean + SD of 25.47 ± 2.46.

The data presented in the Table I shows the mean percentage of the knowledge score of the pre-test and post-test. It reveals an increase of (52.67%) in the total mean percentage of knowledge scores of
the primigravida women regarding pre-eclampsia. The findings from the Table II revealed that, the mean post-test score of primigravida women was significantly higher than the mean pre-test score. The calculated “t” value was greater than the table value. Therefore, it is concluded that the gain in knowledge of primigravida woman through planned teaching programme was very highly significant.

**Discussion:**
The following recommendations can be made from this study-

**Table I:** Area-wise mean, SD and mean percentage of pre-test and post-test knowledge scores of primigravida women in selected areas of pre-eclampsia (N=30)

<table>
<thead>
<tr>
<th>Areas</th>
<th>Max: Possible-score</th>
<th>Pre-test(X)</th>
<th>Post-test(Y)</th>
<th>Effectiveness (Y-X)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaning and risk factors</td>
<td>10</td>
<td>3.83±1.15</td>
<td>8.93±1.41</td>
<td>5.10±1.47</td>
</tr>
<tr>
<td>Signs and symptoms and Complications</td>
<td>9</td>
<td>2.37±1.56</td>
<td>7.57±0.94</td>
<td>5.20±1.42</td>
</tr>
<tr>
<td>Diagnostic measures and antenatal care-high risk for pre-eclampsia</td>
<td>11</td>
<td>3.47±1.76</td>
<td>8.97±1.09</td>
<td>5.50±1.58</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30</td>
<td>9.67±3.79</td>
<td>25.47±2.46</td>
<td>15.80±2.42</td>
</tr>
</tbody>
</table>

**Table II:** Significance of difference between the pre-test and post-test knowledge scores of primigravida women regarding pre-eclampsia (N=30)

<table>
<thead>
<tr>
<th>Areas</th>
<th>Mean effectiveness</th>
<th>“t” Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaning and risk factors</td>
<td>5.10</td>
<td>18.9*</td>
</tr>
<tr>
<td>Signs and symptoms and complications</td>
<td>5.20</td>
<td>20.0*</td>
</tr>
<tr>
<td>Diagnostic measures and antenatal care-high risk for pre-eclampsia</td>
<td>5.50</td>
<td>20.3*</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15.80</td>
<td>35.89*</td>
</tr>
</tbody>
</table>

*VHS: Very highly significant ; P<0.001; Table value t(29) = 3.66 at 0.1% level
A study can be replicated on a large sample with a control group.
A comparative can be conducted in rural and urban settings.
A similar study can be conducted in a hospital setting.

**Implications:**

**Nursing service**-
Planned teaching programme can be used as a teaching strategy in the hospitals as well as in the community; so that the antenatal women are aware of pre-eclampsia.

**Nursing education**-
Every student should be motivated to provide care and opportunities must be provided during the training to plan and conduct health education for antenatal women on pre-eclampsia.

**Nursing administration**-
Nursing administrators can encourage the higher authorities to establish the outreach programmes in the community to improve the knowledge on pre-eclampsia.

**Nursing research**-
There is a need for extended and extensive nursing research in the area of mothers education especially clients at risk for pre-eclampsia.

**Conclusions:**
The study revealed that the planned teaching programme was highly effective in improving the knowledge of primigravida women on pre-eclampsia.

**References:**