Effectiveness of structured teaching programme on knowledge regarding management of self among primigravida mothers with pregnancy induced hypertension

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Abstract
The present study was conducted to evaluate the effectiveness of structured teaching programme on knowledge regarding management of self among primigravida mothers with pregnancy induced hypertension and receiving care at selected hospitals, in Chennai. A quasi experimental research design with one group pretest post test design was adopted for the study. Sixty primigravida mothers attending the antenatal OPD was selected using non probability convenience sampling technique. Data was collected using structured interview schedule for assessing the knowledge of primigravida mothers regarding pregnancy induced hypertension. The data was analyzed using descriptive statistics and inferential statistics like t test and chi – square test. The findings of the study revealed that there was a significant increase in the overall knowledge regarding management of self with pregnancy induced hypertension among primigravida women after the structured teaching programme at $P < 0.05$ level of significance. Hence the study concluded that providing health awareness to the primigravida women was to found to be effective in enhancing the knowledge of the antenatal mothers in creating awareness about the condition, helps to identify the warning signs of pregnancy induced hypertension by managing themselves and helps them in preventing the complications to the fetus.

Keywords: Pregnancy induced hypertension, structured teaching programme, management of self

Introduction
Pregnancy is one of the most wonderful and noble services imposed by nature. Most of the women may not have many problems during pregnancy, but the unlucky ones, face problems related to pregnancy and child birth. In developing countries, pregnancy and child birth are some of the leading causes of death for women in reproductive age group. Yet, the fate of these women and children is too often overlooked or ignored. The concept of “make every mother and child count” reflects the reality that today, government and the international community needs to make the health of the women and children the top priority.

Pregnancy induced hypertension is ominous; pregnancy specific disease, most often associated with severe maternal complication, is a high risk for the fetus. The incidence of Pregnancy induced hypertension is about 5 – 15% of all pregnancies. UN Millennium Summit 2006 states that about 12% of maternal death is due to Pregnancy induced hypertension. Though no perfect remedy is available at present, it is possible to minimize these hazards on the mother and the developing fetus by early detection and prompt action. Most of the complications related to Pregnancy induced hypertension are occurring due to maternal negligence or unawareness of the disease and its management. Management of self offers a real potential for improving their health and thus helps to prevent the severe form of Pregnancy induced hypertension at a reduced health cost. Management of self would be the most effective and appropriate approach to enhance both maternal and fetal well being, as well as the successful outcome of pregnancy. Early identification and education about the warning signs of Pregnancy induced hypertension is important in order to initiate early treatment and to prevent worsening of the disease.

With this background the present study was undertaken to determine the effectiveness of structured teaching programme on the knowledge of primigravida mothers regarding pregnancy induced hypertension.
Objectives
The study sought to a) to assess the existing knowledge regarding management of self among primigravida mothers with pregnancy induced hypertension and receiving care. b) to assess the knowledge regarding management of self among primigravida mothers with pregnancy induced hypertension and receiving care, after the structured teaching programme. c) to compare the pre and post teaching knowledge scores regarding management of self among primigravida mothers with pregnancy induced hypertension and receiving care with selected demographic variables. d) to associate the knowledge scores regarding management of self among primigravida mothers with pregnancy induced hypertension and receiving care with selected demographic variables.

Review of literature
For the present study the review was done under three headings:

Review related to pregnancy induced hypertension
Review related to management of self with pregnancy induced hypertension
Review relate to the effectiveness of structured teaching programme

Bobak and Jensen (2017) \(^1\) defined pregnancy induced hypertension as the development of hypertension after twenty weeks of gestation in a previously normotensive woman without signs of proteinuria or edema. Pilliterri (2016) reported that pregnancy induced hypertension tends to occur more frequent in primigravida mothers less than 20 years and above 30 years, in low socio economic status (due to poor nutrition).

Omule et al. (1996) conducted a comparative study to find out the association between pregnancy induced hypertension and the maternal; mortality and morbidity among 224 pregnant hypertensive and 224 normotensive samples. The study findings concluded that the incidence of pregnancy induced hypertension was 4.9 % and it lead to more hospitalization, intra uterine growth restriction and more number of operative deliveries than the normotensive controls.

Adle Pilliterri (2017) states that regular antenatal care is directed towards the prevention and early detection of pregnancy induced hypertension. Periodic weight checking, monitoring blood pressure, salt restricted diet and detection of edema in the antenatal period helps in the prevention of pregnancy induced hypertension. Good nutrition, sufficient rest and weight control can help to minimize the severity.

Redman & Barbara Kelly (2000) \(^5\) stated that the key principles underpin good midwifery care of every pregnant woman, including a sound knowledge base, meeting the woman’s needs and enhancing care. Normal antenatal care with regular measurement of blood pressure remains the mainstay of screening for hypertension in pregnancy. The midwives role is that of accurate assessment and communication of when to detect the warning signs of hypertension.

Jeyalakshmi (2000) conducted a study to assess the effectiveness of the structured teaching programme on the management of discomforts among primigravida and multigravida mothers in Chennai. The samples were sixty antenatal mothers. One group pre and post test with control group design was adopted for the study. The findings of the study concluded that the structured teaching programme was found to be effective in the development of thinking capacity of the antenatal mothers and helps them to take wiser decisions when needed.

Leeners B, Rath W et al. (2006) conducted a study to examine the satisfaction report with the medical information provided by their health care providers among 620 mothers with pregnancy induced hypertension. Of them 68.6% of the women were not satisfied by the information provided by the health care personnel. They stated that they should be informed about the disease and its potential complications as early as possible. They also concluded that health counseling is their utmost need during this condition. Hence it was concluded structured teaching programme by the midwives is very essential for the antenatal mothers with pregnancy induced hypertension.

Materials and Methods
The study adopted the conceptual framework based on general systems theory by Von Bertalanffy based on the input, throughput and the output model of care. A quantitative evaluative approach was selected for the study. Quasi experimental one group pretest post test design was adopted for the study. Sixty primigravida mothers attending the antenatal OPD was selected using non probability convenience sampling technique.

Criteria for sample selection
Primigravida mothers who are
- With pregnancy induced hypertension who are above 20 and less than 36 weeks of gestation.
- Attending the OPD for the second antenatal visit and above.
- Can understand Tamil or English.

The selection and development of the tool consists of the following sections
Section A: it consists of questions seeking details of demographic data.
Section B: it consists of structured questionnaires to assess the knowledge regarding the management of self with pregnancy induced hypertension on the following aspects: general information regarding pregnancy induced hypertension and management of self with pregnancy induced hypertension.

The structured teaching programme was developed in the aspects of pregnancy induced hypertension – definition, predisposing factors, signs and symptoms, diagnosis, warning signs, maternal and fetal complications of pregnancy induced hypertension.

The management of self was designed with the aspects of regular antenatal visit, bed rest, dietary intake, regular intake of medications, identification of warning signs and regular follow up.

Results
The study results obtained after conducting the study were discussed under the following headings.

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Table 1: Pre teaching knowledge scores regarding management of self among primigravida mothers with pregnancy induced hypertension

<table>
<thead>
<tr>
<th>S. No</th>
<th>Knowledge on</th>
<th>Level of knowledge</th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Inadequate</td>
<td>Moderately</td>
<td>Adequate</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>General information about pregnancy induced hypertension</td>
<td>60</td>
<td>100%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Management of self with pregnancy induced hypertension</td>
<td>59</td>
<td>99%</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>Overall knowledge</td>
<td>60</td>
<td>100%</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 1 reveals that among 60 samples majority 100% of the mothers had inadequate knowledge regarding management of self with pregnancy induced hypertension.

Table 2: Post teaching knowledge scores regarding management of self among primigravida mothers with pregnancy induced hypertension

<table>
<thead>
<tr>
<th>S. No</th>
<th>Knowledge on</th>
<th>Level of knowledge</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Inadequate</td>
<td>Moderately</td>
<td>Adequate</td>
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<tr>
<td></td>
<td></td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>General information about pregnancy induced hypertension</td>
<td>-</td>
<td>-</td>
<td>17</td>
<td>28%</td>
</tr>
<tr>
<td>2</td>
<td>Management of self with pregnancy induced hypertension</td>
<td>-</td>
<td>-</td>
<td>16</td>
<td>27%</td>
</tr>
<tr>
<td></td>
<td>Overall knowledge</td>
<td>-</td>
<td>-</td>
<td>13</td>
<td>22%</td>
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</table>

Table 2 reveals that among 60 samples majority 78% of the mothers had adequate knowledge and 22 % of the mothers had moderately adequate knowledge regarding management of self with pregnancy induced hypertension after receiving the structured teaching programme.

Table 3: Comparison of mean and standard deviation of the pre and Post teaching knowledge scores regarding management of self among primigravida mothers with pregnancy induced hypertension N=60

<table>
<thead>
<tr>
<th>S. No</th>
<th>Knowledge on</th>
<th>Pre teaching</th>
<th>Post teaching</th>
<th>&quot;t&quot; value</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>Standard deviation</td>
<td>Mean</td>
</tr>
<tr>
<td>1</td>
<td>General information about pregnancy induced hypertension</td>
<td>23.45</td>
<td>6.21</td>
<td>82.30</td>
</tr>
<tr>
<td>2</td>
<td>Management of self with pregnancy induced hypertension</td>
<td>26.07</td>
<td>6.56</td>
<td>83.00</td>
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<tr>
<td></td>
<td>Overall knowledge</td>
<td>24.61</td>
<td>4.75</td>
<td>72.67</td>
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</tbody>
</table>

Table 4 reveals that there was a significant increase in the overall knowledge regarding management of self with pregnancy induced hypertension among primigravida women after the structured teaching programme at \( P < 0.05 \) level.

Association of selected demographic variables with the post teaching knowledge scores regarding management of self among primigravida mothers with pregnancy induced hypertension revealed that there was no significant association.

**Discussion**

The first objective of the study was to assess the existing knowledge regarding management of self among primigravida mothers with pregnancy induced hypertension and receiving care

The findings of the pre teaching knowledge scores revealed that among 60 samples majority 100% of the mothers had inadequate knowledge regarding management of self with pregnancy induced hypertension.

Since the primigravida mothers were new for pregnancy, they showed inadequate knowledge. This revealed that structured teaching programme is necessary for the primigravida mothers to improve their knowledge in the above aspects so that they can identify the warning signs on their own and can seek medical aid immediately which in turn contributes to the management of pregnancy induced hypertension.

The second objective of the study was to assess the knowledge regarding management of self among primigravida mothers with pregnancy induced hypertension and receiving care, after the structured teaching programme.

The findings of the post teaching knowledge scores revealed that among 60 samples majority 78% of the mothers had adequate knowledge regarding management of self with pregnancy induced hypertension.

These findings support the recommendations of Pender (2000) who identified that a known gap in the method of prevention and utilization of health care requires a dynamic type of education to help the women to understand the methods and engage in preventive health habits. He suggests that teaching on dietary habits, exercises, rest and health check up is important in the primary prevention and early detection of complications among high risk mothers.

The third objective of the study was to compare the pre and post teaching knowledge scores regarding management of self among primigravida mothers with pregnancy induced hypertension and receiving care

The findings of the study revealed that there was a significant increase in the overall knowledge regarding management of self with pregnancy induced hypertension among primigravida women after the structured teaching programme at \( P < 0.05 \) level.
This was supported by Mullet et al. (2004) who suggested that structured teaching programme by the nurses is the valid mode of success for prenatal care.

The fourth objective of the study was to associate the knowledge scores regarding management of self among primigravida mothers with pregnancy induced hypertension and receiving care with selected variables. The findings showed that statistically there was no significant association between the selected demographic variables with the post teaching knowledge scores regarding management of self among primigravida mothers with pregnancy induced hypertension.

Summary
The study findings were found to be in favor of the researcher’s assumption that the structured teaching programme will be an effective intervention for the primigravida mothers regarding management of self with pregnancy induced hypertension.

Conclusion
It was concluded that the structured teaching programme was effective in improving the knowledge of primigravida mothers regarding management of self with pregnancy induced hypertension.

Implications for Nursing

Nursing practice
- The midwives working in the antenatal unit must provide health education to the mothers with pregnancy induced hypertension regarding self care.
- Arrangements for the conduction of health awareness camps must be made in the hospitals and community areas for the antenatal mothers.

Nursing education
- Curriculum must be designed to provide opportunity for the student nurses to handle the high risk mothers.
- Short term courses, in service education must be provided regularly to the staff nurses working in the obstetrical units.

Nursing administration
- Standard policy, protocols and standing orders must be developed to handle the antenatal mothers with pregnancy induced hypertension.
- Conferences, seminars and training must be conducted to the staff nurses and the students.

Recommendations
- The same study can be conducted in different settings.
- The study can also be conducted to assess the attitude and practice of the primigravida women regarding prevention of pregnancy induced hypertension.
- A longitudinal study can be done.
- A comparative study between the urban and rural population of primigravida mothers can also be conducted.

Suggestions
- To create awareness and knowledge, mass media should take active participation.

Voluntary health agencies should indulge themselves in promoting health awareness.
- Adequate staff nurses have to be appointed in the health care settings by the government to provide quality and cost effective care.

References