Assessment of knowledge and practice regarding Pregnancy Induced Hypertension (PIH) among the primigravid mothers with PIH

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ABSTRACT

Background: Pregnancy Induced Hypertension (PIH) is one of the most common causes of both maternal and neonatal morbidity, affecting pregnant women. It is associated with adverse pregnancy outcomes as well as maternal morbidity and mortality. Hence it is essential to assess the knowledge and practice on PIH. A Quantitative approach - Non experimental descriptive research design was adopted to assess the knowledge and practice on PIH among primigravidas. The study samples consisted of 30 primigravidas with PIH. Convenience sampling technique was used for selecting the subjects and structured questionnaire was used for assessing the subjects. The study findings revealed that, when the knowledge about PIH among primigravidas increases, their level of practice also increases. The demographic variable “education” had shown statistically significant association with the level of knowledge (p<0.001) and level of practice (p<0.01) on PIH, among primigravidas.

Key words: Primigravida, Pregnancy Induced Hypertension.

Introduction

Pregnancy Induced Hypertension (PIH) is the development of new hypertension in a pregnant woman after 20 weeks of gestation due to the absence of protein in the urine or other signs of preeclampsia. The awareness about PIH is vital for mitigating the complications during pregnancy. Mother and children approximately constitute two third of the population in the developing countries. Worldwide 10 % of all pregnancies are complicated by hypertension, with pre-eclampsia and eclampsia being the major causes of maternal and prenatal morbidity and mortality. It is also estimated that PIH, one of the hypertensive disorders of pregnancy, affects about 5-8% of all pregnant women worldwide. In India women in the child-bearing age (15 to less than 45 years) constitute 22.8% and children under 15 years of age constitute 37.1% of the total population. Thus together they constitute nearly 60% of the total population. On the whole, 20% of maternal deaths are due to hypertensive disorders of pregnancy.

PIH is a major pregnancy complication associated with premature delivery, intra-uterine growth retardation, abruptio placenta and intra-uterine death as well as maternal morbidity and mortality. During pregnancy women require special care, because it brings double health benefits, first to her as an adult member of the community and second to the product of her pregnancy. To prevent the complications of pregnancy, the pregnant women should be given health education and proper health services. Nurses share an important role in detection, prevention and management of PIH. With the above evidences, if women have a good knowledge about the signs and symptoms of PIH through antenatal health talk, conferences and workshops, they will immediately go to the hospital without delay for prompt attention.
Statement of the problem

A study to assess the knowledge and practice regarding Pregnancy Induced Hypertension among the primigravid mothers with PIH in Govt. Rajaji Hospital, Madurai.

Objectives

- To assess level of knowledge about PIH, among primigravidas with PIH
- To assess the practice on PIH, among primigravidas with PIH
- To co-relate the level of knowledge about PIH with practice on PIH, among primigravidas with PIH
- To find out the association of the level of knowledge and practice on PIH, with selected demographic variables, among primigravidas with PIH

Null Hypotheses

- There is no relationship between the level of knowledge about PIH and practice on PIH, among primigravidas with PIH
- There is no significant association between the level of knowledge and practice on PIH, and selected demographic variables, among primigravidas with PIH

Methodology

Quantitative approach - Non experimental descriptive research design was adopted. The study was conducted in Govt. Rajaji Hospital Madurai, at Antenatal outpatient department. The study samples consisted of 30 primigravidas with PIH. Convenience sampling technique was used for selecting the subjects and structured questionnaire was used for assessing the subjects.

Results and Discussion

The findings are tabulated and analyses are interpreted as follows

Frequency and percentage distribution of level of knowledge about PIH, among primigravidas with PIH

\[
\begin{array}{|c|c|c|c|}
\hline
\text{Variable} & \text{Inadequate (≤50%)} & \text{Moderately Adequate (51 – 75)} & \text{Adequate (>75)} \\
\hline
\text{Knowledge} & 14 & 16 & 0 \\
\hline
\text{No.} & 46.67 & 53.33 & 0 \\
\hline
\text{No.} & % & % & % \\
\hline
\end{array}
\]

The above table shows that, majority 16(53.33%) had moderately adequate knowledge and 14(46.67%) had inadequate level of knowledge about PIH.

Percentage distribution of level of knowledge about PIH
Frequency and percentage distribution of level of practice on PIH, among primigravidas with PIH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Inadequate (≤50%)</th>
<th>Moderately Adequate (51 – 75)</th>
<th>Adequate (&gt;75)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Practice</td>
<td>19</td>
<td>63.33</td>
<td>11</td>
</tr>
</tbody>
</table>

The above table shows that, majority 19(63.33%) had inadequate and 11(36.67%) had moderately adequate level of practice on PIH.

Correlation between knowledge and practice scores on PIH, among primigravidas with PIH

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>S.D</th>
<th>‘r’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>7.50</td>
<td>1.97</td>
<td>r = 0.861</td>
</tr>
<tr>
<td>Practice</td>
<td>21.50</td>
<td>5.67</td>
<td>p = 0.000, S**</td>
</tr>
</tbody>
</table>

**p<0.01, S – Significant**

The above table shows that the mean score of knowledge was 7.50 ± 1.97 and the mean score of practice was 21.50 ± 5.67. The calculated Karl Pearson’s Correlation Coefficient shows a positive correlation with ‘r’ value of r = 0.861 was found to be statistically significant at p<0.01 level. This clearly indicates that, when the knowledge about PIH among primigravidas increases, their level of practice also increases.
The above table shows that, the demographic variable “education” had shown statistically significant association with level of knowledge on PIH, among primigravidas at p<0.001 level and other demographic variables had not shown statistically significant association with level of knowledge on PIH, among primigravidas.
Association of level of practice on PIH with selected demographic variables, among primigravidas with PIH

N = 30

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Inadequate (≤50%)</th>
<th>Moderately Adequate (51 – 75%)</th>
<th>Chi-Square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 - 20 years</td>
<td>2</td>
<td>6.7</td>
<td>1</td>
</tr>
<tr>
<td>21 - 30 years</td>
<td>16</td>
<td>53.3</td>
<td>9</td>
</tr>
<tr>
<td>31 - 35 years</td>
<td>1</td>
<td>3.3</td>
<td>1</td>
</tr>
<tr>
<td>Residence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Village</td>
<td>11</td>
<td>36.7</td>
<td>3</td>
</tr>
<tr>
<td>Town</td>
<td>8</td>
<td>26.7</td>
<td>8</td>
</tr>
<tr>
<td>City</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uneducated</td>
<td>2</td>
<td>6.7</td>
<td>0</td>
</tr>
<tr>
<td>Primary</td>
<td>13</td>
<td>43.3</td>
<td>2</td>
</tr>
<tr>
<td>High school</td>
<td>4</td>
<td>13.3</td>
<td>7</td>
</tr>
<tr>
<td>Higher secondary school</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Monthly income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rs.1,000 - 3,000</td>
<td>4</td>
<td>13.3</td>
<td>1</td>
</tr>
<tr>
<td>3,001 - 5,000</td>
<td>12</td>
<td>40.0</td>
<td>9</td>
</tr>
<tr>
<td>Above 5000</td>
<td>3</td>
<td>10.0</td>
<td>1</td>
</tr>
<tr>
<td>Religion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hindu</td>
<td>7</td>
<td>23.3</td>
<td>5</td>
</tr>
<tr>
<td>Christian</td>
<td>6</td>
<td>20.0</td>
<td>4</td>
</tr>
<tr>
<td>Muslim</td>
<td>6</td>
<td>20.0</td>
<td>1</td>
</tr>
<tr>
<td>Others</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

**p<0.01, S – Significant, N.S – Not Significant**
The above table shows that, the demographic variable “education” had shown statistically significant association with level of practice on PIH, among primigravidas at p<0.01 level and the other demographic variables had not shown statistically significant association with level of practice on PIH, among primigravidas.

Conclusion

The study findings revealed that, when the knowledge about PIH among primigravidas increases, their level of practice also increases. The demographic variable “education” had shown statistically significant association with the level of knowledge (p<0.001) and level of practice (p<0.01) on PIH, among primigravidas, and other demographic variables had no statistical significance. By these findings the stated null hypotheses were not accepted.

Implications

The findings of the study have implications in the areas of nursing education, nursing practice, nursing administration and nursing research.

Nursing Education

- The nursing curriculum needs to be strengthened to enable nursing students to assess the warning signs of PIH and to provide supportive education for the self-care of patients in preventing complications
- Public awareness on prevention of PIH shall be increased. As midwives are the primary caregiver to the primigravidas with PIH, they are in the best position to teach the antenatal mothers about the complications concerned with PIH

Nursing practice

- The field of Obstetrics and Gynaecological Nursing has greater responsibility in identifying and managing the PIH and hence pregnant women should be subjected to regular antenatal check-ups
- The nurses should be equipped with updated knowledge about PIH to prevent the complications

Nursing administration

- Extensive use of mass media propaganda can help in the prevention of PIH
- Antenatal OPDs to have adequate display materials or museum to educate pregnant mothers about antenatal diet, dangerous signals and care of PIH

Nursing research

- The findings of the study serve as a basis for the professionals and students to conduct further analysis
- This study helps the nurse researchers to develop insight into the development of other research methods and set information for various PIH mothers towards promotion of healthy lifestyle and prevention of complications

Recommendations

- Similar study can replicate on a large sample
- A comparative study can be conducted between the public set up and private set up

References