Effectiveness of the Planned Teaching Programme on Pregnancy-Induced Hypertension among Antenatal Mothers Diagnosed With Pregnancy-Induced Hypertension in a Selected Antenatal Clinic at Indore

Y.D. Stella. M.Sc (N)¹ Sheikh Javed Ahmad. M.Sc (N)²

¹Associate Professor, Department of Obstetrics and Gynecological Nursing, Index Nursing College, Indore India
²Associate Professor, Department of Community Health Nursing, Index Nursing College, Indore, India

Abstract: Pregnancy is one of the most wonderful and noble services imposed by nature. Pregnancy is a special event; a period of happiness, expectancy, and excitement, in short it is a blessing and a privilege. But it is also a period which is not free from anxiety, fear and also from diseases or disorders. Hypertension developing during gravid state is purely called Pregnancy-Induced Hypertension (PIH). It is a leading cause of maternal mortality and morbidity world wide. PIH can be controlled by regulation of diet, relaxation, early identification, medication, monitoring blood pressure, rest, urine testing for the presence of albumin and modification in life style. An evaluatory approach with one group pre-test, post-test design was used for this study. The sample consisted of 60 antenatal mothers with the pregnancy-induced hypertension. They were chosen by convenient sampling technique. The study was conducted at antenatal wards and OPD of Index Medical Hospital and Research Center, Indore. The data was collected by structured interview schedule prior to and after administrating planned teaching programme. The data was analysed by descriptive and inferential statistics. The knowledge gained through Planned teaching programme was good, as it was evident with high significance ($t = 1.96$, $P < 0.01$) between the mean post-test ($x_2 = 28.03$) and mean pre-test ($x_1 = 9.4$) knowledge score. Area-wise pre-test and post-test knowledge score of antenatal mothers diagnosed with pregnancy-induced hypertension shows higher mean percentage score(53%) in the area of basic factors regarding normal physiological changes during pregnancy and the least score (18.9%) in the prevention of complication of PIH in the pre-test. There is a marked difference in the mean percentage of post-test score (96.6%) in the area of prevention and (88%) in the area of basic factors.

Keywords: Pregnancy-Induced Hypertension, PIH, Pregnancy, Antenatal Mothers, Epilepsy.

I. INTRODUCTION

Pregnancy is a one of the most wonderful and noble service imposed by nature, on women. Pregnancy is a special event. Pregnancy is the period of happiness, expectancy, excitement, anxiety and fear¹. Pregnancy is a natural physiological event¹. Pregnancy can be the best of times and can be the worst of the times. It is a period of the beginning of life. Pregnancy can be meticulously planned or made to happen by surprise, which makes a woman’s life never the same again.²
Pregnancy is a grand adventure, it is a kind of miracle, which proves that a man and a women can conspire and to create a new soul. In pregnancy there are two bodies one inside the other under one skin, hence both of them should be cared for and protected.

Most of the women may not have much problem during pregnancy, but some face various problems related to pregnancy and child birth. The success of child birth depends on the co-operative effort from mother, family and health care professional.

Pregnancy is also a period which is not free from diseases or disorders. Hypertensive disorders of pregnancy are the prime cause for early hospitalization, labour induction, maternal and foetal morbidity and mortality. Though a perfect remedy is not available, it is possible to minimize the hazards through early detection and prompt action.

In developing countries the great majority of deaths are due to eclampsia and maternal deaths are higher when antenatal coverage is lower. Pregnancy and delivery are potentially risky. About 20-30 pregnancy belong to this category and complicates 7% of all normal pregnancies. Hypertension is a most common complication during pregnancy.

A woman’s health lies in her hand. She alone is responsible for her health. Hence the mother need to be aware of regular antenatal check up, follow up the medical regimen and adapt self care management to prevent pregnancy-induced hypertension and there by safe child birth.

**Statement of the Problem:**

Effectiveness of the planned teaching programme on pregnancy-induced hypertension among antenatal mothers diagnosed with pregnancy-induced hypertension in a selected antenatal clinic at Indore.

**Objectives of the Study:**

1. To determine the knowledge scores of antenatal mothers on pregnancy-induced hypertension as measured by a structured interview schedule.
2. To evaluate the effectiveness of planned teaching programme on pregnancy-induced hypertension in terms of gain in knowledge scores.
3. To find the association between pre-test knowledge scores of antenatal mothers with selected demographic variables such as age, religion, educational status, previous history of pregnancy induced hypertension.

**Assumptions of the Study:**

1. Antenatal mothers have some knowledge on pregnancy-induced hypertension
2. Teaching programme on pregnancy-induced hypertension help to enhance the knowledge of antenatal clients.

**Hypotheses:**

All hypotheses will be tested at 0.05 level of significance.

H₁: The mean post-test knowledge scores of antenatal mothers on pregnancy-induced hypertension will be significantly higher than mean pre-test knowledge scores as measured by structured interview schedule.

H₂: There will be significant association between pre-test knowledge scores of antenatal mothers with selected demographic variables:- Age, Religion, Educational status, Occupation of the mother, Previous history of pregnancy-induced hypertension

**II. METHODOLOGY**

An evaluatory research approach using the pre-test and post-test was adopted for this study, in order to accomplish the objectives. The investigator selected Index Medical college Hospital to conduct the study. It is an educational cum research centre. The hospital is specialized and well equipped with maternity ward with 250 beds, labour room and obstetrics operation facilities. Hence the investigator selected this hospital for the easy availability of sample in the antenatal ward as well as in the OPD. Sample consists of 60 antenatal mothers diagnosed with pregnancy-induced hypertension who are admitted in the antenatal wards and visiting the OPD, in their 20th week of gestation to term in Index Medical Hospital and Reasearch Center, Indore. Convenient sampling technique is used for the study. In this method the researcher selects those units of the population in the sample which appears convenient to her. A structured interview
schedule is used for data collection. Descriptive and inferential statistics was used to compute the data on master sheet prepared by the investigator. Baseline data containing sample characteristics was analysed using frequency and percentage. The knowledge of antenatal mothers regarding pregnancy-induced hypertension was calculated using ‘t’ test. The association between selected demographic variables like age, religion, educational status, parity, previous history of PIH was assessed by chi-square test.

III. RESULTS

Table 1: Mean, Mean difference, standard deviation and ‘t’ value between pre-test and post-test scores N= 60

<table>
<thead>
<tr>
<th>Group</th>
<th>Knowledge score</th>
<th>Mean difference</th>
<th>SD (di)</th>
<th>S &amp; d</th>
<th>t value</th>
<th>Inference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>9.4 4.67</td>
<td>18.63</td>
<td>19.01</td>
<td>2.454</td>
<td>7.5</td>
<td>Significant</td>
</tr>
<tr>
<td>Post-test</td>
<td>8.04 1.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 value of t at 5% level of significance with 59 df is 1.96. t value is 7.5 is greater than the tabled value 1.96. Hence null hypothesis is rejected and the research hypothesis is accepted. Data in the table shows higher mean post-test knowledge score (x²=28.03) than the pre-test knowledge scores (x̄= 9.4 ). The computed ‘t’ valued significant difference between the pre-test and post-test knowledge scores (t59 =1.96, p<0.01). On the basis of this the null hypothesis (H₀) was rejected and research hypothesis (H₁) was accepted. This indicates PTP is effective in increasing the knowledge of antenatal mothers diagnosed with PIH regarding PIH

Table 2: Range, Mean, Median and standard deviation of pre-test and post-test knowledge scores N = 60

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Range</th>
<th>Mean</th>
<th>Medium</th>
<th>S.D</th>
<th>Mean % Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>2-24</td>
<td>9.4</td>
<td>8.4</td>
<td>4.67</td>
<td>30.3</td>
</tr>
<tr>
<td>Post-test</td>
<td>23-30</td>
<td>28.03</td>
<td>29.5</td>
<td>1.7</td>
<td>90.4</td>
</tr>
</tbody>
</table>

Maximum score: 31

Data in the table represents higher mean (28.03) in the post-test knowledge score with range 23-30, and standard deviation 1.7, mean percentage score 90.4 and in the pre-test knowledge score mean 9.4 with the range 2-24, standard deviation 4.67 and mean percentage score 30.3.

Figure 1: Pyramid diagram showing distribution of mean percentage of pre-test knowledge scores.
Table 8: Chi-Square value between level of pre-test knowledge scores and selected demographic variables

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Variables</th>
<th>Knowledge score ≤Mean</th>
<th>≥Mean</th>
<th>df</th>
<th>X²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Age (in years)</td>
<td></td>
<td></td>
<td></td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>≤25</td>
<td>30</td>
<td>20</td>
<td>1</td>
<td>Not significant</td>
</tr>
<tr>
<td></td>
<td>≥25</td>
<td>7</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td>0.499</td>
</tr>
<tr>
<td></td>
<td>≤ High school</td>
<td>30</td>
<td>21</td>
<td>1</td>
<td>Not significant</td>
</tr>
<tr>
<td></td>
<td>≥ High School</td>
<td>7</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Religion</td>
<td></td>
<td></td>
<td></td>
<td>0.010</td>
</tr>
<tr>
<td></td>
<td>Non- Hindus</td>
<td>20</td>
<td>21</td>
<td>1</td>
<td>Not significant</td>
</tr>
<tr>
<td></td>
<td>Hindu</td>
<td>9</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Previous history of pregnancy-induced hypertension</td>
<td>21</td>
<td>13</td>
<td>1</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
<td>10</td>
<td></td>
<td>Not significant</td>
</tr>
</tbody>
</table>

The computed chi-square value shows no association between the pre-test knowledge score and the selected demographic variable. Therefore the research hypothesis (H₁) was rejected and null hypothesis (H₀) was accepted.

IV. NURSING IMPLICATIONS

Nursing education:

Nursing curriculum plays an important role in the preparation of future nurses, who will play an important role in the preventive and promotive aspects of maternal and child health. Every midwifery student should be given opportunities during her training to plan and conduct health education for mothers on PIH, pre-eclampsia and its prevention and management. The nursing curriculum should incorporate activities like preparation of booklets, handouts, charts, flip charts, models and teaching materials etc. The curriculum should give importance to health education.

Nursing practice:

Several implications can be drawn from the present study for nursing practice. Educational programmes with effective teaching strategies motivate people to follow healthy practices in their day to day lives. The gap between existing and expected level of knowledge of PIH antenatal mothers regarding PTP indicates that there is much scope for improving patient teaching activities in a hospital setting. Patient education is a process assisting people to learn and incorporate health related behaviour into everyday life. It is necessary for good nursing care. Since patient teaching is one of the functions of nursing personnel, its accountability should be stressed. The educative counselling role of the nurse also needs to be emphasised. Educative counselling may motivate clients to practice self-care and maintain preventive and promotive measures of health so its complications can be avoided.

Nursing research:

There is a need for extended and intensive nursing research in the area of mother's education especially to high-risk clients like mother’s with PIH, to develop better methods in teaching, better practice in nursing care and effective teaching material. The emphasis on research and clinical studies is needed to improve the quality of nursing care. Nurses need to engage in multi-disciplinary research, so that it will help to improve the knowledge and by applying the research findings, many health problems can be solved. They should take initiative to conduct research on the nature and the severity of problems regarding the impact of sedentary lifestyles on outcome of pregnancy and labour. The research should be conducted to identify the health needs of the people. Meaningful and relevant information can thus be provided based on their felt needs.

Nursing administration:

There should be a hospital policy to provide health education or written information for all inpatients as well as outpatients of the hospital. They should develop a central education cell, where all the health education materials, guides, leaflets, pamphlets are available for catering to the public. In spite of advancement in science and technology in India people suffer from various health problems due to unhealthy practices. The root cause for these health problems is people's ignorance.
regarding health practices. So the administrative departments of nursing at the institutional, local, state and national levels should focus their attention on making the public aware of the ill effects of unhealthy life styles.

V. CONCLUSION

PIH and its effect Pre-clampsia is a cascading disease most often associated with fatal maternal and foetal complications. It is responsible for early hospital admission and foetal and maternal morbidity and mortality. Therefore it is very important to recognize this pregnancy specific condition. One can never underestimate even the mild degree of hypertension in pregnancy. It is absolutely impossible to predict which case of mild PIH replication to serve degree. Therefore it needs more nursing research to be done on the care of the mother with pregnancy-induced hypertension so as to prevent complication and to ensure safe childbirth.

REFERENCES