Effectiveness of Structured Teaching Programme on Knowledge Regarding Pregnancy Induced Hypertension among Pregnant Mother

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Abstract: A pre-experimental study to assess the effectiveness of structured teaching Programme on knowledge regarding pregnancy induced hypertension among pregnant mothers in upgraded primary health Centre at kundrathur. The objectives of the study was to assess the pre-test and post-test level of knowledge on pregnancy induced hypertension among pregnant mothers and to find out the comparison and association between the pre-test and post-test level of knowledge regarding pregnancy induced hypertension among pregnant mothers. One group pre-test, post-test design was chosen for the study. Data was collected by using non probability convenient sampling technique. Among sixty pregnant mothers.

Those collected data were analyzed on the basis of objectives and testing of hypothesis by using descriptive and inferential statistics.

It was concluded that structured teaching programme was effective in assessing the knowledge on pregnancy induced hypertension among pregnant mothers.

1. Introduction

In a life cycle, a female has to undergo various stages like daughter, wife, mother, mother-in-law and grandmother. Among these one of the most beautiful and memorable event is becoming a mother. Safe motherhood is an essential factor for all women, maternal mortality is an important index for monitoring the progress of safe motherhood. In 2015 the maternal mortality rate in India is 7.5%. Pregnancy and child birth related complications is the major causes of death among women in their reproductive age group. Around 5,29,000 women die each year from maternal causes and for every women who dies at 20yrs or more suffer from injuries, infection and disability during pregnancy or child birth.

Pregnancy is one of the most crucial event in a human life, it is where our mother strives hard and exerts a priceless effort just to expel a foetus outside her womb.

Pre-eclampsia is a multisystem disorder that complicates 3-8% of pregnancies and is a major source of morbidity and mortality worldwide.

Globally, the incidence of pre-eclampsia ranges between 2% and 10% of pregnancies. The incidence of pre-eclampsia, turns to eclampsia if not treated. The incident of preeclampsia in hospital practice varies widely from 5 – 15%, in primigravida it is about 10% and in multi gravidae 5%.

Pre-eclampsia is pregnancy induced hypertension (PIH) of unknown aetiology. Preeclampsia can be quite serious as it can lead to various complications both for the mother and the baby. In fact, complications of PIH like preeclampsia and eclampsia, are the leading cause of maternal death in India. Hypertension complicates an estimated 6-8% of all pregnancies.

Foetal death rates are related to the severity of the hypertension and to the development of HELLP syndrome. The mortality rate associated with HELLP syndrome ranges between 2% to 24% for the women and 7.7% to 60% for the foetus depending on the study referenced (HARVEY et al., 1994).

The loss of maternal and fetal life related to pregnancy induced hypertension can most often be prevented with improved antenatal care and a rational approach to management.

Hypertension is defined as Blood pressure of above 120/90mmhg or higher or a risk of 30mmhg or more in systolic pressure or 15mmhg or more in diastolic pressure the baseline for diagnosis of hypertension. Hypertensive disorders include a variety of vascular disturbances in antenatal period or it can occur as a complication during gestation or in the early postpartum period. Because of the many cardiovascular alterations, pregnancy may induce hypertension in women who have been normotensive prior to gestation or may aggravate existing hypertensive conditions.

Though the cause for pre-eclampsia is unknown, there does appear to be certain risk
factors associated with the condition. The factors that have been postulated to influence the risk of preeclampsia among the mothers include diabetes, renal disease, and obesity. Multiply pregnancy primiparity, age above 30 years, personal or family history of preeclampsia and chronic hypertension.

Hypertensive disorders of pregnancy are the primary cause for early hospitalization, labour induction, maternal and foetal morbidity. Though perfect remedy is not available, it is possible to minimize the hazards through early detection and prompt action. Effective health education about hypertensive disorder helps the pregnant women to take care of her and to have a safe child birth.

Need for the study

The prevalence of the disease may be much higher among certain groups including primi gravida, younger than 20 years women. In India the incidence of PIH varies widely chronic hypertension, women older than 35 years it is observed about 8% -10% of pregnancies. In primi mothers it is about 10% and multipara about 5% (SACHDEVA et al., 2011).

The recurrence rate is correlated to the severity of the prior pregnancy condition. Mild PIH usually does not recur, however severe pre-eclampsia tends to recur in 30% -50% of the women (HARVEY et al., 1992; SCOTT, 1994).

The risk of eclampsia in twin pregnancies is two to three times more than that of single pregnancy. The working women, who may lack sufficient bed rest has a two fold increase in the development of pre-eclampsia (ZUSPAN, 1994).

An estimated 358,000 maternal death occurred worldwide in 2008. This means women that each day about one thousand women die worldwide because of complications related to pregnancy and child birth.

Causes of maternal death is indirect causes 18%. Other direct causes 11%, Embolism 1%, Abortion 10%, Sepsis 8%, Haemorrhage 34%, Hypertension 18% so totally in India MMR rate is in 2011- 206 women, in 2012-197 women, 2013-189 women, 2014-181 women, 2015-174 women. In Tamilnadu 90 women’s died.

COMPTEL, 2015, found that eclampsia is more common among non-white primiparous women with low socio economic status, Peak incidence occur among young women in their teens, early third decade of life and in women with advanced maternal age (>35 years). The reported maternal mortality rate is 2-4% due to eclampsia, 10% due to pulmonary edema.

GADDI SUMAN S. 2014, conducted a study to evaluate the clinical course and outcome in pregnancy induced hypertension with emphasis on the pitfalls in the diagnosis and management. Seven hundred ninety-one consecutive cases of pregnancy induced hypertension were evaluated, 783 cases were managed with magnesium sulphate and 8 were managed with phenytoin regime. The results showed that 30% women did not have edema, 14% women had relative hypertension and 11.4% did not have proteinuria at the time of admission. The convulsions developed in 9.2% women alternate convulsant therapy was started. There were 5.4% maternal deaths and morbidity consisted of pulmonary edema in 3.5% cases, aspiration, pneumonia in 2.7% cases, and acute renal failure in 1.10% cases.

This study was taken to assess the knowledge of pregnant women and found that they had knowledge deficit in all the learning need areas under warning signs and symptoms of pregnancy induced hypertension and prevention of pregnancy induced hypertension. The study highlight that need for structured teaching on assess the knowledge of pregnancy induced hypertension in a PHC to enable early identification and prevention of complication contributing to safe motherhood.

2. Materials and Methods

The research approach used for this study was descriptive research approach. The design used in this study was pre-experimental one group pre-test and post-test design. This study was conducted in upgraded primary health center at Kundrathur. It is 35 bedded hospital with outpatient department consist of general, obstetrical and gynecological, pediatrics, dental, siddha, TB clinic and HIV clinic. The facilities available in this upgraded PHC are laboratory, X-RAY, ECG, Ultrasonography and pharmacy. Approximately 70-80 antenatal mothers attend outpatient department daily. The antenatal outpatient department functions on every day Monday, Tuesday, Thursday and Friday. Approximately 60-80 antenatal mothers come for follow up.

The sample were selected by using Non probability convenient sampling technique who were fulfilled with the inclusion criteria. The tool consists of two sections.

SECTION I This section consists of demographic variables such as age, education, occupation, obstetrical score, gestational week, history of previous illness.

SECTION II This section consists of questionnaires on pregnancy induced hypertension. The planned questionnaires consists of 20 questions to assess the knowledge of pregnant mothers.
regarding pregnancy induced hypertension. Total score is 20.

Validity and reliability:
The research tool and teaching module was prepared on the basis of review of related literature and under the guidance of subject experts. Content validity of the tool was assessed by experts from the field of obstetrical and gynecological nursing faculty. The necessary suggestions and modifications were incorporated in the final preparation of the tools. The reliability of the tools was assessed by test re-test method (r=0.08).

Pilot study:
The investigator conducted a pilot study in upgraded primary health center at kundrathur for mothers who fulfilled the inclusion criteria. Non probability convenient sampling technique was used for selecting mothers. The researcher introduced herself to the pregnant mothers and purpose of the study was explained to them to ensure better co-operation.

The standard questionnaire was given to assess the knowledge of pregnant mothers regarding pregnancy induced hypertension. Structured teaching programme was given for about 30 minutes (posters) and the post-test knowledge was assessed by the same questionnaire after 7days. The data collected were tabulated and were statistically analyzed. The trial run revealed that clarity, feasibility, reliability, practicability in all aspects to conduct the main study. All the pregnant mothers were co-operative and took participation and gained their knowledge.

Method of data collection:
Data collection was done within given period of one week in the month of February 2016. The permission was obtained from the Medical officer in-charge PHC -Kundrathur to conduct the study.

The samples who met the inclusion criteria were selected based on Non probability convenient sampling technique. The investigator met the samples and explained the purpose of the study. Researcher assured the confidentiality and anonymity and consent was obtained from the samples. The data was collected by using standard questionnaire, and the same day structured teaching programme was given for about 30 minutes by using posters and 10 minutes was given for discussion to clarify their doubts. The post-test data was collected after 1 week by using the same questionnaire to find out the effectiveness of teaching programme.

3. Results and Discussion

The first objective of the study to assess the pre-test level of knowledge on pregnancy induced hypertension among pregnant mothers.

Table-1: Comparison of mean and standard deviation of pre-test and post-test level of knowledge of pregnant mothers regarding pregnancy induced hypertension N=60.

<table>
<thead>
<tr>
<th>COMPARISON</th>
<th>MEAN</th>
<th>STANDARD DEVIATION</th>
<th>Z-TEST</th>
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<tbody>
<tr>
<td>Pre-test</td>
<td>8.33</td>
<td>3.52</td>
<td>21.21</td>
</tr>
<tr>
<td>Post-test</td>
<td>17.41</td>
<td>1.65</td>
<td></td>
</tr>
</tbody>
</table>

Table-1: reveals that the pretest mean value was 8.33 with the standard deviation of 3.52.
Considering the post test, the mean value was 17.41 with the standard deviation of 1.65. The ‘z’ test was used to compare of pre and post level of knowledge and it was 21.21. The calculated value (21.21) was greater than table value (1.96) which shows significance at the level of p<0.50. So the research hypothesis was accepted and it shows the structured teaching programme was effective.

4. Conclusion

The ‘z’ test value is 21.21 the calculated value was greater than the table value (1.96). Which shows significant at the level of P<0.50. So the research hypothesis (H₁) is accepted and it shows the structured teaching programme was effective.

4.1. References


Journal reference: