A Study to Assess the Knowledge Regarding Factor Influencing the Use of Magnesium Sulphate in Eclampsia and Preeclampsia among Staff Nurses at SMVMCH, Puducherry

P. Manimegalai

M. SC., (N), PH. D. Associate Professor, Department of Obstetrics and Gynaecological Nursing, Sri Manakula vinayagar Nursing College, Puducherry - 605107, India

Abstract: Background: pre - eclampsia is a multisystem pregnancy disorder characterized by variable degree of placental malperfusion, with release of soluble factors into the circulation. These factors causes maternal vascular endothelial injury, which leads to hypertension and multi organ injury. Objectives: To assess the level of knowledge regarding factor influencing the use of magnesium sulphate in eclampsia and preeclampsia among Staff nurses at SMVMCH, Puducherry. - To associate the level of knowledge regarding factor influencing the use of magnesium sulphate in eclampsia and preeclampsia among Staff nurses with their Demographic variables. Method: A Quantitative approach adopted for this present study. Descriptive research design chosen for the present study by using Convenient sampling technique was sample size was 30 staff nurses with factor influencing the use of magnesium sulphate in eclampsia and preeclampsia. The data collection period was one week. Major Findings in the study: The study was conducted at SMVMCH, Puducherry. The period of data collection was 1 weeks, the data were collected from the 30 - samples of staff nurses by using convenient sampling technique and interview by demographic data. Represent Frequency and percentage wise distribution of knowledge regarding factor influencing the use of magnesium sulphate in eclampsia and preeclampsia among Staff nurses were less competent 8 (26.4%), Moderately competent 17 (56.1%), Highly competent 5 (16.5%) respectively, depicts that the demographic income and previous experience in department had shown statistically significant association regarding factor influencing the use of magnesium sulphate in eclampsia and preeclampsia among Staff nurses with chi - square value of $X^2$ is 0.0106 and 0.0060 at $p<0.05$ level. The other demographic variables had not shown statistically significant association regarding factor influencing the use of magnesium sulphate in eclampsia and preeclampsia among Staff nurses. Conclusion: the study shown that, shown statistically significant association regarding factor influencing the use of magnesium sulphate in eclampsia and preeclampsia among Staff nurses with chi - square value of $X^2$ is 0.0106 and 0.0060 at $p<0.05$ level.

Keywords: Multisystem pregnancy disorder, placental malperfusion, hypertension and multi organ injury.

1. Introduction

Hypertensive disorders in pregnancy are one of the leading causes of morbidity, long - term disability and death during pregnancy and postpartum and account for approximately 14% of all maternal deaths worldwide. Hypertensive disorders of pregnancy include: chronic hypertension; gestational hypertension; pre - eclampsia with or without severe features; eclampsia and chronic hypertension with superimposed pre - eclampsia. Hypertensive disorders are the second leading cause of maternal mortality worldwide A useful framework for understanding causes of maternal deaths includes the three delays model delay in deciding to seek care, delay in reaching a healthcare facility delay in receiving appropriate and correct care at the healthcare facility.

Pre - eclampsia (PE) is a pregnancy - associated multisystem disorder with no definite aetiology. The primary cause of Preeclampsia is still under investigation. However, it is occurred in two stages. The first stage encompass the impairment of fetal trophoblastic invasion of the decidua and local placental hypoxia. The second stage is the release of placental blood - related factors into the maternal circulation and aberrant expression of pro - inflammatory, antiangiogenic and angiogenic factors.

Eclampsia is new onset of the seizures activity or unexplained coma during pregnancy or post - partum in a woman with signs and symptoms of pre - eclampsia is the occurrence of convulsions in association with signs and symptoms of preeclampsia. The syndrome of pre - eclampsia normally affects all maternal organ systems, however it is usually detected by the presence of new hypertension, proteinuria, and oedema in pregnancy. Primary symptoms of eclampsia are seizures or convulsions in a pregnant woman, woman in labour or within 42 days after delivery who does not have a history of epilepsy. Other symptoms of eclampsia include muscle aches and pain, agitation, loss of consciousness and stroke, coma and death can occur to a mother and foetus.

Aim of the Study
The aim of the study was to assess the knowledge regarding factor influencing the use of magnesium sulphate in eclampsia and preeclampsia among Staff nurses.

Objectives of the Study
- To assess the level of knowledge regarding factor influencing the use of magnesium sulphate in eclampsia and preeclampsia among Staff nurses at SMVMCH, PUDUCHERRY.
- To associate the level of knowledge regarding factor influencing the use of magnesium sulphate in eclampsia
and preeclampsia among Staff nurses with their Demographic variables.

2. Methodology
The selection of research approach is the basic procedure for conducting research enquiry. A research approach gives information about the data to collect, and how to analyst it also suggests possible conclusions to be drawn from the data. In view of the nature of the problem selected for the study and the objectives to be accomplished, was considered the best to determine the knowledge regarding factor influencing the use of magnesium sulphate in eclampsia and preeclampsia.
A Quantitative approach adopted for this present study.

Research Design
In this present study, Descriptive research design was selected for the study. The primary objective of the study was to assess the level of knowledge regarding factor influencing the use of magnesium sulphate in eclampsia and preeclampsia.

Research Setting
The study will be conducted at Sri ManakulaVinayagar Medical College and Hospital. It consist of 1050 - bedded hospital in Puducherry. The population of the study all Staff nurses working at SMVMCH, Puducherry. sample size is the number of subjects involved in the study, sample size consist of 30 staff nurses. Sampling refers to the process of selecting a portion of the population to represent the entire population. Sampling technique chosen was purposive sampling.

Description of the tool
Section A:
This section consists of demographic data such as age, gender, religion, educational qualification, occupation, income, residence, marital status, year of experience, residencies.

Section B:
This section consists of structured knowledge questionnaires to assess the knowledge regarding factor influencing the use of magnesium sulphate in eclampsia and preeclampsia among staff nurses.

Plan for the Data Analysis
Descriptive statistics: Frequency distribution, mean and standard deviation is used to assess the demographic Variables and studied the Knowledge factor influencing the use of magnesium sulphate in eclampsia and preeclampsia among staff nurses
Analyzed data is presented in the form of tables, diagrams, graphs based on the findings.

Scoring Interpretation

<table>
<thead>
<tr>
<th>Scoring</th>
<th>Interpretation</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate</td>
<td>0 - 8</td>
<td>26.4%</td>
</tr>
<tr>
<td>Moderate</td>
<td>9 - 16</td>
<td>56.1%</td>
</tr>
<tr>
<td>Adequate</td>
<td>17 - 25</td>
<td>16.5%</td>
</tr>
</tbody>
</table>

3. Results and Discussion
Frequency and percentage wise distribution of knowledge regarding factor influencing the use of magnesium sulphate in eclampsia and preeclampsia among Staff nurses were less competent 8 (26.4%), Moderately competent 17 (56.1%), Highly competent 5 (16.5%) respectively.

Table 1.2: Mean and standard deviation of Knowledge regarding factor influencing the use of magnesium sulphate in eclampsia and preeclampsia among staff nurses

<table>
<thead>
<tr>
<th>Knowledge regarding factor influencing the use of magnesium sulphate in eclampsia and preeclampsia among staff nurses</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>51.27</td>
<td>16.9</td>
</tr>
</tbody>
</table>

Figure 2: Mean and standard deviation of Knowledge regarding factor influencing the use of magnesium sulphate in eclampsia and preeclampsia among staff nurses.

4. Conclusion
The Descriptive research design chosen was selected for the study to assess the Knowledge factor influencing the use of magnesium sulphate in eclampsia and preeclampsia among staff nurses, at SMVMCH, Puducherry.

References

