A descriptive study to assess the knowledge of staff nurses regarding obstetrical emergencies and its management in selected hospital of Greater Noida

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Abstract

Background: Obstetrical emergencies are life threatening medical conditions that occur in pregnancy, during or after delivery and are the leading cause of maternal and perinatal mortality and morbidity. It comprises 46% of maternal mortality in worldwide (PARK J.E. 2007). The emergency conditions of pregnancy that threaten the wellbeing of both mother and child may occur during labour and after delivery (in post-partum period). Being primary health care provider nurses have key roles in identification and prompt management of obstetric emergencies.

Objectives: To assess the knowledge of staff nurses regarding obstetrical emergencies and its management. To find out association between the knowledge and selected demographic variables of the staff nurses.

Method: The research approach adopted for this study is descriptive in nature, Non-experimental research design is used. 80 subjects were collected by using convenient sampling techniques. The researcher introduced himself to the respondents and explained the purpose of the study to the staff nurses. After this investigator collected the data from staff nurses by using self-structured questionnaire to assess the knowledge and management regarding obstetrical emergencies.

Result: The majority of the respondents, where having 66.8% knowledge about part-1 (overall knowledge about obstetrical emergencies and its management). In other parts respondents were having knowledge regarding 4 selected obstetrical emergency conditions and its management namely (PPH, cord prolapsed, uterine rupture and Shoulder dystocia). 49.3% knowledge about part-2 (PPH and its management), 40.9% knowledge about part-3 (cord prolapsed and its management), 46.9% knowledge about part-4 (uterine rupture and its management) and 39.9% knowledge about Part-5 (shoulder dystocia and its management) Significant association is check by chi square test. There is no significant association between the knowledge score and following demographic variables (Age, professional qualifications, working area, experience, previous experience in maternity related services/ward.). There is significant association between knowledge and gender demographic variable at 0.05 level of significance means female staff nurses have more knowledge than male staff nurses regarding obstetrical emergencies and its management.

Conclusion: In this study Majority of respondents were having maximum knowledge regarding obstetrical Emergencies and its management was 66.8% and minimum 39.9%.

Keywords: Assessment, knowledge, staff nurses, obstetrical emergencies

Introduction

Obstetrical emergencies are life threatening medical conditions that occur in pregnancy, during or after delivery and are the leading cause of maternal and perinatal mortality and morbidity. It comprises 46% of maternal mortality in worldwide (PARK J.E. 2007). The emergency conditions of pregnancy that threaten the well-being of both mother and child may occur during labour and after delivery (in post-partum period). The obstetrical emergencies that occur in pregnancy, labour and postpartum period include pre-eclampsia, eclampsia, anti-partum hemorrhage, ectopic pregnancy, placenta Previa, placenta abruptio, premature rupture of membrane, amniotic fluid embolism, acute inversion of uterus, placenta acreta, prolapsed umbilical cord, shoulder dystocia, postpartum hemorrhage, shock, postpartum depression, postpartum baby blues [1]

There are certain categories of pregnancies (20-30%) where the mother, the fetus, or neonate is in a state of increased jeopardy. This group must be identified and given extra care to improve obstetric result as this group is responsible for 70-80% of perinatal mortality and morbidity. Obstetric complications can neither be predicted nor be prevented but can be managed by timely provision of life saving services. Quality of care in Emergency obstetrics involves institutional and staff preparedness in the provision of appropriate emergency
services while responding to the needs and rights of the clients. These include having staff with relevant skills available, having functional equipment and supplies, and having adequate infrastructure, all of which are prerequisites for the provision of prompt and appropriate care when emergencies arise. Proper knowledge about identification signs, emergency measures to be taken and well-equipped obstetric unit can reduce maternal mortality by almost 35-40%. As the nurses being the primary health care providers, their preparedness for obstetric emergencies attains paramount importance. The challenges perceived by them in managing those urgent situations demand immediate interventions in order to ensure safe pregnancy and child birth for obstetric population [2].

Obstetrical and gynecological nurses form the backbone of the health care system and are the main providers of maternal health care. They function in a variety of settings as caregivers, client advocates, researchers, case managers and educators. Also, they act as consultants in their area of expertise, as well as serving as role models and teachers of quality nursing care. Furthermore, they play a large role in helping women remain well so that they can enter a pregnancy in good health and maintain their health throughout life [3].

Objectives

- To assess the knowledge of staff nurses regarding obstetrical emergencies and its management.
- To find out association between the knowledge and selected demographic variables of the staff nurses.

Methodology

Study design

In this study, Non experimental research design was adopted.

Study population

Study population comprises of all staff nurses who have successfully completed GNM, B.Sc. Nursing, Post Basic B.Sc. Nursing and M.sc Nursing from INC Registered school/college of nursing and registered in the state nursing council and work in this selected setting.

Study area

Study was conducted in Kailash hospital Pari Chowk Greater Noida U.P.

Sample size

In this study the total sample size is 80 staff nurses from all respective areas of selected setting. Respective area wise from casualty 20, labour ward 16, medicine ward 17, surgery 16, pediatric ward 5, and from others 6 sample were collected.

Sampling method

In this study convenient sampling technique is used. Convenient sampling technique is a non-probability sampling technique. In which samples are selected due to their convenient accessibility and proximity of the researcher. The subjects are chosen just because of fact that they are very easy to recruit for the study.

Inclusion criteria

- Staff nurses who have successfully completed GNM, B.Sc. Nursing, post basic B.Sc. Nursing and M.Sc. Nursing course from INC registered school/college of nursing and registered in the state nursing council.
- Nurses who were working in Kailash hospital.
- Nurses who were willing to participate in the study.

Exclusion criteria

Nurses who were not available at the time of study.

Data collection tool

The structured knowledge questionnaire was used to collect the data from staff nurses.

Development of tool

The study tool considered of two section-

Section A: Socio-demographic performa

Age, gender, professional qualification, working area, experience, previous experience in maternity related services/ward.

Section B: Knowledge questionnaire

Part-1: 10 general questions related to obstetrical emergencies.

Part-2: 10 questions related to PPH and its management.

Part-3: 10 questions related to cord prolapsed and its management.

Part-4: 10 questions related to uterine rupture and its management.

Part-5: 10 questions related to shoulder dystocia and its management.

Data collection

A formal written permission was obtained from the Kailash hospital. The data was collected in the month of November and December 16/11/2018 to 15/12/2018. 80 subjects were collected by using convenient sampling technique. The researcher introduced himself to the respondents and explained the purpose of study to the staff nurses after this investigator collected the data from staff nurses by using structured questionnaire to assess the knowledge and management regarding obstetrical emergencies. They were assured that their responses would be kept confidential and used only for the research purpose. The collected data was then organized for analysis.

Statistical analysis

The data analysis was done in accordance with the objectives of the study. The collected data was tabulated and analyzed by calculating frequency, percentage, Mean, Median, Mode standard deviation and Chi square test. Levels of significance chosen were P < 0.05. Bar graphs pie chart, column diagrams were used to depict the findings. The data collected will be analyzed by using descriptive and inferential statistics.

Ethical clearance and informed consent

Institution’s ethical review committee’s permission was taken. Written permission was obtained from the ethical committee of Kailash hospital greater Noida after explaining the type and purpose of study. The responses of participants were kept confidential.
Results
Findings related to socio-demographic variables
It was found that
- 40 (50%) samples were in the age group of below 25 years, 33 (41.25%) of samples were in the age group of 26 to 30 years, 6 (7.5%) of samples were in the age group of 31 to 35 years, 1 (1.25%) of samples were in the age group of 36 to 40 years and no one sample was in the age group of above 40.
- 51 (63.75%) samples were female and 29 (36.25%) of the samples were male.
- 56 (70%) were GNM, 18 (22.55%) were B.Sc. Nursing, 5 (6.25%) were post basic B.Sc. Nursing and 1 (1.25%) were M.Sc. Nursing.
- 20 (25%) in casualty, 17 (21.25%) in medicine ward, 16 (20%) in labor ward, 16 (20%) in surgery ward, 5 (6.25%) in pediatric ward and 6 (7.5%) were posted in other working areas.
- 30 (37.5%) of samples had 1 to 3 years’ experience, 24 (30%) were fresher (less than 1 year), 23 (28.75%) of samples had more than 3 years up to 6 years’ experience, 2 (2.5%) of samples had more than 8 years’ experience, 1 (1.25%) of samples had more than 6 years up to 8 years’ experience.
- 61 (76.25%) of samples did not have previous experience in Maternity related services/ward and 19 (23.75%) of samples had previous experience in Maternity related services/ward.

Findings related to knowledge of staff nurses regarding obstetrical emergencies and its management
The majority of the respondents, where having 66.8% knowledge about part-1 (overall knowledge about obstetrical emergencies and its management). In other parts respondents were having knowledge regarding 4 selected obstetrical emergency conditions and its management namely (PPH, cord prolapsed, uterine rupture and shoulder dystocia). 49.3% knowledge about part-2 (PPH and its management), 40.9% knowledge about part-3 (cord prolapsed and its management), 46.9% knowledge about part-4 (uterine rupture and its management). 39.9% knowledge about part-5 (shoulder dystocia and its management).

Findings related to significant association between knowledge and demographic variables
Significant association is check by chi square test. There is no significant association between the knowledge score and following demographic variables (Age, professional qualifications, working area, experience, previous experience in maternity related services/ward.) at 0.05 level of significance. There is significant association between knowledge and gender demographic variable at 0.05 level of significance.

Table 1: Showing the frequency and percentage of sample characteristics (Age, gender, professional qualification, working area, experience, previous knowledge obtained during in-service regarding obstetrical emergencies and its management.)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Sample characteristics</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Age (In years)</td>
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<td></td>
</tr>
<tr>
<td>a)</td>
<td>Below 25</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>b)</td>
<td>26-30</td>
<td>33</td>
<td>41.25</td>
</tr>
<tr>
<td>c)</td>
<td>31-35</td>
<td>6</td>
<td>7.5</td>
</tr>
<tr>
<td>d)</td>
<td>36-40</td>
<td>1</td>
<td>1.25</td>
</tr>
<tr>
<td>e)</td>
<td>Above 40</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a)</td>
<td>Male</td>
<td>29</td>
<td>36.25</td>
</tr>
<tr>
<td>b)</td>
<td>Female</td>
<td>51</td>
<td>63.75</td>
</tr>
<tr>
<td>3</td>
<td>Professional qualification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a)</td>
<td>GNM</td>
<td>56</td>
<td>70</td>
</tr>
<tr>
<td>b)</td>
<td>B.Sc. Nursing</td>
<td>18</td>
<td>22.5</td>
</tr>
<tr>
<td>c)</td>
<td>Post basic B.Sc. Nursing</td>
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<td>6.25</td>
</tr>
<tr>
<td>d)</td>
<td>M.Sc. Nursing</td>
<td>1</td>
<td>1.25</td>
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<td>4</td>
<td>Working area</td>
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<tr>
<td>a)</td>
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<td>25</td>
</tr>
<tr>
<td>b)</td>
<td>Labour ward</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>c)</td>
<td>Medicine ward</td>
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</tr>
<tr>
<td>d)</td>
<td>Surgery ward</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>e)</td>
<td>Paediatric ward</td>
<td>5</td>
<td>6.25</td>
</tr>
<tr>
<td>f)</td>
<td>Other specify</td>
<td>6</td>
<td>7.5</td>
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<tr>
<td>5</td>
<td>Experience (In years)</td>
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</tr>
<tr>
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<td>Fresher (Less than 1 year)</td>
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<tr>
<td>b)</td>
<td>1-3 year</td>
<td>30</td>
<td>37.5</td>
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<tr>
<td>c)</td>
<td>More than 3 years up to 6 years</td>
<td>23</td>
<td>28.75</td>
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<tr>
<td>d)</td>
<td>More than 6 years up to 8 years</td>
<td>1</td>
<td>1.25</td>
</tr>
<tr>
<td>e)</td>
<td>More than 8 years</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>6</td>
<td>Previous experience in maternity related services/ward</td>
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<td></td>
</tr>
<tr>
<td>a)</td>
<td>Yes</td>
<td>19</td>
<td>23.75</td>
</tr>
<tr>
<td>b)</td>
<td>No</td>
<td>61</td>
<td>76.25</td>
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</tbody>
</table>

N = 80
Discussions

In this chapter, an attempt has been made to relate the findings of the present study to the studies done earlier. The finding of the present study has been discussed in accordance with the objectives of this study. The first objective of the study was to assess the knowledge of staff nurses regarding obstetrical emergencies and its management. The majority of respondents, where having 66.8% knowledge about part-1 (overall knowledge about obstetrical emergencies and its management). In other parts respondents were having knowledge regarding 4 selected obstetrical emergency conditions and its management namely (PPH, cord prolapsed, uterine rupture and shoulder dystocia). 49.3% knowledge about part-2 (PPH and its management), 40.9% knowledge about part-3 (cord prolapsed and its management), 46.9% knowledge about part-4 (uterine rupture and its management), 39.9% knowledge about part-5 (shoulder dystocia and its management).

All respondents were having maximum knowledge regarding obstetrical emergencies and its management in part-1 (66.8%) and minimum knowledge in part-5 (39.9%). The second objective of the study was to find out association between knowledge and selected demographic variables of staff nurses such as age, gender, professional qualification, working area, experience, previous knowledge obtained during in-service regarding obstetrical emergencies and its management.

Conclusion

Obstetrical emergencies are life threatening medical conditions that occur in pregnancy, during or after delivery.
and are the leading cause of maternal and perinatal mortality and morbidity. Being primary health care provider nurses have key roles in identification and prompt management of obstetrical emergencies. The present study was conducted in order to assess the knowledge of staff nurses regarding obstetrical emergencies and its management. The computed chi square test showed that there was significant association between knowledge of staff nurses and gender demographic variable and no significant association with other selected demographic variables.

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Declarations
Funding: No funding sources

Ethical approval: The study was carried out after obtaining approval from the Institutional Ethical Committee of Kailash Institute of Nursing and Paramedical Sciences Knowledge, Park-3, Greater Noida.

References