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Effectiveness of an Organized Education Program on Specific Obstetrical Situations for Nurses Working in Prenatal, Postnatal, and Labor Rooms

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Abstract

Medical illnesses known as obstetric crises endanger the lives of expectant mothers and their unborn children. Approximately 15% of pregnant women experience a serious issue from conception until delivery.

For nurses to succeed, they must be able to integrate competence, compassion, and critical thinking. Midwives must possess and develop the essential qualities needed to care for a woman experiencing an obstetric crisis.

Objectives of the study:

1. to evaluate the pretest level of knowledge among nurses working in prenatal, postnatal, and labor rooms regarding specific obstetrical emergencies.
2. To evaluate the post-test level of knowledge about certain obstetrical emergencies among nurses employed in prenatal, postnatal, and labor rooms.
3. To evaluate how well nurses working in labor rooms, prenatal wards, and postnatal wards understand certain obstetrical emergencies through an organized teaching program.
4. To determine the relationship between nurses working in labor rooms, prenatal wards, and postnatal wards' awareness of specific obstetrical emergencies and their chosen demographic characteristics.

Methods: This was a quasi-experimental study. The study used a quantitative research strategy as its methodology. Sixty staff nurses who worked in prenatal, postnatal, and labor rooms made up the sample. The data was gathered using a non-probability handy sampling strategy.

Results: During the pre-test in this study, the sample's highest mean percentage (46.57%) was identified in the area of cord prolapse, followed by pregnancy-induced hypertension (40.72%) and postpartum hemorrhage (26.63%). The pre-test yielded an overall mean percentage of 22.55%. Pregnancy-induced hypertension had the highest mean percentage (54.61%) in the current study's post-test, followed by cord prolapse (50.14%), and postpartum hemorrhage (30.45%) had the lowest mean percentage. In the post-test, the overall mean percentage was 27.91%.

Conclusion: Based on the study's findings, it can be concluded that the organized education program was successful in raising the staff nurses' knowledge levels in the labor room, prenatal, and postnatal wards. Additionally, since the mean knowledge score in the current study was the lowest in both the pretest and posttest, it is advised that even though staff nurses' knowledge has improved, more training

programs in obstetrical emergencies, particularly postpartum hemorrhage, would be beneficial for the nurses.

Keywords: Effectiveness, knowledge, obstetric emergencies, nurses, postnatal & labour room

Introduction

Children frequently get upper respiratory tract infections; a healthy three-year-old typically has six to ten colds annually. Although the symptoms of an upper respiratory tract infection are typically minor, viral, and self-limiting, children may experience fever, irritability, lethargy, and discomfort. The goal of treatment is to reduce discomfort and symptoms. Even yet, popular over-the-counter cough and cold remedies might not be useful for managing the illness's symptoms. They may have a wide range of negative consequences, including toxicity from inadvertent overdosing and unexpected reactions, especially in children under three.

The most frequent cause of hospital care consultations is upper respiratory tract infections. Health issues that pose a threat to the lives of expectant mothers and their unborn children are known as obstetric crises.

During pregnancy, labor, and delivery, an obstetric emergency can occur at any point. All obstetric emergencies require hospital care since the woman may require specialized care and a prolonged hospital stay. This could be due to a higher danger to the woman's health, the possibility of an early birth, or the loss of a baby. Approximately 15% of pregnant women often experience major complications from conception to delivery. A small percentage of all the emergency circumstances that can occur in the field of obstetrics require immediate, practical action to be taken in order to protect the mother's life, the life of the unborn child, or both.1

It ranges from 100 to 700 in poor nations, with India having roughly 254 per 100,000 live births.9 It is the most common cause of pregnancy-related mortality worldwide, occurring 8.7 million times annually and causing 44,000 to 86,000 deaths. In the UK, PPH kills roughly 0.4 women out of every 100,000 births, whereas in sub-Saharan Africa, it kills about 150 women out of every 100,000 births. In the UK, death rates have significantly declined since at least the late 1800s.14. To prevent maternal death, hospital treatment is necessary for the majority of life-threatening obstetric problems. Some people believe that government hospitals and health centers must offer hospital services for the impoverished in developing nations, and that a significant percentage of deliveries must take place there in order to give them prompt access to emergency care. This is a serious issue in nations like India, where nearly all births take place at homes, government hospitals, and health centers, where emergency care is typically inadequate. Nurses need to be able to integrate critical thinking, compassion, and competence. In order to care for a woman experiencing an obstetric emergency, midwives must possess and cultivate certain skills.

Need of study

Maternal and perinatal death rates are important indicators of a nation's overall or partial health care delivery system quality. Over 20% of maternal deaths worldwide occur in India, which has 16% of the world's population. The lowering of mortality in developed nations has been largely attributed to the maintenance of reliable vital statistics (keeping records of important occurrences like births and deaths), their critical examination, and the development of preventive measures. The main causes of the high

rates of maternal and perinatal fatalities in underdeveloped nations are known to include uncontrolled fertility, unsafe abortion, inadequate prenatal care, and a shortage of skilled delivery attendants.2 Between 327 in 1996 and 675 in 1999, almost 76% of the women died within 48 hours of being admitted, and the majority had low parity (37.5%). PPH is linked to 1.2% of deliveries in the underdeveloped countries, and 3% of women die as a result of PPH. It is the most common cause of pregnancy-related mortality worldwide, occurring 8.7 million times and causing 44,000 to 86,000 deaths annually.3 primary cause of pregnancy-related deaths.3

According to an assessment of the literature, mother and child mortality is one of India's most pressing problems. To enhance their skills and reduce mother and child morbidity, numerous skill-based training programs are being developed for prenatal and child care nurses. The author believed the problem was suitable for the study since he works in a clinical setting and wants to raise public awareness of the significance of preventative health care.

The study's objective

to evaluate the efficacy of a systematic education program on specific obstetrical emergencies for nurses employed in labor rooms, prenatal wards, and postnatal units of particular institutions.

Techniques

The nature of the investigation was quasi-experimental. The study used a quantitative research strategy as its methodology. Sixty staff nurses from the labor room, prenatal, and postnatal wards made up the sample. The data was gathered using a non-probability handy sampling strategy. The tool was divided into two sections: 1. Demographic information and 2. Self-structured questionnaires on obstetrical care knowledge.

Reliability

The test-retest method is used to determine reliability, and Karl Pearson's formula is used to determine the correlation coefficient. The tool's estimated value indicates that it is quite dependable.

Pilot study

Following the pilot study, it was determined that the full study was both practicable and feasible. The questionnaire was pertinent, the time and expense of the study were within budget, and the involved authorities and the samples were determined to be cooperative.

Result

The following is the result for demographic factors:

Age-wise, 33.33 percent of samples were between the ages of 20 and 25, 26.66 percent were between the ages of 26 and 30, 31.66 percent were between the ages of 31 and 35, and 8.33 percent were older than 35. 50% of the nurses in the sample are married, 46.66% are single, and 3.33% are divorced, according to their marital status. According to professional credentials, 33.33 percent of respondents have an ANM, 38.33 percent have a GNM, and 28.33 percent have a B.Sc. (N).

This is currently visible in most of the workspace. At the moment, 31.66 percent of responders work in prenatal care, 16.66 percent in the postnatal ward, and 36.66 percent in the labor room. Only 8.33 percent and 6.66 percent of respondents have 10–15 and more years of experience in the labor room and

labor OT ward, and 15% have worked in ANC & PNC OPD. The bulk of respondents have 1–5 years of experience, while 25% have 5–10 years.

The majority of respondents had worked in a maternity ward for one to five years, 25% for five to ten years, and only 6.66% and 3.33% for ten to fifteen and more than fifteen years, respectively. 23.33 percent of nurses can describe obstetrical emergencies, 28.33 percent can describe obstetrical emergency investigations, 26.66 percent can manage obstetrical emergencies, and 21.66 percent can describe general knowledge of obstetrical emergencies, according to prior obstetrical emergency knowledge.

The majority of nurses attended only one to three obstetrical emergencies training programs in the preceding five years, whereas 30% attended four to six. Only 13.33 percent of nurses work in semi-government hospitals, while 86.66 percent work in private hospitals, according to the statistics gathered. A set of programs called Obstetrical Emergencies is dedicated to obstetrical emergencies. The majority of nurses (53.33%) had low knowledge, 40% had moderate knowledge, and 6.66% had good knowledge about certain obstetrical emergencies in the pre-test, according to the percentage distribution of nurses by knowledge level. 61.66% of respondents had average knowledge and 13.33% had strong knowledge about specific obstetrical emergencies following the implementation of a systematic instruction program.

Table 1:

Table 1: Comparison of Mean, SD & Mean % of Pretest and Post Test Knowledge of nurses working in labour room, antenatal & postnatal wards regarding selected Obstetrical Emergencies.

Sr. No	Area	Pretest		mean	Posttest		Mean
		Mean	SD		Mean	SD	
1	Pregnancy Induced Hypertension	7.33	1.60	40.72	9.83	1.45	54.16
2	Cord Prolapse	3.26	1.26	46.57	3.51	1.23	50.14
3	Postpartum Haemorrhage	2.93	1.36	26.63	3.35	1.38	30.45

Pregnancy-induced hypertension had a mean of 7.33, SD was 1.60, and the mean percentage score was 40.72%, cord prolapse had a mean of 3.26, SD was 1.26, and the mean percentage score was 46.57%, and postpartum hemorrhage had a mean of 2.93, SD was 1.36, and the mean percentage score was 26.63%.

Relationships between certain demographic characteristics and pretest knowledge scores The Chi square test was used to determine the relationship between pretest knowledge scores and particular demographic factors. The findings indicate that there is no correlation between any demographic factor and nurses' understanding of obstrectic situations.

Fig 1:

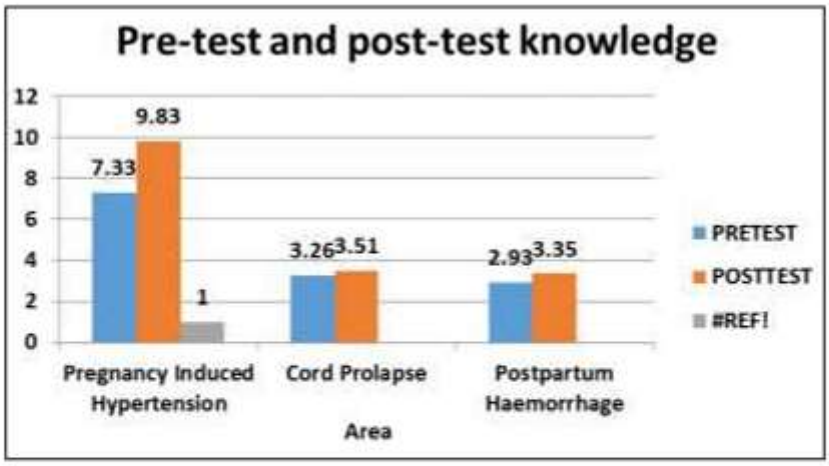

Fig 1: Pretest and posttest knowledge percentage wise distribution

Table 2: Z value of pre and post-test knowledge of staff nurses regarding structured teaching programme

Knowledge scores	Mean	SD	SE	Z Value	Level of Significance
Pretest scores	13.53	5.67	1.029	3.12	Significant
Post test scores	16.75	5.61			

df= 59, table value= 2, p = ≤0.05

It shows that staff nurses working in labor rooms, prenatal wards, and postnatal wards had mean knowledge scores of 13.53 on the pretest and 16.75 on the posttest for specific obstetrical emergencies. The Z value was computed to examine the variation between nurses' pre- and post-test knowledge scores for specific obstetrical emergencies. There was a notable variation in the nurses' knowledge scores. (z value = 3.12).

The aforementioned data shows that staff nurses who participated in a structured instruction program on specific obstetrical emergencies and worked in labor rooms, prenatal wards, and postnatal wards had higher mean knowledge scores in the posttest compared to the pretest. The systematic training program on specific obstetrical emergencies has been successful in imparting knowledge, it can be concluded.

Because it is believed that there was a substantial difference between the pre-test and post-test knowledge scores, the stated null hypothesis is rejected. Therefore, there was a real difference between the pre-test and post-test mean knowledge score values.

Discussion

A study on the evaluation of nurses' practical abilities in preventing postpartum hemorrhage was conducted by Galal A, Soad A. et al. (2017) [4]. This study aimed to assess nurses' practical skills in reducing postpartum hemorrhage. The obstetrics and gynecology department of Benha University Hospital conducted the descriptive study.

A convenient sample of fifty nurses. A self-administered questionnaire sheet, a modified Likert scale, and an observation checklist for preventing postpartum hemorrhage were the tools utilized to collect the data. More than half of nurses had adequate knowledge of postpartum care, more than two-thirds of nurses had an uncertain attitude, more than three-quarters of nurses had incorrect practices, and two-thirds of nurses had average knowledge of postpartum hemorrhage and antenatal prevention of postpartum hemorrhage.

Over 75% of nurses used improper procedures.
Certain operations, like wound care, enema, and urinary catheter implantation, are not performed by any of the nurses in this study.
More than three quarters of nurses had an average of 43 knowledge points about postpartum hemorrhage avoidance, more than two thirds of nurses had an ambiguous attitude toward postpartum hemorrhage avoidance, and less than three quarters of nurses performed hemorrhage avoidance practices incorrectly, according to the current study's findings [4].

Conclusion

The study's results have led to the following conclusions: Before and after the implementation of a systematic education program, it was discovered that staff nurses working in labor rooms, prenatal wards, and postnatal wards in particular hospitals had different mean knowledge scores. Staff nurses working in labor rooms, prenatal wards, and postnatal wards in some hospitals were found to benefit from a comprehensive education program on certain obstetrical emergencies. Additionally, even though staff nurses' knowledge improved, they would benefit from additional training programs, especially in service education on obstetrical emergencies, especially postpartum hemorrhage, as the mean knowledge score in the current study was the lowest in both the pretest and posttest. Further investigation into postpartum hemorrhage and its treatment is necessary in light of the findings of the previously described study. Prior to the pretest, there was no discernible correlation between certain demographic characteristics and staff nursing expertise.

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