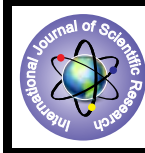


A Study to Assess the Effectiveness of Video Assisted Teaching Module (VATM) on Knowledge Regarding Prevention & Management of Birth Asphyxia Among Staff Nurses at Capital Hospital Bhubaneswar, Odisha



Medical Science

KEYWORDS : Birth Asphyxia, Video Assisted Teaching Module, Prevention & Management.

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ABSTRACT

A Quasi experimental design was conducted on staff nurses to assess the effectiveness of Video Assisted Teaching Module (VATM) on PMBA. An evaluative approach with one group pre test & post test design was used for the study. 50 samples were selected by purposive sampling technique method through the use of closed ended multiple choice questionnaire. The present study was conducted in Capital Hospital, Bhubaneswar, Odisha. The Data were analyzed by using descriptive & inferential statistics. A significant difference between pre test & post test knowledge was found ($t=59, p \leq 0.05$). The study findings showed that the VATM was effective in improving knowledge of staff nurses regarding prevention & management of Birth Asphyxia. There was no significant association between the level of knowledge & demographic variables.

INTRODUCTION :-

“Their body appearing so senseless and their face so blue...let the midwife take a little wine in her mouth and spout it into its mouth, repeating it often, if there be occasion”. (Aristotle, 384-322 BC)

Health of future citizens depends on the care; we are giving to neonates today. More than 50% of the infants' death occurs in new born period. Most of this death occurs during first week of life. The majority of complication will occur during the period of first 24hours of life.

Every health care personnel working in the delivery room should be able to prepare for resuscitation & practice. The components of neonatal resuscitation procedure are of temperature, establishment of an open airway, initiating of breathing, maintenance of circulation. If the infants has no spontaneous breathing then positive pressure ventilation should be started with bag & mask ventilation followed by chest compression & endotracheal intubation. Nurses play a vital role in the neonatal resuscitation & preventing from complications 1.

Need For the Study

Birth asphyxia is the third major cause of neonatal death after infections and Preterm births in developing countries and accounts for an estimated 23% of the annual 4 million neonatal deaths. WHO estimates that 3% of the approximately 120 million infants born every year in developing countries develop birth asphyxia and require resuscitation². In India birth asphyxia is a major cause for neonatal morbidity and mortality, responsible for 25-35% of the deaths that occur during neonatal and perinatal periods³.

All India Institute of Medical Sciences in New Delhi pointed out that there are 26 million births annually in India & birth asphyxia is the cause of 20% of neonatal deaths in India⁴.

In view of the above reason & the researcher's own experience regarding prevention & management of birth asphyxia, the researcher is interested to take up this problem to assess the knowledge staff nurses is felt to be essential for improvement in the nursing care regarding prevention & management of birth asphyxia. So here comes the role of nurse to assess the asphyxia babies & to protect them from various complications. Hence it is important to educate the staff nurses about prevention of Birth Asphyxia & how to manage the newborn with such problem.

Statement of the problem

“A study to assess the effectiveness of Video Assisted Teaching Module (VATM) on knowledge regarding Prevention & Management of Birth Asphyxia among staff nurses at Capital Hospital Bhubaneswar.”

Objectives of the Study

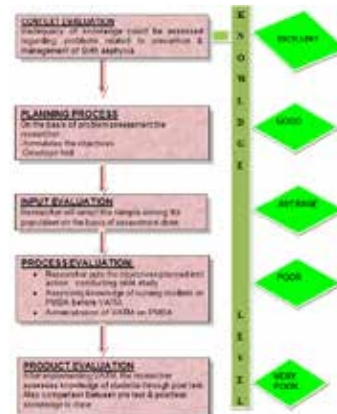
- To assess the pretest knowledge on prevention & management of neonatal birth asphyxia among staff nurses.
- To find out the effectiveness of VATM on prevention & management of neonatal birth asphyxia among staff nurses.
- To compare the pre test & post test knowledge score of staff nurses with their demographic variables.
- To find out the association between the post test knowledge score of staff nurses with their selected demographic variables.

Hypothesis

H₁ → There is a significant difference between pretest & posttest knowledge scores of staff nurses after giving VATM on prevention & management of neonatal birth asphyxia.

H₂ → There will be a significant association between post test knowledge scores with their selected demographic variables.

Figure no -1: Conceptual Frame Work:- Conceptual framework selected for this study was based on modified CIPP Model (2002) as postulated by Daniel Stuffle Beam's.



Materials & methods:-

The research design used for this study was Quasi-experimental design. The research design used for this study was Quasi-experimental in nature. The study was conducted at Capital Hospital, Bhubaneswar, Odisha. The sample included 50 staff nurses on the basis of inclusion & exclusion criteria were selected. Purposive sampling technique was used for this study. The tool consists of 2 section. Sect-1 consisting of section I (Socio-demographic variables such as age, sex, professional qualification, experience in NICU (in years), any exposure to VATM) & section II (consisting of 40 items related to knowledge regarding prevention & management of Birth Asphyxia). The content validity of structured questionnaire was ensured by submitting the tool to the expert in the field of pediatrics for content validation. Pilot study was conducted (who were not included in the study) at District Head Quarter Hospital, Khordha, Odisha, which is other than the main setting. The reliability of tool was computed by applying split half technique & was calculated by Karl Pearson's coefficient of correlation formula, which was found 0.82.

Results & Findings

Table:1: Frequency & percentage distribution of staff nurses according to their demographic variable.

Demographic Variables	Frequency	Percentage
Age		
21-30	19	38
31-40	20	40
41-50	14	28
51 and above	4	8
Sex		
Male	0	0
Female	50	100
Professional Qualification		
ANM	4	8
GNM	30	60
B.Sc (N)	14	28
M.Sc (N) and above	2	4
Experience as a staff nurses in NICU		
1-3	10	20
3-5	8	16
5-7	28	56
Above 7 years	4	8
Previous exposure to VATM on PMBA		
Yes	5	10
No	45	90



Figure-1: Bar diagram represents the pre & post test knowledge scores of staff nurses regarding PMBA.

Fig-1: Levels of pre test & post test knowledge score of staff nurses regarding prevention & management of Birth Asphyxia depicts that in pretest, (58%) of the staff nurses had V.P.OOR

knowledge & (42%) of them had POOR knowledge. But in post test majority (80%) of the staff nurses have EXCELLENT knowledge & (20%) have GOOD knowledge.

A. Area wise post test highest mean percentage is (90%) with mean (3.60±0.49) for area "Meaning of Birth Asphyxia". The lowest mean percentage in post test is (85.2%) with mean score (17.42±1.51) for area "Management of Birth Asphyxia". Further, effectiveness varies from 57.5% to 68%.

B. Item wise comparison showed that there is effectiveness of VATM in increasing knowledge of the staff nurses on PMBA. Highly significant difference was found between pre & post test knowledge scores.

H0- There will be significant difference in the pretest and post-test level of knowledge score among the caregivers after administration of structured teaching programme.

Table 2: Comparison between overall knowledge scores of pre test & post test among staff nurses regarding PMBA.

Area	't' value	Level of Significance
Introduction to Birth Asphyxia	5.55	Highly Significant
Meaning of Birth Asphyxia	6.4	Highly Significant
Etiological Factors of BA	4.88	Highly Significant
Pathophysiology of BA	5.11	Highly Significant
Clinical Features of BA	4.15	Highly Significant
Management of BA	5.44	Highly Significant
Prevention of BA	8.96	Highly Significant
Over all	9	Highly Significant

df=49)(table value=2.00),(p<0.05)

Table-2: Paired 't' test was calculated to assess the significant difference between the area wise score values of pre test and post test. Thus, the difference observed in the mean score value of pre test and post test were true difference and not by chance. Hence stated null hypothesis is rejected (p<0.05) and statistical hypothesis is accepted it can be interpreted that VATM was effective for all the areas.

H1: There will be significant relationship between level of knowledge among the care givers who receives structured teaching programme.

Table-3 : Association between post test knowledge scores of staff nurses on PMBA with their demographic Variables.

Demographic Variables	Chi-square Value	Level of Significance
Age	2.834	Not Significant
Sex	2	Not Significant
Profession qualification	1.207	Not Significant
Experience as a staff nurse in NICU	0.216	Not Significant
Previous exposure to VATM on PMBA	0.262	Not Significant

(p≤0.05)

Table -3: From the Chi square test it was interpreted that there was no significant association found between knowledge scores of the staff nurses with their selected demographic variable (p>0.05).

IMPLICATION**Nursing practice**

❖ The content of the Video Assisted Teaching Module will help the staff nurses in advancing their knowledge in provision of resuscitative care in case of Birth Asphyxia.

❖ The findings will help the staff nurse to be aware of situation which requires immediate nursing action to prevent birth asphyxia.

❖ This Video Assisted Teaching Module can be utilized by the staff nurses in creating the awareness among the nurses in selected Hospital.

Nursing Education:-

❖ The nurse educator can use the Video Assisted teaching Module to teach the student in an effective way.

❖ The nurse educator can plan VATM & instruct the nursing students to utilize opportunities provided to them show as to gain expertise & skill in practice of PMBA.

❖ The clinical instructor can also teach the students regarding prevention & management of birth asphyxia with the help of VATM.

Nursing Administration:-

❖ With technological advances & ever growing challenges of nursing, the nurse administrators have responsibility to provide with substantive educational opportunity.

❖ Nurse administrator may use the study findings to improve the quality of care in every situation.

❖ Administrator should organize in-service education program, refresher courses & workshops for health care personnel & encourage them to participate them in these activities.

Nursing Research:

❖ The essence of research is to build up of a body of knowledge in nursing, as it is an evolving profession.

❖ The findings of the study help the professional nurses & nursing students to develop enquiring in knowledge & skills by providing a base.

❖ A large scale study can be done for replication to standardize the Video Assisted Teaching Module on PMBA.

Recommendations

Keeping in view the findings of present study, the following recommendations were made since this study was carried out a small sample, the result can be used only as a guide for further study.

❖ A similar study on a large sample may help to draw more definite conclusion & make generalization.

❖ An experimental study can be undertaken with control group.

❖ A similar study can be conducted in separate settings.

❖ A comparative study can be conducted on knowledge of students in two alternate hospitals.

CONCLUSION:-

The study findings implied that the VATM has a vital role in improving the knowledge of staff nurses regarding prevention & management of Birth Asphyxia. Health related education is an integral part of hospital services; Video Assisted Teaching program can play an important role in Health Education program, making the nurses an important channel for improving knowledge & skill in clinical practice.

REFERENCE

1. Dutta Parul. "Text book of Pediatric Nursing". 1st Edition (2007). Jaypee Brothers Medical Publishers (p) Ltd. Page No. 67-75. | 2. World Health organization. Basic Newborn Resuscitation: A practical guide Apr 2006. | 3. Meghendra Banerjee, Joy Elamon ,Meenakshi Agarwal. Intervention addressing Birth asphyxia at institutional and community levels-Experiences. May 2009. | 4. Bang AT, Bang RA, Deshmukh MD: Management of Birth Asphyxia in home Deliveries in Ruralgadchoroli, J Perinatol 2005;Sb2-S91 | 5. Chelapa. "Text book of Pediatric Nursing,1st Edition(2004). Vora Medical Publication Calcutta. Page No. 48-49. | 6. Panna Choudhury. "Principles of Pediatric Neonatal Emergencies", 2nd Edition (2006).New Delhi, Jaypee Brothers Medical Publishers (P) Ltd,Page No.28-29. | 7. Das. Neonatal Morbidity and Mortality. Journal of Medicine.2007,Page No. 86-88. | 8. Hungler Polit. "Nursing research principles and methods". 7th Edition (2004).Philaldephia, Lippincott Williams and Wilkins company. Page No. 250-251. | 9. Dr. Suresh k. Sharma. Nursing research and statistics. 1st edition. Reprint 2012. Chapter-6. Published by ELSEVIES, a division of Red Elsevion India Private Limited. |