## ORIGINAL RESEARCH PAPER

Obstetrics & Gynecology

TO EVALUATE THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING (VAT) ON KNOWLEDGE REGARDING POST PARTUM HAEMORRHAGE (PPH) MANAGEMENT DRILL AMONG 4TH YEAR B.SC. NURSING STUDENTS OF A SELECTED NURSING COLLEGE AT MANGALORE.

# **KEY WORDS:**Dexmedetomidine, Pediatric intravenous general anesthesia,

Quality, Stress, Mean arterial pressure

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Background:-Postpartum haemorrhage is a serious situation which can be managed through prompt attention and treatment. Postpartum haemorrhage management drill plays a leading role in prevention and control of PPH and which includes a series of steps like recognition of PPH and patient's response, alert team and ask for help to monitor the patient, performance of uterine massage, observation of perineum and bladder, administer uterotonic drugs, bimanual compression and compression of abdominal aorta, intrauterine packing, intrauterine balloon tamponade, identification of cervical trauma and hemodynamic stability. Aim:-To evaluate the effectiveness of video assisted teaching (VAT) on knowledge regarding Postpartum Haemorrhage (PPH) management drill. Objectives:-1.To determine the pre-test and post-test level of knowledge regarding PPH management drill among 4th year B. Sc. nursing students as measured by a structured knowledge questionnaire. 2. To evaluate the effectiveness of video assisted teaching (VAT) on knowledge regarding Postpartum Haemorrhage (PPH) management drill among 4th year B. Sc. nursing students in terms of gain in mean post-test knowledge score. Methodology: Evaluatory research approach was used to achieve the objective of the study. And the research design used was quasi experimental one group pre-test post-test design. A structured knowledge questionnaire was used to assess the knowledge. Results: The pre-test 18.6% had poor knowledge and 81.6% had average knowledge. In the post test it shows the 8.33% gained excellent score, 53.3% gained good knowledge and 38.3% had average knowledge score and none of them had poor knowledge.

#### INTRODUCTION

The birth of a baby is a momentous occasion, tiny details of the experiences surrounding the whole event are etched in the memory forever. Of all stages of labour, third stage is the most crucial one for the mother. Foetal complications may appear unexpectedly in an otherwise uneventful first or second stage. Even though third stage lasts only for fifteen to twenty minutes in both primi and multigravida mothers it can be complicating due to mismanagement of third stage of labour, resulting in maternal mortality. Simulation-based training has been shown to improve learner competency in evaluating and treating obstetrical emergencies. Due to the relative infrequency of PPH, student nurses of today may miss opportunities to practice critical skills and gain knowledge in a supervised learning environment. Simulation allows students to practice low-frequency, high-stakes events such as PPH within an environment of safety. Postpartum haemorrhage drill is the clear logical steps that can be used to reduce maternal mortality rate, promoting student knowledge, ability in management of Postpartum Haemorrhage.

## Need for the study

Deaths associated with PPH could be prevented with prompt recognition, timely, adequate management. International Federation of Gynaecology and Obstetrics further state that every attendant at birth should have knowledge, skills and judgment needed to carryout "Active Management of Third Stage of Labour (AMTSL)" for preventing PPH. Hence, it is recommended that all delivering women should benefit from AMTSL. This is possible by training nursing graduate students in preventing PPH. One of such teaching modalities is simulation using mannequin. Simulation is artificial creation of real process for training or performance testing.

A wide range of literature suggests that if adequate training, skills and knowledge are provided to all health care members especially the students who are in their learning phase by providing a comprehensive, non-judgmental, educational package in the form of video-show on postpartum hemorrhage simulation or drills can effectively help in the management of Postpartum Hemorrhage and also help in reduction of maternal mortality and morbidity rate

## Problem statement

A study to evaluate the effectiveness of Video Assisted Teaching(VAT) on knowledge regarding Post-Partum Haemorrhage (PPH) management drill among 4th year B. Sc.

nursing students of a selected nursing college at Mangalore.

## Objectives of the study

1. To determine the pre-test and post-test level of knowledge regarding PPH management drill among 4th year B. Sc. nursing students as measured by a structured knowledge questionnaire.

2. To evaluate the effectiveness of video assisted teaching (VAT) on knowledge regarding Postpartum Haemorrhage (PPH) management drill among 4th year B. Sc. nursing students in terms of gain in mean post-test knowledge score.

## Hypothesis

The hypothesis will be tested at 0.05 level of significance. H1: The mean post-test knowledge score of 4th year B. Sc. nursing students on Postpartum Hemorrhage management drill will be significantly higher than their mean pre-test knowledge score.

## Assumptions

## This study assumes that:

- 4th year B.Sc. nursing students in selected nursing college may have some knowledge and information regarding Postpartum Haemorrhage and its Management.
- Video assisted teaching is an accepted teaching strategy in improving the knowledge of the students.

## **Delimitations**

## The study will be delimited to:-

- The 4th year B. Sc. nursing students of a selected nursing college at Mangalore.
- Generalization of the findings is limited due to the small number of sample.

## Review of Literature

A cross-sectional study was conducted in selected MPHW schools at Hyderabad, Andhra Pradesh to assess the pre-test and post-test level of knowledge regarding Postpartum Haemorrhage among 100 students. The mean Pre-test knowledge score 14.36±2.826 was less than the Post-test knowledge score 36.86±5.235. The study concluded that MPHW students were lacking in depth knowledge in the aspects of Postpartum haemorrhage such as meaning and classification of PPH, causes, Risk factors and Complications, Clinical manifestations and diagnosis of PPH, Prevention of PPH, Nurses role and management of PPH.

A randomized or quasi-randomized controlled trials conducted in women with primary postpartum haemorrhage comparing pharmacological, surgical and radiological interventions for the treatment of primary postpartum haemorrhage. One trial, comparing rectally administered misoprostol versus syntometrine combined with an oxytocin infusion, met the eligibility criteria and was included in the review. The study concluded that there was no significant difference between the two groups regarding surgical interventions to control intractable haemorrhage including hysterectomy, internal iliac artery ligation and/or uterine packing.

## Research Methodology:-

Evaluatory research approach was used to achieve the objective of the study. And the research design used was quasi experimental one group pre-test post-test design.

The target population consisted of 4th year B. Sc. nursing students of a selected college of nursing, Mangalore and accessible population and sixty 4th year B. Sc. nursing students studying in Athena College of Nursing at Mangalore was the accessible population.

Simple random sampling technique was used to select sixty 4th year B.Sc. nursing students.

## **Inclusion Criteria**

- $1.4 th\, year\, B.Sc.\, nursing\, students\, who\, were\, studying\, in\, Athena\, College\, of\, Nursing.$
- 2. Students who were willing to participate in the study.
- 3. Students who were present at the time of data collection.

#### Exclusion criteria

Student nurses who were absent in the class during the time of data collection.  $\,$ 

#### Reliability

The reliability of the structured knowledge questionnaire was found by using Karl Pearson's correlation coefficient formula and found to be 0.86 which indicated that the tool was reliable.

## **Data Collection**

The study was conducted in Athena Institute of Health Sciences at Mangalore. sixty, 4th year B. Sc. nursing students were selected by using Simple Random Sampling technique. The purpose of the study was explained and informed consent was obtained prior to the administration of structured knowledge questionnaire to ensure their cooperation and prompt answers. Confidentiality was assured to all subjects. The data was collected by using structured knowledge questionnaire in the classroom of Athena College of Nursing and the average time taken was 20-30 minutes. The post test was conducted after seven days by using the same structured knowledge questionnaire.

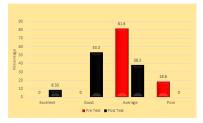
## RESULTS

a. Range, Mean, Median, Standard deviation and Mean percentage of Pre-test and Post-test knowledge scores

				_	n=60
Knowledge level	Range	Mean	Median	SD	Mean%
Pre-test	10-20	13.3	13.3	2.4	33.2
Post-test	13-35	22.9	22.5	5.4	57.5

Maximum possible score: 40

 b. Graph showing Knowledge level of 4th year BSc Nursing Students regarding Postpartum Hemorrhage management drill.



## Implications of the study

- 1. The findings of the present study have implications in the field of nursing education, nursing practice, community, nursing administration and nursing research.
- 2. Student nurses should be encouraged to participate in specialized courses and one such regarding Post-Partum Haemorrhage management drill. The study also gives priority for the continuing education programme for staff nurses as it upholds and maintains knowledge, and thus making them more competent.
- 3. The video- assisted teaching prepared in the present study provides useful framework to guide nurses in discussing and teaching family members regarding Post-Partum Haemorrhage and its management. It will enable staff nurses to care for mothers with Post-Partum Haemorrhage and will influence their ability to maintain skill and expertise when a situation of Post-Partum Haemorrhage arises.

#### Recommendations

- 1. An experimental study could be replicated on simulation on Post-Partum haemorrhage management.
- 2. A study could be conducted on a large group and different setting and students from various colleges.
- 3. A study could be conducted to assess the long term effects of video-assisted teaching programme in their future service field
- 4. A comparative study could be undertaken to evaluate different teaching strategies, self-instructional module, peer evaluation and education by student nurses.

## CONCLUSION

The data collected were subjected to analyze using descriptive and inferential statistics in terms of mean, median, range, SD and paired 't' test. From the findings of the study, it was concluded that VAT was useful in improving the knowledge of 4th year B. Sc. nursing students regarding Postpartum Haemorrhage (PPH) management drill. The 4th year B. Sc. nursing students had average knowledge on Postpartum Haemorrhage Management Drill (33.2%) before administration of Video Assisted Teaching (VAT). After the administration of VAT, 4th year B. Sc. nursing students attained a good knowledge on Postpartum Haemorrhage (PPH) management drill (57.5%).

## REFERENCES

- Beatty TE. Dr. Beatty's contribution to Midwifery. [online]. [Accessed 9 November 2018]. Available from: URL:1834-beatty-pph-revsep2015.pdf; 320o
- Murray SS, McKinney ES. Foundation of maternal-new-born and women's health nursing. 5th ed. Missouri: Sounders Elsevier Publication; 2010. p. 731
- El-Refaey H, Rodick C. Postpartum haemorrhage: definition, medical and surgical management. a time for change. British Medical Bulletin 2010 Dec;96(1):205-17.
- Reddi PR, Begum J. Recent advances in the management of major postpartum haemorrhage - a review. US National Library of Medicine, National Institutes of Health. 2017 Feb; 11(2).
- Abouzahr C. Global burden of maternal death and disability. Br Med Bull 2003;67(1):1-11.