

# A Study to Assess the Effectiveness of Competency Based Education Programme in Identifying the Predictors of Postpartum Haemorrhage during Antenatal Period among Staff Nurses at SMVMCH, Puducherry

Prof. DR.R. Danasu<sup>1</sup>, Mrs. R. Priya Dharshini<sup>2</sup>, G. Renuga Devi<sup>3</sup>

<sup>1</sup>Principal, SMVMCH, Puducherry,

<sup>2</sup>Associate Professor, SMVMCH, Puducherry,

<sup>3</sup>M.Sc., Nursing - II Year, SMVMCH, Puducherry.

Corresponding Author: G. Renuga Devi

## ABSTRACT

Postpartum haemorrhage is an obstetric emergency associated with both the vaginal birth and caesarean section. It is among the manageable causes of maternal mortality that if managed properly can prevent most of the cases of maternal deaths. The problem statement of the present study is effectiveness of Competency Based Education Programme among staff nurses to Identifying the Predictors of Postpartum Haemorrhage during antenatal period. The objectives of this study were, 1.To assess the level of knowledge and skills, among staff nurses in identifying the Predictors of Postpartum haemorrhage during antenatal period. 2. To evaluate the effectiveness of Competence Based Education Programme among staff nurses in identifying the Predictors of Postpartum Hemorrhage during antenatal period.3.To correlate the clinical variables with demographic variables of antenatal mothers. 4.To associate the level of knowledge and skills, among staff nurses with selected demographic variables. The quantitative research approach was used and the research design was pre experimental one group pre test post test method. The study was conducted at Sri Manakula Vinayagar Medical College and Hospital for 60 staff nurses by using purposive sampling technique. Knowledge questionnaire and Observational check list was used to assess the knowledge and skills among staff nurses. The study findings revealed that out of 60 staff nurses, the pre test of knowledge mean score 11.66 and level of skill score 8.83and the post test of knowledge mean score 19.98 and level of skill score 17.33. The study findings concluded that the Competency Based Education training programme on management In Identifying the Predictors of Postpartum Haemorrhage during Antenatal Period of was effective in improving knowledge and High competent skills among staff nurses.

**Key words:** Postpartum Haemorrhage (PPH), Competency Based Education

## INTRODUCTION

In the life cycle, a female has to undergo various stages like daughter, wife, mother, mother in law and grandmother. Among these one of the most beautiful and memorable event is becoming a mother. Every mother to be hopes for an easy and

trouble free pregnancy. The reality is some women may have Jeopardize outcomes during pregnancy, with significant complication on maternal and perinatal health. Mother is considered as a high risk. High risk pregnancy is defined as a pregnancy in which the mother or fetus has

a significantly increased chance of disability or death. The common High risk conditions that are witnessed during postnatal period are Postpartum haemorrhage, puerperal sepsis, Subinvolution of uterus and puerperal psychosis, out of all the associated risk factors, one of the common cause for increasing maternal mortality during puerperal period is PPH, nearly one quarter 25% of all maternal deaths. PPH is defined as a loss of blood in the Postpartum period of more than 500 ml. The 4 T'S of PPH is Tone, Trauma, Tissue, and Thrombin. It is important that health professional should involve in predicting the risk factors, symptoms and problems earlier during antenatal period. The predictors of PPH in present study is classified as three category such as Low, moderate and high risk level,

**NEED FOR THE STUDY:**

PPH is the world's leading cause of maternal mortality, accounting for one-third of all maternal deaths worldwide. The majority of these deaths occur within 4 hours of delivery, indicating they are a consequence of events in the third stage of labour. In 2015, maternal mortality ratio is 239 per 100 000 live births versus 12 per 100 000 live births in developed countries. Especially Tanzaniamaternal mortality is estimated at 398 deaths per 100 000 live births with 25% of all maternal deaths due to haemorrhage, and 99% of all maternal deaths occur in developing countries with more than half of these deaths occur in sub-Saharan Africa and almost one third occur in South Asia in the world. In 2016, it was

estimated that globally, four out of every ten maternal deaths resulted from two causes, namely, Postpartum hemorrhage and pre-eclampsia/eclampsia. Every year, approximately, 15 million women suffer from Postpartum hemorrhage globally. In the United States, the probability is 1 : 3,700. Direct obstetric causes bleeding in antepartum and Postpartum, preeclampsia, sepsis, prolonged labour, obstructed labour, and complications related to abortion.

The supportive study reveals that the main obstacle for high quality PPH care is patients feels lack of information and care given by health professionals in before, during and after the PPH events. Main obstacles in health professionals were lack of clarity of the guidelines, Lack of knowledge and lack of team communication. Team training and checklist flow charts were more helpful for professionals. Now a days same situation are present in many healthcare settings, these is the only reason for researcher selected the staff nurses for the study. As nurses it is our duty to contribute towards the reduction of maternal mortality due to PPH. Though there are many referral services are available for antenatal mothers and aware of predicting risk factors of PPH. The nurse should be particularly vigilant in monitoring the PPH mothers. So that excessive bleeding can be anticipated and minimized. The researcher helps the staff nurses to initiate frequent assessments on predicting the Postpartum hemorrhage during antenatal period, through competency based education programme.

**STUDY DETAILS**

Research approach:	Quantitative Approach
Research design:	Pre Experimental Design
Setting of the study	Sri Manakula Vinayagar Medical College and hospital maternity unit.
Population:	All staff nurses
Sample:	Staff nurses who are working in maternity unit at SMVMCH, Puducherry
Sample size:	60 staff nurses
Sampling technique	Purposive sampling
Variables	Independent Variables: Competency Based Education Programme Dependent Variables: Level of Knowledge and skill of staff nurses identifying the predictors of Postpartum haemorrhage

**INCLUSION CRITERIA:**

- Staff nurses working in maternity unit
- Staff nurses irrespective of their years of working experience.

- Staff nurses who are registered to practice their profession at SMVMCH.
- Both male and female staff nurses.

The observational check list was formulated to assess the skill for staff nurses. After validation the total score was determined as 20 and the score interpretation is as follows

SCORE	INTERPRETATION
0	No Competent
10	Low Competent
20	High Competent

**EXCLUSION CRITERIA:**

- Staff who are working in administrative position such as nursing superintendent, Deputy nursing superintendent, Staff nurses who are working in other wards

**Description of Data Collection Instruments:**

- Assessment of knowledge on identifying the predictors of PPH for staff nurses. Knowledge questionnaire on staff nurses consists of totally 25 self-structured questionnaire items.

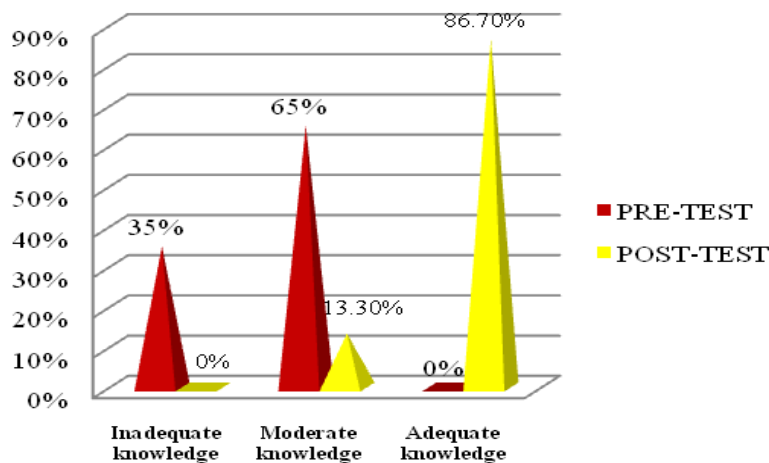
LEVEL OF KNOWLEDGE	SCORE
Inadequate knowledge	1-8
Moderate knowledge	9-17
Adequate knowledge	18-25

**RESULT**

A study was conducted at Sri Manakula vinayagar Medical College and Hospital for 30 Staff Nurses which has 1050 bedded hospital.

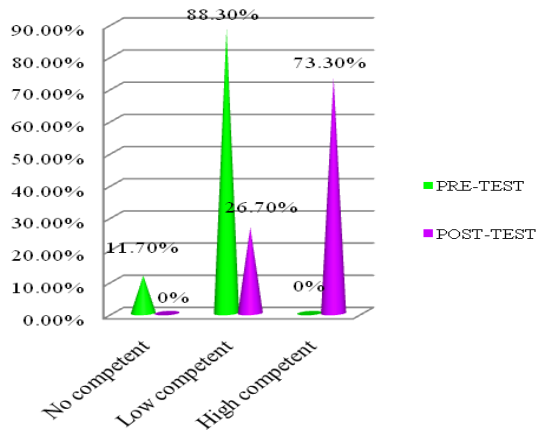
Level of knowledge and skill among staff nurses regarding identifying the predictors of Postpartum hemorrhage before and after Competence Based Education Programme

LEVEL OF KNOWLEDGE	PRE TEST			POST TEST			't' Value	'p' Value
	N	%	Mean & SD	N	%	Mean & SD		
Inadequate Knowledge	21	35	11.6	0	0	19.9	22.33	.001**
Moderate Knowledge	39	65		8	13.3			
Adequate Knowledge	0	0		52	86.7			
Total	60	100		60	100			



**LEVEL OF SKILL**

LEVEL OF SKILLS	PRE TEST			POST TEST			't' Value	'p' Value
	N	%	Mean & SD	N	%	Mean & SD		
No competent	7	11.7	8.83	0	0	17.3	18.28	.001**
Low competent	53	88.3		16	26.7			
High competent	0	0		44	73.3			
Total	60	100		60	100			



### MAJOR FINDINGS OF THE STUDY:

The major finding reveals frequency and percentage wise distribution on effectiveness of Competency Based Education Programme in identifying the predictors of Postpartum haemorrhage during antenatal period among staff nurses.

On comparing the pre –test and post test score of Pre-experimental group level of knowledge the post-test mean is 19.98 and standard deviation is 1.610 and its p values is .001\*, and paired “t” test value of  $t = -22.33$  shows statistically highly significant.

On comparing the pre –test and post test score of Pre-experimental group level of skill the post-test mean is 17.333 and standard deviation is 4.459 and its p values is .001\*, and paired “t” test value of  $t = -18.28$  shows statistically highly significant

### CONCLUSION

The conclusion of the present study is usually the onset of Postpartum haemorrhage is considered unpredictable because of the lack of knowledge about predictors of Postpartum haemorrhage during antenatal period. The study showed that certain known risk factors accurately

predicted during antenatal period, the onset of Postpartum haemorrhage with adequate knowledge and skill to identifying the risk factors. This study implies that before intervention majority of staff nurses had moderate knowledge and low competent skill level. After Video assisted teaching the level of knowledge and skill was improved to highly and adequate for the staff nurses in identifying the predictors of Postpartum haemorrhage during antenatal period.

### REFERENCES

- Basavanthappa,(2006) “The textbook of midwifery and reproductive health nursing,” 1st edition published by Jaypee.
- Dutta D.C,(2004)“Text Book of Obstetric”,6th edition published by Hiralal Konar
- Dilip Kumar dutta (2007) “Text book of Postpartum haemorrhage. published by Jaypee Brothers
- DaftaryShirish N (2005) “the textbook of obstetrics and gynecology” 1st edition published by B.I . Publication
- Elizabeth Marie,(2010)” The textbook of midwifery for nurses”,1st edition 2010 published by CBS publishers
- Geoffrey Chamberlain. (1995) Obstetrics by ten teachers.16th edition Arnold London.
- Gray Cunningham & Norman.(2001). Obstetrics. 1st edition New York: McGraw Hill
- Sheila Balakrishnan. (2007). Text book of obstetrics, Hyderabad: Paras Medical Publishers
- Lakshmi Seshadri (2015) Text book of Essential of obstetrics, published by Wolters Kluwer
- Martin (2014) Text book of maternity nursing, 19 the edition, published by Wolters Kluwer

How to cite this article: Danasu R, Dharshini RP, Devi GR. A study to assess the effectiveness of competency based education programme in identifying the predictors of postpartum haemorrhage during antenatal period among staff nurses at SMVMCH, Puducherry. International Journal of Research and Review. 2019; 6(7):345-348.

\*\*\*\*\*