

EFFECTIVENESS OF OBSTETRIC SIMULATION LEARNING OF SKILLS ON IMMEDIATE NEWBORN CARE AMONG FINAL YEAR B.SC NURSING STUDENTS AT PPG COLLEGE OF NURSING COIMBATORE..

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Abstract

Background of the study:

Immediate newborn care is the first care start within few minute following the postpartum Stages. It is the process which involving various risk regarding the new born. The midwife is the person who is very important in the delivery team. She has to prepare the procedure to save the mother and newborn in all complication which makes overall success of delivery room management. The mortality of infant more than 30% so as WHO recommended to support and training for the midwives students to bring the best neonatal outcome. Immediate newborn care is performed first day of after the delivery. The most important steps in deciding for immediate newborn care is initial care and practices to reduce the complication which is consider as golden hours of the newborn. Hence, the newborn initial care and evaluation skills of midwife in the delivery room are important to reduce the mortality and morbidity.

Methodology: Quantitative approach of Pre Experimental study on one group pretest and post test design. By using non probability convenient sampling technique, 90 samples of B.sc Nursing Students were selected. By using questionnaire and check list the investigator assessed the knowledge and skill of immediate newborn care. Data were evaluated by using inferential and descriptive statistics. **Result:** The results show that, Nursing Students pre-test had inadequate knowledge and skills regarding the immediate newborn care. The pre-test knowledge mean score was 18, and pre-test skill score was 86.3. After delivering the simulation on the seventh day, the post-test was conducted, the mean post-test knowledge score was 21 and the mean post-test skill score was 98.7. **Conclusion:** The study show that simulation on immediate newborn care was improved by IV year B.Sc Nursing students on knowledge and skills were able to perform all clinical area. It may reduce the morbidity and mortality rate of newborn and midwives also improve their competence.

Keywords: Neonate, Competence, Simulation Training, Morbidity and Mortality

INTRODUCTION:

Immediate newborn care is the first care start within few minute following the postpartum Stages. It is the process which involving various risk regarding the new born. The midwife is the person who is very important in the delivery team.[1] She has to prepare the procedure to save the mother and newborn in all complication which makes overall success of delivery room management. The mortality of infant more than 30% so as WHO recommended to support and training for the midwives students to bring the best neonatal outcome. Immediate newborn care is performed first day of after the delivery [2]. The most important steps in deciding for immediate newborn care is initial care and

practices to reduce the complication which is consider as golden hours of the newborn. Hence, the newborn initial care and evaluation skills of midwife in the delivery room are important to reduce the mortality and morbidity [3]

The immediate newborn care has the competent of their midwifery skills that need to be gain before graduation of the students, So, that simulation techniques is always develop the skill in the immediate newborn care training in the delivery room. This may increases experience and skills point of the midwives during handling of the newborn. [4]

Simulation is a tool to increase the competences of midwives which is improving the safety, proper care,

performance, and evidence based practice to bring best mothers outcome. The integration of simulation which include the high quality of care, safe delivery, and robust systems to improve neonate outcome. [5]

Simulation trainings for the students during internship are the opportunity to encounter and practice with reality life situation it includes the safe environment, knowledge, skill development evaluation of training and clinical competencies. [6]

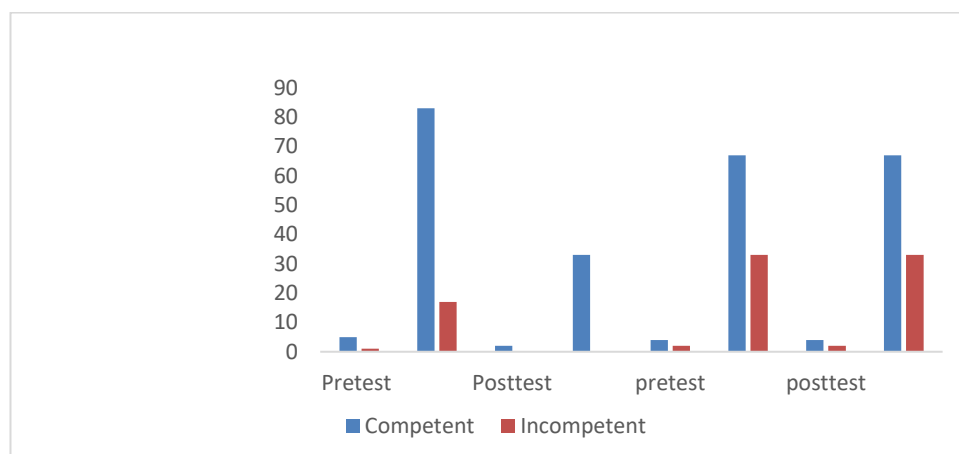
Education programs that are carried out by computer-assisted simulation which include the teaching guide to improve knowledge-skills on immediate newborns care ' during the time of delivery .It may reduce the mortality and morbidity of newborn The midwives increase the competencies and improve the clinical performance .[7]

METHODOLOGY:

TABLE 1: ASSESSMENT OF PRE AND POST TEST SCORES OF SKILLS ON IMMEDIATE NEWBORN CARE AMONG FINAL YEAR B.Sc NURSING STUDENTS IN INTERVENTIONAL GROUP

(n-90)

Level of competencies skill	Interventional group (n-90)			
	Pretest		Posttest	
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Outstanding	-	-	55	64
Competent	43	48	30	33
Incompetent	47	52	5	3



The table 2 shows the Comparison Of Mean, SD, And Mean Percentage Of Pre And Post Test Skills On Immediate Newborn Care In The Interventional Group

TABLE 2: COMPARISON OF MEAN, SD, AND MEAN PERCENTAGE OF PRE AND POST TEST SKILLS ON IMMEDIATE NEWBORN CARE IN THE INTERVENTIONAL GROUP (n-90)

S.No	Areas	Max Score	Pre test score			Post test score			't' value paired test
			Mean	SD	Mean (%)	Mean	SD	Mean (%)	

1.	Immediate newborn care Examination	20	14	0.7	70	18	0.9	90	0.93
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*significant at 0.05 level

The table 3 Shows The Correlate The Pre Test & Post Test Of Knowledge And Skill On Immediate Newborn Care Among B.Sc Nursing Final Year Students

TABLE 3: CORRELATE THE PRE TEST & POST TEST OF KNOWLEDGE AND SKILL ON IMMEDIATE NEWBORN CARE AMONG B.SC NURSING FINAL YEAR STUDENTS (n=90)

Group	Variable	Pre Test				Post Test			
		Mean	S.D	Spearm an rho correlati on coefficie nt	Type of correlati on	Mean	S.D	Spearman rho correlation coefficient	Type of correlati on
Interventio nal group	Knowledge	18	2.5	r =0.78	Strong +	21	2.5	r =0.9	Strong +
	Skills	86.3	4.89			98.7	4.9		

Result

Data were evaluated by using inferential and descriptive statistics. The results show that, during pre-test, IV Year B.Sc. Nursing students had inadequate knowledge and skills regarding the immediate newborn care. The mean pre-test knowledge score was 18with a standard deviation (SD) of 2.5, and the mean pre-test skill score was 86.3 with an SD of 4.89. After conducting the simulation on the seventh day, the post-test was conducted, and the mean post-test knowledge score was 21 with an SD of 2.5, and the mean post-test practice skill score was 98.7 and an SD of 4.9. This shows that significant improvement in knowledge and regarding immediate new born care among students. Hence the alternative hypothesis accepted.

Discussion:

This study found that the proportion of midwives students with good knowledge and skill in immediate newborn care was improved by using simulation method. WHO reported that increase death rate may be linked to a lack of knowledge and skill of midwives during delivery of neonatal birth. The study revealed that majority (60%) had good practice of immediate new born care. In comparison, our result is significantly highly improved their skills and knowledge in all situation by using simulation method [9].Most of the midwives respondents immediately after delivery which includes the wipe the eye of the new born, dry the body of the new born, clean the vernix of the newborn immediately after birth and initiate breastfeeding within 30 minutes after birth. To delay cleaning of the newborn’s vernix for at least 6 hours and may be up to 24 hours as it has beneficial effects to the new born retention of moisture (aids thermoregulation in newborn) among midwives .so basic newborn care will improve the health of the newborn, every student midwives must know the immediate newborn care to reduce the complication. [10]

Conclusion:

As student midwives play an important role in care of mother and newborn .Student Midwives need competencies and

education about the current practice of immediate newborn care during the delivery time. Hence, the midwives need the training, conference, workshop and education in all aspect. This is mainly focus to prevent the complication during the delivery .

Acknowledgments

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Ethical considerations

Ethical clearance was obtained from PPG college of Nursing. Written informed consent was obtained from each key informant and verbal consent from each Midwives Students to follow the care practice in hospital. Confidentiality of the study participants was maintained in each level of the response.

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