

# A Study to Assess the Effectiveness of Video Assisted Teaching on Knowledge Regarding Neonatal Resuscitation among Pediatric Nursing Students in Selected Nursing College at Chengalpet District

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**How to cite this article:** Begam SR, Suganthi S, Thomas A , Yadav KJ , Priya RS , Surendhiran N. A Study to Assess the Effectiveness of Video Assisted Teaching on Knowledge Regarding Neonatal Resuscitation among Pediatric Nursing Students in Selected Nursing College at Chengalpet District. 2023;11(1):28-32.

## BACKGROUND

**Background:** The knowledge on neonatal resuscitation is very much essential for nurses. Our study is to assess knowledge among the pediatric nursing students in Selected Nursing College at Chengalpet district. The objectives were to assess the level of knowledge on neonatal resuscitation among pediatric nursing students, and to determine the effectiveness of video assisted teaching regarding neonatal resuscitation by post test among the pediatric nursing students. And to find out the association between the pre and post test knowledge score regarding neonatal resuscitation among pediatric nursing students with their selected socio-demographic variables.

**Materials and Methods:** Purposive sampling technique is used to select 95 samples of 3rd year BSc nursing students. The data were collected by self administered questionnaire. The collected data was tabulated and analyzed.

**Results :** Descriptive and inferential statistics methods were used. The study shows that 50.5% of pediatric students had inadequate knowledge, 46.3% of pediatric students had moderate knowledge, 3.2% of pediatric students had adequate knowledge in pretest. And in post-test, 1.1% of pediatric students had inadequate knowledge, 7.4% of pediatric students had moderate knowledge and 91.6% of pediatric students had adequate knowledge.

**Discussion:** There was significant association between the knowledge and demographic variables like age, gender, Procedure seen or not, Experience got from.

**Keywords:** Video-Assisted teaching, knowledge, Neonatal Resuscitation.

## INTRODUCTION

Birth of a healthy neonate baby is one among the greatest gifts of the nature. The mechanism

of the birth takes only some hours, but it's the finest of life. It's the most precarious period of life, it is related to the largest number of

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deaths as compared to any others phase of life<sup>1</sup>. Neonatal resuscitation may be a means to revive a child from asphyxia. It's a single intervention of birth asphyxia. The major cause of early neonatal death is neonatal asphyxia, which may be prevented by neonatal resuscitation<sup>2</sup>. Caring for a replacement born baby during a essential component and must be done in an effective and supportive manner<sup>3</sup>. Through the need for resuscitation can be anticipated in some situations in many instances a baby is born in poor condition without forewarning newborn resuscitation may be a complex procedure that requires the use of specialized knowledge and skills in an emotionally charged and stressful situation. Knowledge about newborn resuscitation and good performance skill is significant for the implementation of neonatal resuscitation<sup>4</sup>. Worldwide, annually 5 million neonates die. Birth asphyxia is liable for 20% of these death of the 26 million infants born in India per annual 4-6% fail to experience spontaneous breathing at birth and suffer from asphyxia. Timing and appropriate management of asphyxiated babies at birth can save them and supply a better quality of life among-est survivors, without any neurological sequence. The need for resuscitation of newly born infant can be predicted, such circumstance may arise suddenly and should occur in facilities that do not routinely provide neonatal intensive care<sup>5</sup>. A transition from placenta gas exchange during a fluid filled intrauterine environment to spontaneous breathing of air in an extra-uterine environment requires unique physiological change in the infant during first hours of birth<sup>6</sup>. During intrauterine life, the fetal lungs are crammed with fluid and they do not serve any ventilation purpose. Since the placenta supplies the oxygen to the fetus the blood flow through the lungs is markedly diminished thanks to constricted arterioles and right to left shunt through the ducts arterioles during fetal life. During the fetal life, the lungs are immature soon after the birth the baby on adopt the extra uterine life. Blood is oxygenated and exchanged in placenta and its returned to fetus through

vena umbilicus. At the birth when the duct cut, the baby on establish its own respiration. Hence some newborn need help during this transition<sup>7</sup>.

## STATEMENT OF THE PROBLEM

A Study to assess the effectiveness of video assisted teaching on knowledge regarding Neonatal resuscitation among Pediatric nursing students in Selected Nursing College at chengalpet district.

## OBJECTIVES OF THE STUDY

1. To assess the level of knowledge regarding neonatal resuscitation by pre test score among Pediatric Nursing Students
2. To determine the effectiveness of video assisted teaching regarding neonatal resuscitation by post test among Pediatric Nursing Students.
3. Find out the association between the pre & post test knowledge score regarding neonatal resuscitation among Pediatric Nursing Students with their selected socio-demographic variables.

## METHODOLOGY

Keeping in mind the objectives of the study the Quasi experimental one group pre-test & post-test research design was used as it lays the base for future rigorous research. Purposive sampling technique was used to select 95 B.Sc Nursing 3<sup>rd</sup> year students in Chettinad College of Nursing at chengalpet district .The tool was developed and used for data collection contained socio-demographic data (4 variables), and structured knowledge questionnaire (20 items) to assess the knowledge of Pediatric Nursing students regarding neonatal resuscitation. After the collection of data, master data sheet was formed to take thing forward for result and analysis.

## RESULTS

Out of 95 B.Sc Nursing students 3% of students had a adequate knowledge , 46% of students

had a moderate knowledge and 51% of students had a inadequate knowledge in pretest and 92% of students had a adequate knowledge, 8% of students had a moderate knowledge and 1% of students had a inadequate knowledge in post test regarding neonatal resuscitation. Over all pretest mean score was 9.33% whereas in post test mean score was 18.12% revealing the difference of 72.55% shows the effectiveness of video assisted teaching. Paired 't' test was calculated to assess the difference between pre test (0.494, 0.813, 0.413, 0.052) and post test (0.825, 0.562, 0.747, 0.253) knowledge with their socio demographic variable regarding neonatal resuscitation among pediatric nursing students. The finding shows highly

significant difference for all the demographic variables.

The table 1 shows that the age from 20-21yrs students represents the high percentage distribution (95.8%),the females has high percentage (51.6%),most of the students seen procedure (80%),majority of students got experience from classroom (49.5%).

From the table 2 ,the majority of students have inadequate knowledge(50.3%) in pretest. In post test the majority of students have adequate knowledge(91.6%)

The finding shows that there is association between demographic variable ( age, gender, procedure and experience) and pediatric

**Table 1 : Under the frequency and percentage distribution we have drawn tabular column of various demographic variables like age,gender, procedure and experience.**

Variables		Frequency	Percentage	Mean	Standard Deviation
Age	20-21	91	95.8%	1.04	0.202
	22-23	4	4.2%		
Gender	Male	46	48.4%	1.52	51.6
	Female	49	51.6%		
Procedure Seen Or Not	Yes	76	80.0%	1.20	0.402
	No	19	20.0%		
Experience Got From	Class room	47	49.5%	2.34	1.555
	Media	12	12.6%		
	Books	6	6.3%		
	Clinical	17	17.9%		
	None	13	13.7%		

**Table 2: We have drawn a tabular column pre test and post test frequency.**

Level of Knowledge	Pre Test		Post Test	
	Frequency	Percentage	Frequency	Percentage
Inadequate Knowledge	48	50.5%	1	1.1%
Moderate Knowledge	44	46.3%	7	7.4%
Adequate Knowledge	3	3.2%	87	91.6%
Mean	9.33		18.12	
Standard Deviation	3.089		2.207	
'T' Value	-21.966			

**Table 3 : Association of demographic variables with level of knowledge in pre test.**

Variables		Level of Knowledge			Chi Square	P Value
		Inadequate Knowledge	Moderate Knowledge	Adequate Knowledge		
No.		No.	No.			
Age in Years	20-21	47	41	3	1.412	0.494
	22-23	1	3	0		S
Gender	Male	23	21	2	0.413	0.813
	Female	25	23	1		S
Seen Procedure or Not	Yes	40	33	3	1.771	0.413
	No	8	11	0		S
Experience Got From	Class Room	31	15	1	15.412	0.052
	Media	1	10	1		
	Books	2	4	0		
	Clinical	8	8	1		
	None	6	7	0		

**Table 4 : Association of demographic variables with level of knowledge in post test**

Variables		Level Of Knowledge			Chi Square	P Value
		Inadequate Knowledge	Moderate Knowledge	Adequate Knowledge		
		No.	No.	No.		
Age In Years	20-21	1	7	83	0.384	0.825
	22-23	0	0	4		S
Gender	Male	1	3	42	1.153	0.562
	Female	0	4	45		S
Seen Procedure or Not	Yes	1	5	70	0.583	0.747
	No	0	2	17		S
Experience Got From	Class Room	0	4	43	10.180	0.253
	Media	1	1	10		
	Books	0	0	6		
	Clinical	0	0	17		
	None	0	2	11		

nursing students had significant association with level of knowledge. ( S- Significant, NS- Non significant)

The table shows the p value and weather it is a significant or not significant

The finding shows that there was association between a demographic variable( age, gender, procedure,experience) and

pediatric students had the significant association with level of knowledge.

## DISCUSSION

The findings of the present study supported by pre experimental one group pre and post test conducted by Dr. Minaxi vyas. Highly significant difference was founded between the total knowledge score of pre and post test.

It reveals the effectiveness of VAT programme and it is similar with present study.

## CONCLUSION

The present study aims to assess the effectiveness of video assisted teaching on knowledge regarding neonatal resuscitation among Pediatric nursing students in chettinad college of nursing. From the findings of the data analysis it is clear that the video assisted teaching has an effect on enhancing the knowledge among Pediatric nursing students. Hence, the video assisted teaching on neonatal resuscitation and assessment can be utilized by nursing students to prevent early neonatal complications and mortality.

## ETHICAL CONSIDERATION:

- Obstetrical and gynecological Nursing Departmental clearance was obtained.
- Human Ethical committee clearance was obtained.
- Prior permission from the head of the institution was obtained.

- Informed consent was obtained from the participants.
- Confidentiality was maintained.

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