

A study to assess the effectiveness of structured teaching programme on knowledge regarding newborn resuscitation among B.Sc Nursing 3rd year students, at selected nursing college, Dehradun.

¹Archana Maletha, ² Kirti Harjai, ³Rakhi Chand

^{1,2,3} Assistant Professor, SGRRU, College of Nursing, Dehradun

Email – ¹archanamaaletha@gmail.com, ²kirti.harjai287@gmail.com, ³rakhichand83@gmail.com

Abstract: Resuscitation of the neonate presents a different set of challenges than resuscitation of the adult or even, the older infant or child. For resuscitation measures consider being successful, it requires accurate understanding by the nursing students working in the delivery room, postnatal and neonatal units to have adequate skill for prompt neonatal resuscitation technique. The nature of the study was pre experimental. The research design used for the study was one group pre-test post-test design. Data Collected using non probability convenient sampling. Major findings of the study is the highest percentage of students 48% in the age group of 18-20 years and most of the students 98% of them was females. Pre-test analysis revealed that 76% students are having inadequate knowledge, 24% of the students are having moderate knowledge.

Key Words: Knowledge, newborn resuscitation.

1. INTRODUCTION:

Birth of a healthy neonate baby is one of the greatest gifts of the nature. The mechanism of birth takes only a few hours, but it is the finest of life. Since it is most precarious period of life, it is associated with the largest number of deaths as compare to any other phase of life. After birth, the airway and the alveoli must be cleared of fetal lung fluid so that the lung can operate as a functional respiratory unit providing adequate gas exchange. If the baby is not able to start breathing immediately after birth, baby may even die due to lake of oxygen. A proper resuscitation technique help the baby to promote normal breathing. Resuscitation of the neonate presents a different set of challenges than resuscitation of the adult or even, the older infant or child.

2. OBJECTIVES:

- To assess the pre-existing knowledge of B.Sc. Nursing 3rd year students regarding newborn resuscitation.
- To evaluate the effectiveness of structured teaching programme on newborn resuscitation among B.Sc. Nursing 3rd year students by comparing pre and post-test knowledge.
- To find out association between pre-test knowledge score of B.Sc. Nursing 3rd year students with their selected demographic variables.

3. ASSUMPTION:

- B.Sc. Nursing 3rd year students may have little knowledge regarding newborn resuscitation.
- Structured teaching programme regarding newborn Resuscitation may rebuild previous knowledge of the B.Sc. Nursing.

4. HYPOTHESIS:

- There is a significant difference in the level of knowledge among B.Sc. Nursing 3rd year students regarding newborn Resuscitation before and after structured teaching programme.
- There is significant association between socio demographic variables and knowledge score regarding Newborn Resuscitation among B.Sc. Nursing 3rd year students.

5. RESEARCH APPROACH:

The research approach used for the study was Quantitative Approach

- **Research design**
Pre experimental (one group pre-test post-test design)
- **Setting**
Shri Guru Ram Rai Institute of Medical & Health Sciences, College of Nursing, Patel Nagar Dehradun

- **Population**
B.Sc. Nursing 3rd year students
- **Sample**
In this study the sample is B.Sc. Nursing 3rd year students of Shri Guru Ram Rai Institute of Medical & Health Sciences, College of Nursing, Patel Nagar Dehradun
- **Sample size**
50 students of B.Sc. Nursing 3rd year
- **Sampling technique**
Non probability convenient sampling technique used to select the 50 samples
- **Data collection instrument**
Structure questionnaire to assess the effectiveness of structure teaching programme regarding newborn resuscitation among B.Sc. Nursing 3rd year students and scoring procedure.
 Below 50% - Inadequate Knowledge
 51 – 75% - Moderate Knowledge
 76 – 100% Adequate Knowledge

SECTION- A

**Table 1 Frequency and Percentage Distribution of Sample according to demographic variable
 N= 50**

Sr. No	Demographic Variables	Frequency (f) n=50	Percentage (%)
1.	Age (in year)		
	18 – 20 years	24	48%
	21 – 23 years	25	50%
	24 – 26 years	01	02%
	Above 26 years	00	00%
2.	Sex		
	Male	01	2%
	Female	49	98%
•	Education of parents		
	Illiterate	00	00%
	Primary Education (1-5)	01	02%
	Higher Secondary (6-10)	09	18%
	Intermediate and above	40	80%
4.	Source of Information		
	Mass media	07	14%
	Friends	00	00%
	Books	31	62%
	Health Personnel	12	24%
5.	Any past experience or knowledge		
	Workshop	02	04%
	BLS training	00	00%
	Life experience	07	28%
	Other	41	82%
6.	Personality		
	Introverted	16	32
	Extroverted	34	68

The table 1 shows the demographic details, according to their age group depict that 48% of the students were in the age group of 18 – 20 years, and the age group of 24 -26 years of age was 2%. 98% students were female and only 02% are male. Majority of the student 82% were having past experience or knowledge through other sources, and only 04% students were through workshop.

SECTION- B

Table 2 Frequency and percentage distribution of the pretest and posttest score value. N= 50

Level of knowledge	Score range	Pre test		Post test	
		Frequency N=50	Percentage %	Frequency N=50	Percentage %
Inadequate knowledge	< 50 %	38	76 %	00	00 %
Moderate knowledge	51 – 75 %	12	24 %	06	12 %
Adequate knowledge	76 – 100%	00	00 %	44	88 %

Data presented in table 2 shows majority of the students are having inadequate level of knowledge in pre-test and 88% of students score ranging between 76 – 100%, adequate level of knowledge in post-test.

SECTION- C

Table 3 “t” value between the pre-test and post-test score value. N= 50

Knowledge score value	Mean	SD	t-value	Level of Significance
Pre test	14.3400	2.8969	26.370	Highly Significant
Post test	28.6400	2.9537		

Significant at p <0.05

Data shows that calculated t value (26.370) is more than the table value at 0.05 level of significance. Therefore structure teaching programme was effective in increasing knowledge level among B.Sc. Nursing 3rd year students. Hence the H1 is accepted.

SECTION- D

Table 3 “t” value between the pre test and post test score value. N= 50

Sr. No	Demographic variable	df	Chi square value	Level of significance
1.	Age (in year) 18 – 20 years 21 – 23 years 24 – 26 years Above 26 years	1	2.2041	#
2.	Sex Male Female	1	1.77	#
3.	Education of parents Illiterate Primary Education (1-5) Higher Secondary (6-10) Intermediate and above	1	.524	#
4.	Source of Information Mass media Friends Books Health Personnel	2	.4845	#
5.	Any past experience or knowledge Workshop BLS training Life experience Other	1	.524	#
6.	Personality Introverted Extroverted	1	.354	#

*Significant at p <0.05 , # Not significant at p<0.05 level

Data shows that calculated chi square value is less than the table value at 0.05 level of significance with all demographic variables. Hence the H2 is rejected.

6. RECOMMENDATION:

On the basis of present study the following recommendation are formed for future study:

- The study can be replicated with a large number of sample for better generalization.
- The study can be carried out to assess practice regarding neonatal resuscitation.
- The similar study can be carried out to assess the knowledge and practice among the staff nurses of different hospital regarding neonatal resuscitation.

7. CONCLUSION:

The conclusion was derived from the findings of the study. It can be conclude before the structured teaching programme 76 % students having inadequate knowledge and 24 % of students having moderate knowledge 00 % of students having adequate knowledge. After the structured teaching programme 00 % students having inadequate knowledge, 12 % having moderate knowledge and 88 % of students having adequate knowledge regarding neonatal resuscitation.

4. REFERENCES:

1. Donoghue, A., Baren, J., & winograd,S.M. (2004). Rapid sequence intubation in pediatrics 585-590.
2. Sharma Rimple, "Essential of Pediatric Nursing" first edition, Page no 141 – 145.
- 3 Journal of pediatric 2010 June The adaptive changes in the immediate postnatal period, with pediatric reference to respiration,: 56(23):585 – 604
4. <http://www.resus.org.au/policy/guidelines/admin/arc-index>
5. www.pubmed.com
6. www.scienceblog.com