

A Study to Assess the Effectiveness of Lab Demonstration on Knowledge Regarding Neonatal Resuscitation among GNM Students at Selected Nursing College of Baglkot

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Abstract: *Introduction:* Birth of a newborn baby is a special movement, a movement of joy and hope. Most babies go through the transition from the mother's womb to the outside world smoothly: A mere then percent may need some degree of assistance during this process. *Objectives:* To assess the knowledge regarding Neonatal resuscitation protocol among GNM students of selected school of Bagalkot. *Methods:* A structured teaching programme study with a sample of 60 GNM students aged between, 17years to 25 year students was selected by nonprobability convenient sampling technique. Structured questionnaire was used to collect baseline information. *Results:* Assessment of the level of knowledge of the students reveals that majority (93.33%) of the students had a average knowledge, 6.66% of diploma students who had a good knowledge and not any GNM students had poor knowledge regarding Neonatal Resuscitation among Gnm students. The Mean percentage of the pre-test knowledge scores was 65.2% percent with mean and SD 65.2±8.07. These findings reveal that diploma students had average knowledge regarding Neonatal Resuscitation. The calculated values were much higher than table value (1.96). Findings reveal that the difference between mean pre-test (65.2±8.07) and post-test (68.8±8.29) knowledge scores of diploma students found to be statistically significant at 0.05 level. *Conclusion:* There is significance difference between the findings of the study concluded that the structured teaching programme was effective in improving the knowledge and attitude of the diploma students regarding the Neonatal Resuscitation. All the subjects had again in knowledge and attitude compared to their pretest knowledge scores and post test scores.

Key words: Assess, Effectiveness, Neonatal resuscitation

1. Introduction

Birth of a newborn baby is a special movement, a movement of joy and hope. Most babies go through the transition from the mother's womb to the outside world smoothly: A mere then percent may need some degree of assistance during this process.¹

To decrease the neonatal mortality in developing countries, there is an urgent need to improve the neonatal care. Data from developing countries showed that about 4 million babies die in the neonatal period.²

Among these developing countries, Indonesia had a mortality rate reaching 12.4 per 1,000 live births in 2019.³The leading causes of neonatal mortality were prematurity, sepsis, and asphyxia. These conditions often necessitate neonatal resuscitation.⁴Neonatal resuscitation involves a series of procedures performed to prevent the morbidity and mortality associated with a hypoxic-ischemic tissue injury (brain, heart, kidney) and restore spontaneous breathing and adequate cardiac output.⁵The neonatal mortality rate in the United States and Canada has decreased from nearly 20 per 1000 live births in the 1960s to the current rate of approximately 3.5 per 1000 live births.⁶

The 2025 neonatal resuscitation guidelines contain recommendations based on the best available resuscitation

science for the most impactful steps to perform during delivery and in the neonatal period. In addition, specific recommendations regarding systems of care and training of resuscitation are provided in the respective guidelines.⁷

Neonatal resuscitation is a complex procedure that requires the use of specialized knowledge of the nurses. Appropriate assessment and resuscitation is an important part of neonatal care provided during the first minutes of life.⁸

This is because we as a nurse are here to save newborn's life as well as to help the newborn and infant mortality rate. More than 100 million babies are born annually worldwide. They have to make transition from fluid filled environment in which the placenta serves as the gas exchange for the organ of the fetus and to an air- filled environment in which baby's own cardiopulmonary system has to independently function within minutes of birth for survival.⁹

It aims to prevent mortality and morbidity associated with bith asphyxia by supporting breathing and circulation within the critical "Golden minute". Evidence- based techniques focused on prompt positive pressure ventilation (ppv)- are critical to lowering neonatel mortality.¹⁰

The keys to successful newborn resuscitation include assessment of perinatal risk and a system to rapidly assemble team members with skills that are appropriate to the

anticipated need for resuscitation on the basis of that risk. Other critical components of successful resuscitation include an organised resuscitation area that ensures immediate access to all needed supplies and equipment and the standardisation of behavioural skills that foster optimal teamwork and communication.¹¹

Objectives of the Study

- To assess the knowledge regarding Neonatal resuscitation protocol among GNM students.
- To find out the relationship between the level of knowledge regarding the Neonatal Neonatal resuscitation protocol among GNM students.
- To assess the knowledge regarding Neonatal resuscitation protocol among GNM students with their socio demographic variable.
- To assess the effectiveness of planned structured teaching programme on lab demonstration and post-test regarding Neonatal resuscitation protocol among GNM students.

2. Methods

It was structured teaching programme with an intended to assess the knowledge regarding Neonatal resuscitation protocol among GNM students as perceived from the Shri BVVS Institute of Nursing Sciences Colleges of Baglkot.

Study participants:

The study participants were Gnm students as perceived from the Shri BVVS institute of Nursing Sciences colleges of Baglkot. Followed by the probability convenient sampling technique.

Setting of the Study:

Based on the investigator's familiarity, availability of the subjects and feasibility to conduct the study, the present study was conducted in Shri BVVS institute of Nursing Sciences colleges of Baglkot.

Sampling technique:

The sample was selected by the nonprobability convenient sampling technique will be used to select the sample form Shri BVVS institute of Nursing Sciences colleges of Baglkot.

Data collection instruments:

Questionnaires it includes questions related to students knowledge towards Neonatal resuscitation protocol. The questionnaires each item given a score of 1.

Translation and reliability of data collection instrument:

The instrument was in the English. The Reliability of STP study obtained by test and the r value was found to be 0.8 Since, the reliability of R is more than 0.7. The by questionnaires on knowledge regarding Neonatal Resuscitation protocol among GNM students of shri bvvs institute of nursing sciences bagalkot was found to be more reliable. Hence investigator has decided to use the same tool in main study to collect the by questionnaires on knowledge regarding Neonatal Resuscitation protocol among GNM students.

Procedure For Data Collection

Data collection was done for 10 days from 19-05-2026 at shri bvvs institute of nursing sciences Bagalkot. A formal Permission was obtained from the Principal of Shri B. V. V. S Institute of Nursing Sciences Bagalkot. The purpose of the study was explained to the Gnm students the investigator given self-introduction explained the purpose of data collection to the subjects and subject's willingness to participate in the study. The subject was assured the anonymity and confidentiality of the information provided by them. by questionnaires on knowledge regarding neonatal resuscitation protocol among GNM students. To assess knowledge regarding and neonatal resuscitation protocol among gnm students. Each participant has tell that the taken around 45 minutes to complete the scale.

Data Analysis

The data obtained were analyzed according to the research objectives using inferential statistics. The main data was prepared based on the participants responses. Frequency and percentage statistical analysis.feature select and select different populations in words and pictures.

Ethical Clearance

Ethical clearance was obtained from the Institutional Ethics Committee of BVVS Institute of Nursing Sciences, Bagalkot.

3. Result

Part I: Description of the socio-demographic characteristics of sample

Depicts that the majority (50%) of GNM students were in the age group of 22-30 years, 17-20 years followed by this 48.3% of GNM students, students were in the age group of more than 24-30 years followed by this 1.6%, null of students were in the age group more than 30 years.

Depicts that the majority (68.33%) of students were females, followed by this 31.66% of were Male students are involved in this study.

Depicts that the majority (95%) of students were Hindu, followed by this 5% of students were Muslim are involved in this study.

Depicts that the majority (100%) of students were belongs to diploma in nursing course students involved in this study.

Depicts that the majority (83.3%) of a students were in the II year diploma nursing students, III year diploma nursing students followed by this (16.66%).

Depicts that the majority (65%) of a students were have previous knowledge about Neonatal resuscitation, followed by this (35%) students have no knowledge about Neonatal resuscitation.

Depicts that the majority (18.3%) of a students have no source of information about neonatal resuscitation, followed by this (53.33%) students have sources of information from teachers about neonatal resuscitation, (16.66%) information from mass media, (11.66%) information from friends.

Part II: Level of knowledge regarding Neonatal Resuscitation among GNM students, N=60

Level of knowledge	Range of scores	Number of respondents	Percentage (%)
Poor	0-40	0	0
Average	40-80	56	93.33%
Good	80-120	4	6.66%

Mean, SD and Mean percentage of knowledge scores of GNM students, N=60

S. No	Knowledge variables	Max Score	Mean	SD	Mean%
1.	Assessment of knowledge regarding Neonatal Resuscitation among Gnm students.	120	65.2	8.07	54.3%

Assessment of the level of knowledge of the students reveals that majority (93.33%) of the students had a average knowledge, 6.66% of diploma students who had a good knowledge and not any GNM students had poor knowledge regarding Neonatal Resuscitation among Gnm students.

The Mean percentage of the pre-test knowledge scores was 65.2% percent with mean and SD 65.2±8.07. These findings reveal that diploma students had average knowledge regarding Neonatal Resuscitation.

Part III: Association between the pre-test knowledge scores of Gnm students and selected socio-demographic variables

S. No	Socio demographic	Chi-square	d/f	P value	Significance
1	Age	0.01	1	1	Not significant
2	Gender	0.04	1	0.84	Not significant
3	Religion	1.12	1	0.28	Not significant
4	Course	0.75	1	0.38	Not significant
5	Year	0.75	1	0.38	Not significant
6	Previous knowledge about NRP	3.9	1	0.04	Significant
7	If yes ,sources of knowledge	19.5	1	<.005	Significant

*P<0.05

Part IV: A Significance difference between the pre-test and post-test knowledge scores of the diploma students, N=60

Knowledge area	Test	Mean	SD	Mean Diff.	SD Diff.	Table value
Knowledge regarding Neonatal Resuscitation among Gnm students of shribvvs institute of nursing sciences Bagalkot.	Pre test	65.2	8.07	3.6	0.22	1.96
	Post test	68.8	8.29			

*P<0.05 [Significant]

The calculated values were much higher than table value (1.96). Findings reveal that the difference between mean pre-test (65.2±8.07) and post-test (68.8±8.29) knowledge scores of diploma students found to be statistically significant at 0.05 level of significance.

Born among the staff nurses working in neonatal intensive care unit at selected hospitals of Belgaum city with a view to develop self- instruction module”. The mean score difference between the pre-test and post-test knowledge increased by 3.6 indicating a significant enhancement in post-test scores regarding the diploma students knowledge about Neonatal Resuscitation following the planned teaching program.¹⁴

4. Discussion

The current research utilized an STP approach, with a comparable study carried out by **Saroj Yadav** M.Sc. Nursing, Govt. College of Nursing, Jaipur. A Study to Assess the Effectiveness of Demonstration on knowledge and Skills Regarding Neonatal Resuscitation among B.Sc. Nursing Part IVth Students at a Selected College of nursing, Jaipur, Rajasthan.¹²

The above mentioned studies are similar to our study.

The above mentioned study and our study the sample size is similar with samples are also similar

5. Conclusion

This study employed an STP approach, and a similar study was executed by **Ms. Rajwinder Kaur, Dr. (Ms.) Lalita Jangwal**, which focused on the effectiveness of a structured teaching program aimed at enhancing knowledge about. To Assess the Effectiveness of Structured Teaching Programme regarding Neonatal Resuscitation among G.N.M. Interns Students, Jalandhar, Punjab.¹³

The findings of the study concluded that the Gnm students lacked adequate knowledge regarding Neonatal Resuscitation and the structured teaching programme administered by the investigator helped them to improve the knowledge and attitude on Neonatal Resuscitation .The effectiveness of structured teaching programme was tested in terms of gain in knowledge and attitude and the findings showed that it was a statistically not significant .The findings of the study concluded that the structured teaching programme was effective in improving the knowledge and attitude of the Gnm students regarding the Neonatal Resuscitation. All the subjects had again in knowledge and attitude compared to their pretest knowledge scores and post test scores.

The current study applied an STP method; a similar investigation was conducted by **Mr. Mahaling MH** with the goal of evaluating the effectiveness of a regarding Assess the Knowledge and practice regarding Resuscitation of New

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