



**ORIGINAL RESEARCH PAPER**

**Nursing**

**ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING NURSING CARE DURING INTUBATION AND SUCTIONING OF A PATIENT WITH ENDOTRACHEAL TUBE AMONG B.SC. NURSING STUDENTS.**

**KEY WORDS:**

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**ABSTRACT**

**BACKGROUND OF THE STUDY**

Endotracheal intubation is the optimum method for protecting the patency of the airway and maintaining oxygenation and ventilation in patients requiring advanced life support. Tracheal intubation, ordinarily just alluded to as intubation, is the situation of an adaptable plastic tube into the trachea (windpipe) to keep up an open aviation route or to fill in as a conductor through which to oversee certain medications.

**AIM:-** To assess the effectiveness of planned teaching programme regarding nursing care in intubation and suctioning of a patient with an endotracheal tube.

**OBJECTIVE :1.** To assess the knowledge of B.Sc. Nursing students regarding nursing care in intubation and suctioning of a patient with an endotracheal tube by pre-test and post-test.**2.** To evaluate the effectiveness of structured planned teaching programme regarding nursing care in intubation and suctioning of a patient with endotracheal tube among B.Sc. Nursing students.**3.** To find out the association between pretest knowledge of B. Sc. Nursing students with selected demographic variables.

**METHODOLOGY**

Evaluative research approach was used for the study. Research design was pre- experimental onegroup pre-test post-test research design. Probability sampling method was used to collect the sample. The sample consists of 60 students.

**RESULT**

The mean post-test knowledge score (24.75) was higher than the mean pre-test knowledge score (16.37).The dispersion of pre-test score (SD ±3.37) is less than that of post-test score (SD ±1.29) and paired 't' test computed ('t39'=15.32 P≤0.001) shows significant difference .

**INTRODUCTION:**

Tracheal intubation, ordinarily just alluded to as intubation, is the situation of an adaptable plastic tube into the trachea (windpipe) to keep up an open aviation route or to fill in as a conductor through which to oversee certain medications. It is much of the time performed in fundamentally harmed, sick, or anesthetized patients to encourage ventilation of the lungs, including mechanical ventilation, and to keep the likelihood of suffocation or aviation route check.The most broadly utilized course is Orotracheal, in which an endotracheal tube is gone through the mouth and vocal mechanical assembly into the trachea. In a Nasotracheal strategy, an endo- tracheal tube is gone through the nose and vocal contraption into the trachea. Different techniques for intubation include medical procedure and incorporate the cricothyrotomy (utilized solely in crisis conditions) and the tracheotomy, utilized principally in circumstances where a delayed requirement for aviation route bolster is foreseen.

**NEED OF THE STUDY:**

Endotracheal suctioning (ETS) is an important practice completed in escalated care units. In includes the expulsion of aspiratory discharges from a patient with a counterfeit aviation route set up. All escalated consideration medical caretakers ought to know when playing out this mediation of the potential dangers a patient is presented to, and should try to anticipate or limit these.

**Problem statement**

A study to assess the effectiveness of planned teaching programme on knowledge regarding nursing care during intubation and suctioning of a patient with endotracheal tube among B.Sc. Nursing students of selected nursing colleges of Indore.

**Objectives of the study:** To assess the knowledge of B.Sc. Nursing students regarding nursing care in intubation and suctioning of a patient with an endotracheal tube by pre-test and post-test.**2.** To evaluate the effectiveness of structured planned teaching programme regarding nursing care in intubation and suctioning of a patient with endotracheal tube among B.Sc. Nursing students.**3.** To find out the association between pretest knowledge of B. Sc. Nursing students with

selected demographic variables.

**Hypothesis:1.H<sub>1</sub>:** There will be a significant increase in knowledge regarding nursing care in intubation and suctioning of a patient with endotracheal tube after implementation of planned teaching programme among B.Sc. Nursing students.**2.H<sub>2</sub>.** There will be significant association between the pretest knowledge score with selected demographic variables.

**Assumptions**

This study assumes that:

- Planned teaching programme can help the B.Sc. Nursing students to increase knowledge regarding nursing care in intubation and suctioning of a patient with endotracheal tube.
- B.Sc. Nursing students may have inadequate knowledge regarding nursing care in intubation and suctioning of a patient with endotracheal tube.

**Delimitations**

The study will be delimited to:-

- Students who available at the time of during the data collection process
- Students who available at the time of study.
- Students who willing to participate in the study.

**Review of Literature**

Kulkarni, Atul et al (2012) directed an investigation on extubation disappointment in emergency unit: and administration Extubation disappointment requirement for re intubation inside 72 h of extubation is regular in emergency unit). It can cause expanded dismay, higher costs, higher ICU and doctor's facility length of remain (LOS) and mortality. Patients with cutting edge age, high seriousness of ailment at ICU affirmation and extubation, previous interminable respiratory and cardiovascular disarranges are at expanded danger of extubation disappointment. Uncertain disease, advancement, and movement of organ disappointment amid the time from extubation to re intubation and re intubation itself have been proposed as purposes behind expanded dismay and mortality. Parameters used to foresee extubation disappointment can be ordered into parameters

evaluating respiratory mechanics, aviation route patency and security and cardiovascular hold. Sufficient hack quality, negligible discharges, and readiness are important for fruitful extubation. Proof proposes that early foundation of non-intrusive ventilation and prophylactic organization of methylprednisolone may avert re intubation in a few patients.

Lang, Johnetal (2013) direct an examination on pneumonectomy, was planned for a correct upper aspiratory lobectomy. Utilization of a Left-Sided Double-Lumen Endotracheal Tube in a Patient with a Prior Left Pneumonectomy led an investigation on A 77-year-old man, 7 years after left pneumonectomy, was planned for a correct upper aspiratory lobectomy. The early distinguishing proof of a recently creating carcinoma on the correct upper pneumonic flap justified careful resection. Right exploratory thoracotomy, pleural lysis, incomplete pleurectomy, and right upper projection wedge resection were finished, and the patient was released without sequelae.

**Research Methodology:-** Evaluative research approach was used for the study. Research design was pre- experimental onegroup pre-test post-test research design. Probability sampling method was used to collect the sample. The sample consists of 60 students.

**Inclusion Criteria**

1. Student who are willing to participate in this study.
2. Students who are studying in B.Sc. nursing the third year.
3. Students who are available at the time of data collection.
4. Students who know to read and write English and Hindi

**Exclusion criteria**

1. Students those who are not willing to participate in the study
2. Students those are not available at the time of data collection.
3. Students who know to read and write English and Hindi.

**Reliability:-** The reliability was calculated by using the test –retest method. The reliability was confirmed by using Karl Pearson coefficient that obtained '**r = 0.89**' which showed that the tool was reliable.

**Data Collection**

The study was conducted in Indore nursing college Indore M.P. Sixty. Sc. nursing students were selected by using Simple Random Sampling technique . Confidentiality was assured to all subjects. The data was collected by using structured knowledge questionnaire in the classroom of Indore Nursing College and the average time taken was 20-30 minutes. The post test was conducted after seven days by using the same structured knowledge questionnaire.

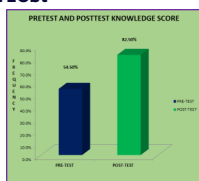
**Results**

**Comparison between mean, mean difference, standard deviation and 't' value of Pretest and posttest knowledge score (N=60)**

Knowledge score	Mean	Percentage	Standard deviation	Mean Difference	't' value
Pre-test	16.37	54.5%	3.379	8.35	15.321
Post-test	24.75	82.5%	1.292		

't<sub>60</sub>'= 15.321, P ≤ 0.001

**Figure Bar Diagram Depicts The Mean Knowledge Score of Pre Test and Post Test**



**Implications of the study**

The findings of the present study have several implications in the field of Nursing education, Nursing practices, Nursing administration and Nursing research

1. It will provide assistance and confidence for students and staff working in the ICU/CCU, surgical ICU and emergency department to follow guidelines of the structured teaching program
2. In service and continuing education on nursing care of a patient on endotracheal insertion, endotracheal suctioning, ventilator-associated pneumonia, its prevention, need to be planned and implanted from time to time for staff nurses working in Icu/CCU, surgical ward, and emergency department
3. The nursing administrator will be able to equip the ICU/CCU, surgical ward and emergency department with all necessary article needed for providing care a patient on the endotracheal tube

**Recommendations**

1. A similar study can be conducted in a larger sample to generalize findings.
2. A comparative study can be conducted to find out the effectiveness of planned teaching program and video regarding the same topic.
3. A study can be conducted to assess the practice of the students regarding on role and responsibilities of a nurse in intubation and suctioning of a patient with an endotracheal tube.
4. A similar study can be conducted on staff nurse to assess their knowledge and practice regarding on role and responsibilities of a nurse in intubation and suctioning of a patient with an endotracheal tube.

**CONCLUSION:**

Nursing research can be conducted to detect the attitude and practices about role and Responsibilities of a nurse in intubation and suctioning of a patient with endotracheal tubeso it can be concluded that students have inadequate knowledge regarding role & responsibilities of a nurse in intubation and suctioning of a patient with an endotracheal tube. And planned teaching programme is an effective teaching strategy to increase their knowledge regarding role and responsibilities of a nurse in intubation and suctioning of a patient with endotracheal tube.

**REFERENCES:-**

1. Basavanhappa, BT. (2007), Nursing Theories, 1sted. New Delhi, India. Jaypee Brothers; 203 – 211.
2. Basavanhappa, BT. (2014), Nursing Research and Statistics (3rded.) Haryana, India. Jaypee Brothers Medical Publisher; 309 – 395.
3. Burns, N., and Grove, S.K. (2007), Understanding Nursing Research Building an evidence-based practice, (4thed.) Noida, India. Sanat Printers; 164, 236.
4. Chintamani (2011) Lewis Medical Surgical Nursing Assessment and Management of Clinical Problems. 1st ed. Haryana, India. Mosby Elsevier; 1707-1708, 1710-1718.
5. Chugh, S.N. (2013) AP Textbook of Medical Surgical Nursing. 1st ed., New Delhi, Avichal Publishing Company; 451 – 452.