

Knowledge on Endotracheal Suctioning among Staff Nurses and Nursing Students

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ABSTRACT

Background: Endotracheal suctioning is an important procedure to remove accumulated pulmonary secretions is also very essential for obtaining a sputum specimen to rule out or identify pneumonia or other pulmonary infections.

Aim: To compare the level of knowledge regarding endotracheal suctioning between staff nurses and nursing students.

Setting and Design: The study was conducted in Narayana Medical College hospital by using a descriptive design.

Materials and Methods: The sample size selected for the study was 30 samples. 15 staff nurses and 15 nursing students working in NMCH, Nellore by using convenience sampling technique. **Statistical Analysis Used:** The collected data was organized, tabulated, analyzed and interpreted by using descriptive and inferential statistics based on the objectives of the study.

Results: The results regarding knowledge on endotracheal suctioning shows that, among staff nurses, 5(33.3%) are having adequate knowledge, 7(46.7%) are having moderate knowledge and 3(20%) are having inadequate knowledge. Among nursing students, 4 (26.7%) are having adequate knowledge, 7(46.7%) are having moderately adequate knowledge and 4(26.6%) are having inadequate knowledge.

Conclusion: The study concluded that majority of staff nurses and nursing students had moderately adequate knowledge regarding gastrostomy feeding.

Keywords: Endotracheal suctioning, Staff Nurses, Nursing Students.

I. INTRODUCTION

Endotracheal suctioning is a component of bronchial hygiene therapy and mechanical ventilation and involves mechanical aspiration of pulmonary secretions from patient with an artificial airway in place.

The placement of suction catheter through the artificial airway into the trachea the application of negative pressure as the catheter has been withdrawn, sterile techniques and standard protocol should be employed each pass of suction catheter into the artificial airway is considered as a suctioning event, duration of suctioning should be approximately 10 – 15 sec.

Suctioning pressure should be set as low as possible (80 – 120 mmHg) and effectively secretions are withdrawn, indications for suctioning are patients with crackle and rhonchi on auscultation, frequent coughing or setting off the high pressure alarm and increasing restlessness or anxiety.

Knowledge regarding endotracheal suctioning among staff nurses and nursing students is a major component of nursing care and these includes several guidelines and procedures, the effect of nursing practice the nurse must have knowledge about endotracheal suctioning then only she can able to provide effective nursing care and this helps to decrease the incidence of pneumonia. Lack of knowledge regarding endotracheal suctioning among staff nurses and nursing students leads to increase incidence of nosocomial infection.

Nurses are important members of a critical care team. They need adequate knowledge regarding endotracheal suctioning to perform this procedure during emergency and needed to perform this at correct time without complications so, the investigator decided to assess the knowledge regarding endotracheal suctioning among staff nurses and nursing students.

II. METHODS AND MATERIAL

1. Objectives of the Study:

- To assess the level of knowledge on endotracheal suctioning among staff nurses.
- To assess the level of knowledge on endotracheal suctioning among the nursing students.
- To compare the level of knowledge on endotracheal suctioning the between staff nurses and nursing students
- To find out the association between the level of knowledge regarding endotracheal suctioning and selected socio demographic variables of staff nursing.
- To find out the association between the level of knowledge regarding endotracheal suctioning and selected socio demographic variables of nursing students.

2. Detailed Research Plan

Research Approach: Quantitative Approach.

Research Design: Descriptive design.

Target Population :

The target population of the study comprised of staff nurses and nursing students.

Accessible Population :

The population of the study comprised of staff nurses and nursing students who are posted in the Narayana Medical College Hospital, Nellore.

Sample :

The samples for the present study includes all the staff nurses and nursing students who fulfill the inclusion criteria were selected.

Sampling Technique :

Non probability convenience sampling technique was adopted.

Sample Size :

The sample size selected for the study was 30 samples. 15 staff nurses and 15 nursing students working in NMCH, Nellore.

III. RESULTS AND DISCUSSION

Distribution of socio demographic variables of staff nurses

Table 1. Frequency and percentage distribution of socio demographic variables of staff nurses

Demographic Variable	Frequency (f)	Percentage (%)
Age		
a. 18-20 yrs	10	66.7
b. 21-23 yrs	5	33.3
Educational Status		
a. 2 nd year B.sc(N)	5	33.3
b. 3 rd year B.sc(N)	5	33.3
c. 4 th year B.sc(N)	5	33.4
Source of knowledge		
a. Clinical Exposure	5	33.3
b. Journals	1	6.7
c. All the above	9	60
Attended any work shop		
a. Attended	2	13.3
b. Not attended	13	86.7

Table 2 : Comparison of level of knowledge between staff nurses and nursing students regarding endotracheal suctioning (N=30)

Level of knowledge	Staff nurses(n=15)		Nursing Students(n=15)	
	f	%	f	%
Adequate	5	33.3	4	26.7
Moderately	7	46.7	7	46.7

adequate				
Inadequate	3	20	4	26.6
Total	15	100	15	100

Table No:2 Shows that with regard to level of knowledge regarding endotracheal suctioning, among staff nurses , 5(33.3%) are having adequate knowledge, 7(46.7%) are having moderate knowledge and 3(20%) are having inadequate knowledge. Among nursing students, 4 (26.7%) are having adequate knowledge, 7(46.7%) are having moderately knowledge and 4(26.6%) are having inadequate knowledge.

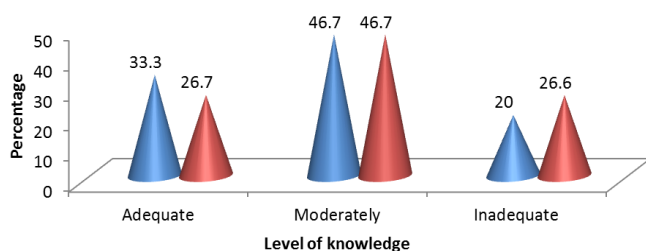


Figure 1. Percentage distribution of staff nurses and nursing students based level of knowledge

Association between the level of knowledge and socio demographic variables of staff nurses : Shows that with regard to the level of knowledge among the staff nurses with their selected socio demographic variables in that gender, educational qualification, working area, attended any in service education, sources of information are non-significant and age, years of experience are significant.

Association between the level of knowledge and selected socio demographic variables of nursing students : Shows that with regard to the level of knowledge among nursing students with their selected socio demographic variables in that years of course, source of information and attended any work shop are significant and age are non-significant.

IV. CONCLUSION

The study concluded that majority of staff nurses and nursing students had moderately adequate knowledge regarding gastrostomy feeding.

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