

ASSESS THE PRACTICE OF ENDOTRACHEAL SUCTIONING AMONG CRITICAL CARE HEALTH-PERSONNEL

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Abstract

*Endotracheal suctioning (ETS) is one of the most common procedure performed in patients with artificial airways. It is a component of bronchial hygiene therapy and mechanical ventilation that involves the mechanical aspiration of pulmonary secretions from a patient's artificial airway to prevent its obstruction. The procedure includes patient preparation, the suctioning event, post procedure care. Tracheobronchial suctioning using the open suctioning system has physiological benefits for critically ill patients. Because micro-aspiration of secretions is a risk factor for Ventilator Associated Pneumonia, management of endotracheal tube is important. **Objectives:** i. To assess the practice of endotracheal suctioning among critical care health-personnel. ii To associate the practice of endotracheal suctioning among critical care healthpersonnel with selected baseline variables. **Methodology:** Research approach: quantitative approach, a non-participant structured observational design for 53 samples by Non- probability convenient sampling technique. **Results:** The descriptive study was undertaken to assess the practice of endotracheal suctioning among CCHP in medical ICU in a selected hospital, Chennai, portrays that 62% of the CCHP had poor practice and there was the significant association of the level of practice with level of education score (at $p < 0.5$).*

INTRODUCTION

Endotracheal intubation and the institution of invasive mechanical ventilation are resources which are widely used in the management of critically-ill patients, so as to provide sufficient gaseous exchange for those with some sort of respiratory insufficiency. However, these devices can cause detrimental effects - inflammation, infections, and traumatic lesions to the airways -, which require preventive care. The appropriate management of the artificial airway has a direct impact on the patients' prognosis, including reduction of morbimortality, length of hospitalization, and hospital costs. [Pedersen, 2009]. In this regard, one of the most important nursing care action is endotracheal suctioning (ETS), directed at removing secretions and, through this, promoting the maintenance of the airways' permeability, as well as optimizing ventilation and oxygenation. The procedure is essential for the stability of pulmonary function, as the presence of ventilator prosthesis interferes in the physiology of coughing and of the mucociliary system, which can inviabilize the adequate clearance of secretions from the tracheobronchial tree and cause stasis of this content. This can cause atelectasis, infections, respiratory compromise, obstruction of the endotracheal tube, hemodynamic changes and death [Frota OP, 2012]

NEED FOR THE STUDY:

With an increasing demand for intensive care beds more CCHPs in acute and high dependency wards will be expected to care competently for patients with tracheostomy tubes. Tracheal suctioning is an essential aspect of effective airway management. It is imperative that CCHPs are aware of the risks and are able to practice according to current research recommendations. The problems with implementing research findings that are based on empirical evidence and producing clinical guidelines and protocols in nursing have also been documented. These include issues such as lack of motivation or knowledge of the most up to date or current evidence. Endotracheal suctioning is one intervention that should be based on research evidence, as there have been a large number of studies published on the various aspects of this routine procedure. However, although the study has examined the indications for initiating suctioning and further study investigated CCHPs' assessment skills prior to suctioning

(Wood, 1998b), no other studies appear to have investigated how certain aspects of the suctioning procedure are performed in practice. Endotracheal suctioning is a frequently performed procedure that has many associated risks and complications. The researcher designed the study to assess the practice of endotracheal suctioning among critical care health-personnel, and associate the practice of endotracheal suctioning among critical care health-personnel with selected baseline variables.

PROBLEM STATEMENT

ASSESS THE PRACTICE OF ENDOTRACHEAL SUCTIONING AMONG CRITICAL CARE HEALTH-PERSONNEL

OBJECTIVES

1. To assess the practice of endotracheal suctioning among critical care health-personnel.
2. To associate the practice of endotracheal suctioning among critical care health-personnel with selected baseline variables.

METHODS AND MATERIALS USED

Research approach: quantitative approach, a non-participant structured observational design for 53 samples by Non-probability convenient sampling technique. The tool used for the study was 20-item structured observational schedule (appendix 1) adapted from a previously validated survey tool (McKillop 2004) which was constructed to reflect the observable behaviors associated with best practice suctioning of adults with an artificial airway (Thompson 2000). After getting permission from the ICU in-charge data were collected for 2 weeks. The staff and the students practice were observed, by one ETS practice at a time. The data was analyzed using descriptive statistics and inferential statistics. A total of 53 no of nursing staff, nursing students and allied health students were taken as samples for the survey. In this study 20 items checklist includes questions regarding endotracheal suctioning practice which was assessed by critical care performance check list include 35 points.

RESULTS

The results shows that 33(62.26%) of the samples had poor practice and 4 (7.5%) had good practice highlighted the poor practice of the CCHP. The quality of treatment mean was 20.94. To associate the practice of endotracheal suctioning among critical care health-personnel with selected baseline variables. The result shows that 17(32%) had degree as their level of education and Allied health science students were 9(17%).

CONCLUSION

The descriptive study was undertaken to assess the practice of endotracheal suctioning among CCHP in medical ICU in a selected hospital, Chennai, portrays that 62% of the CCHP had poor practice and there was the significant association of the level of practice with level of education score (at $p < 0.5$).

RECOMMENDATION

Similar study would be repeated in other intensive care units.

Similar study can be repeated by increasing the size of the sample.

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