

Interventions and prevention strategies in routine nursing care with ventilator patients.

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Abstract

Endotracheal intubation (EI) is a common emergency procedure used on patients who are unconscious or unable to breathe on their own. Airway difficulties, Respiratory deficiencies, Inadequate Circulation, Central Nervous system Problems, Muscle Weakness, and Patients with Risk for aspiration of stomach contents blood mucus aspiration.

Complications: paralysis of the tongue, ulceration of the mouth, paralysis of the vocal cord, and tissue stenosis and necrosis of the trachea. Regularly inspect mechanical ventilators and humidification equipment to ensure appropriate operation; monitor and adjust ventilator and alarm settings.

To limit the danger of airway obstruction, provide humidification and monitor the need for suctioning; replace closed suction equipment on a regular basis.

Keywords: Intensive care units, Emergency care units, ICU, Endotracheal intubation, Nursing, Respiratory, Critical care.

Introduction

Patients in the intensive care unit (ICU) are particularly vulnerable to sleep deprivation. Sleep disruption is linked to higher morbidity and mortality in critically ill individuals. The aetiology of sleep disturbance is multifaceted. The paper analyses the literature on sleep in the ICU, the implications of sleep loss, and techniques to improve sleep in the ICU. It is appropriate to offer critically ill patients with consolidated, restorative sleep until the consequences of interrupted sleep are well understood [1].

Failure to extubate can result in a lengthier Intensive Care Unit (ICU) stay, a greater mortality rate, and an increased likelihood of necessitating a tracheostomy. Chest Physiotherapy (CPT) can help patients reduce airway secretion buildup, prevent collapsed lung, improve lung compliance, and reduce comorbidities. Much study has been conducted to investigate the relationship between CPT and respiratory system clearance. Few research, however, have looked into the relationship between CPT and failed ventilator extubation. As a result, the purpose of this study was to look at the efficacy of CPT for lowering the rate of failure removal from mechanical ventilators. The intervention group was enrolled in the chest physiotherapy programme in advance. Inspiratory muscle training, manual hyperinflation, chest wall mobilisation, secretion removal, cough function training, and early mobilisation were all part of the chest physiotherapy treatment programme [2].

Ventilator-associated pneumonia (VAP) is one of the most common nosocomial infections among ventilated patients

in Intensive Care Units (ICUs), and it is related with an increase in ICU stay days, morbidity, and mortality. Every hospital is concerned about its prevention. The majority of the interventions and preventative techniques are standard nursing care. Nurses play a variety of critical responsibilities in avoiding VAP, including care giver, manager, educator, coordinator, and evaluator. Nurses' lack of understanding about infection prevention and good nursing care may be a barrier to following evidence-based guidelines for reducing ventilator-associated pneumonia. This study will provide nurses with in-depth knowledge of VAP and its prevention, allowing them to apply their knowledge in clinical practise [3].

The ventilator-associated pneumonia (VAP) care bundle is made up of evidence-based practises that aim to enhance the outcomes of patients on mechanical ventilation. This quasi experimental study sought to explore the impact of the care bundle implementation on VAP rates. Observations were done in the first phase to determine the VAP care bundle adherence of intensive care unit (ICU) nurses. In the second phase, ICU nurses were educated on the issue of the VAP care bundle. The effect of VAP care package adherence on VAP rates following education was evaluated in the third phase. It was discovered that VAP rates after schooling were considerably lower than VAP rates before education. Implementing a VAP care bundle with education developed in accordance with evidence-based standards reduced VAP rates. As a result, it is advised that the VAP care bundle be implemented on mechanically ventilated patients' care [4].

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Nurse-led medication monitoring provides an exceptional chance to reduce unnecessary treatment burdens. Important factors, such as patients' and professionals' time, additional paperwork, nurse education and training, and inter-professional communication, must be investigated. More research is needed to determine the therapeutic benefits and patient outcomes of nurse-led drug monitoring [5].

More patients in the intensive care unit (ICU) are conscious as a result of modifications in sedative tactics. As a result, new and complex responsibilities in nursing practise have evolved, necessitating a focus on the challenges that patients face. Thirst is one such important issue, which arises when the mechanical ventilator prohibits patients from drinking when they feel the urge. This study focuses on the patients' sensations of thirst during mechanical ventilation (MV) while aware in order to acquire a deeper understanding of the patients' experiences and to offer new knowledge in nursing care. Four themes emerged from the patients' thirst experiences during MV: acute thirst, a new sense in the mouth, deprivation of the possibility to quench thirst, and challenges related with thirst. Patients associate thirst with feelings of desperation, fear, and powerlessness. These feelings are detrimental to their psychological well-being. A policy in the ICU that includes no sedation for critically sick patients requiring MV places new pressures on nurses who must care for patients who are thirsty [5].

Conclusion

The findings suggest that intense chest physiotherapy could

reduce extubation failure in mechanically ventilated ICU patients. Furthermore, chest physiotherapy may enhance the quick shallow breathing index score significantly. Understanding VAP pathophysiology, risk factors, and care bundle is critical for effective VAP prevention and therapy. Every ICU must have particular protocols, tactics, and active surveillance for the care bundle.

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