

THE APPLICATION OF SUCTIONING TO IMPROVE AIRWAY
CLEARANCE IN VENTILATOR -DEPENDENT PNEUMONIA
PATIENTS IN THE ICU AT dr.SOEPRAOEN LEVEL II HOSPITAL

Annisya Alfanny Nurmuza¹, Rudi Hamarno²

Nursing Professional Education Study Program

Email : annisya_p17212255062@poltekkes-malang.ac.id

ABSTRACT

Pneumonia is an infection of the lung parenchyma that increases airway secretions, resulting in ineffective airway clearance. In patients receiving mechanical ventilation, the cough reflex is reduced due to the use of an endotracheal tube (ETT), leading to secretion retention and an increased risk of airway obstruction. Suctioning is an essential nursing intervention to maintain airway patency and improve respiratory function. This study employed a descriptive case study approach involving one patient with pneumonia receiving mechanical ventilation in the Intensive Care Unit (ICU) of Rumkit TK. II dr. Soepraoen. The case study was conducted over four days, during which suctioning was performed according to clinical indications and standard operating procedures. Data were collected through observation, physical examination, medical record review, and family interviews. Nursing care was implemented following the nursing process, including assessment, nursing diagnosis, intervention planning, implementation, and evaluation. Suctioning improved airway clearance, as indicated by reduced airway secretions, decreased rhonchi, improved airway patency, more effective ventilation, and maintained normal oxygen saturation throughout the observation period. Suctioning is an effective nursing intervention for improving airway clearance in mechanically ventilated patients with pneumonia. Appropriate implementation contributes to airway patency, enhances ventilation, and supports optimal nursing care outcomes in the intensive care unit.

Keywords: Pneumonia, Suction, Ineffective Airway Clearance, Mechanical Ventilation, Intensive Care Unit.