

## Nursing Interventions in the Prevention of Mechanical Ventilation-Associated Pneumonia in Adult Hospitalized in Intensive Care Units: An Integrative Literature Review

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### ABSTRACT

**BACKGROUND:** One of the major challenges of health care in the 21st century is Health Care Associated Infections. Ventilation Associated Pneumonia (VAP) is one of the most relevant elements in this context because of its prevalence and significance in increasing length of hospital stay, health costs as well as morbidity and mortality of patients admitted to Intensive Care Units (ICUs)

**OBJECTIVES:** To identify nursing interventions in VAP in the adult hospitalized in the ICU. **METHODS:** Integrative literature review, based on online access of the PubMed and EBSCO databases, on January 2019, defining the time limit from 2014 to 2018 with the descriptors "Nursing Care", "Critical Care", Pneumonia, Ventilator-Associated "and" Prevention & Control ". 50 documents were found and selected 14 after the inclusion and exclusion criteria were applied. **RESULTS:** From the analysis of the selected studies, it was possible to observe that the positive results for decreasing VAP rates result mainly from two intervention axes: the implementation of bundles, in which are included autonomic nursing interventions such as: head-of-bed elevation at 30 - 45°, daily discontinuation of sedation and daily assessment of the possibility of extubation, prophylaxis of peptic ulcer, prophylaxis of deep venous thrombosis, daily oral hygiene care with chlorhexidine, hand hygiene and monitoring of cuff pressure<sup>[1,4]</sup>. Reassuring that there's still divergences regarding the best oral decontamination technique, is needed further investigation in the area<sup>[3]</sup>. The other interventional axis in relation to this issue is also based on the need for continuous education and training of health professionals, namely nurses, who tend to provide higher quality care associated with greater competence when education and training is a framework implemented in ICUs<sup>[2]</sup>. **CONCLUSION:** Ventilation-associated pneumonia in ICUs can be clearly prevented by the implementation of autonomous nursing interventions. That way and according to the existing studies, it can be concluded that the implementation of bundles covering head elevation, oral hygiene care with chlorhexidine, cuff pressure monitoring, interrupting

daily sedation and continuous staff education and training produces positive results in reducing the incidence of VAP in Intensive Care Units.

**Keywords:** *nursing care, critical care, pneumonia ventilator-associated, prevention & control*

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