

Module 4: Critical Appraisal, Evaluation/Summary, and Synthesis of Evidence

Student's Name

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Part 4B: Critical Appraisal of Research

Based on the critical appraisal, the best practice that emerges from the research reviewed is the use of oral care to prevent ventilator-associated pneumonia (VAP) (Zhang et al., 2017). Research indicates that VAP is one of the common preventable healthcare complications of a patient's hospital stay. Besides, research suggests that incorporating oral hygiene may decrease VAP as much as by 60% (Haghighi et al., 2017). Studies also indicate that among mechanically ventilated patients, oral health often deteriorates quickly. The majority of the patients often sustain injuries to their oral mucosa during the intubation, and afterward, the patients are often prone to dry mouth. These factors, in combination with the already compromised immune system, may increase bacteria colonization in the oral mucosa (Haghighi et al., 2017). Therefore, it is recommended that proper oral hygiene be considered by nurses to reduce bacterial growth and decrease the risk of infection.

Oral care includes various practices such as brushing teeth, gums, and tongue at least twice every day with a soft pediatric toothbrush and moistening oral mucosa and lips every two to four hours. Offering mouth care decolonizes the oral cavity, thus preventing bacteria multiplication. Studies indicate that the colonization of dental plaque from the organism in the oral cavity has been linked to mechanically ventilated patients (Zand et al., 2017). In oral care intervention, the nurse needs to ensure that the ICU unit has written practice documents like policy, procedure, or standards of care that describe the procedure for oral care. The step-by-step guide to oral care is as follows:

The nurses need to wash their hands and apply gloves before beginning oral care. Next, it is crucial to assess the oral cavity every eight hours, utilizing a valid and reliable tool for

assessment. The next stage is to suction the patient's mouth to remove excess secretions before oral care. The last step is the actual oral care in which the nurse brushes the patient's teeth for three to four minutes utilizing an antiseptic mouth rinse like chlorhexidine. Research indicates that the use of chlorhexidine for oral care decreases the occurrence of VAP (Zand et al., 2017).

References

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