

ABSTRACT**Effectiveness of Using Oral Hygiene Method With Chlorhexidine on The Prevention of Ventilators Associated Pneumonia (VAP) in Patients With Mechanical Ventilators****Ainur Rusdi****Nursing Program, Faculty of Nursing, Universitas Airlangga**

Introduction: Ventilator-associated pneumonia is a complication that causes chronic respiratory disease and occurs in patients using mechanical ventilators in the ICU. VAP can be prevented by using oral decontamination, one of which is by using chlorhexidine. The aimed of this review was to explore the effectiveness of oral hygiene using chlorhexidine (CHX) in reducing the risk of Ventilator-Associated Pneumonia (VAP). **Methods:** Six databases, including Scopus, EBSCO & CINAHL, ProQuest, PubMed, Web of Science and Science Direct, were explored to search relevant articles. The initial keywords were “Intensive Care Units” and “oral hygiene” and “chlorhexidine” and “ventilator-associated pneumonia”. The study quality of each article was determined based on the quality analysis of The JBI guidelines and the study evaluation used PRISMA checklist. The search was limited to English and bahasa the data sources were limited to articles published from 2015-2020. **Results and Analysis:** Twenty-five articles were included in the review. The results of this study are eight studies (32%) showing the type of oral hygiene with toothbrushing + 0.2% CHX, five studies (20%) toothbrushing + 0.12% CHX, three studies (12%) toothbrush + 0.2 % CHX mouthwash, three studies (12%) sponge toothbrush + 0.2% CHX mouthwash, four studies (16%) Standard treatment with toothbrushing and two studies (8%) brushing teeth + placebo gel. **Discussion:** This review suggests that comprehensive oral hygiene care regimen that includes toothbrushing, suctioning and rinsing with chlorhexidine is effective in reducing the risk of VAP in patients using mechanical ventilators

Keywords: Chlorhexidine, Chronic Respiratory Disease, Intensive Care Units, Pneumonia, Ventilator-Associated