

**ANALISIS PENERAPAN *VENTILATOR BUNDLE* PADA  
PASIEN YANG TERPASANG VENTILASI MEKANIS  
TERHADAP KEJADIAN *VENTILATOR-ASSOCIATED  
PNEUMONIA* (VAP) DI RUANG ICU**

**Agista Rahmawati**

**Abstrak**

Kebutuhan ventilasi mekanis diperkirakan mencapai antara 6,6 hingga 23 kasus per 100.000 populasi. Ventilator-Associated Pneumonia menjadi salah satu penyebab morbiditas dan mortalitas di ICU dan telah meningkat menjadi 1% per hari. Intervensi yang dapat mencegah kejadian VAP adalah *Ventilator Bundle*. Penelitian ini bertujuan untuk mengetahui penerapan *Ventilator Bundle* pada pasien yang terpasang ventilasi mekanis terhadap kejadian VAP di ruang ICU. Penelitian menggunakan desain studi kohort dengan pendekatan prospektif pada 40 pasien yang terpasang ventilasi mekanis dan diambil berdasarkan teknik *purposive sampling*. Instrumen penelitian meliputi lembar observasi kepatuhan *Ventilator Bundle* dan penilaian skor *Clinical Pulmonary Infection Score* (CPIS). Hasil penelitian menunjukkan bahwa lebih dari setengahnya berjenis kelamin laki-laki pada usia dewasa tengah dengan lama rawat ICU berkisar 3-15 hari. Hasil juga menunjukkan lebih dari setengah pasien tidak mengalami VAP dan sebagian besar penerapan *Ventilator Bundle* dilakukan dengan patuh. Terdapat hubungan signifikan antara penerapan *Ventilator Bundle* dengan kejadian VAP ( $p < 0,001$ ), dengan korelasi kuat positif. Penelitian ini menegaskan pentingnya penerapan *Ventilator Bundle* secara konsisten sebagai strategi efektif pencegahan VAP.

**Kata Kunci :** *Intensive Care Unit, Ventilator-Associated Pneumonia, Ventilator Bundle, Ventilasi Mekanis*

***ANALYSIS OF THE APPLICATION OF VENTILATOR BUNDLE  
IN PATIENTS ON MECHANICAL VENTILATION FOR  
VENTILATOR-ASSOCIATED PNEUMONIA (VAP)  
IN THE ICU***

**Agista Rahmawati**

***Abstract***

*The need for mechanical ventilation is estimated to reach between 6.6 and 23 cases per 100,000 population. Ventilator-associated pneumonia is one of the causes of morbidity and mortality in the ICU and has increased to 1% per day. An intervention that can prevent VAP is the Ventilator Bundle. This study aims to determine the application of the Ventilator Bundle in patients on mechanical ventilation for VAP in the ICU. The study used a prospective cohort study design in 40 patients on mechanical ventilation and was selected using purposive sampling. The research instruments included a Ventilator Bundle compliance observation sheet and a Clinical Pulmonary Infection Score (CPIS) assessment. The results showed that more than half of the patients were male, of middle age, and had been in the ICU for 3-15 days. The results also showed that more than half of the patients did not experience VAP and that most of the Ventilator Bundle was implemented with compliance. There was a significant relationship between the implementation of the Ventilator Bundle and the incidence of VAP ( $p < 0.001$ ), with a strong positive correlation. This study confirms the importance of consistent implementation of the Ventilator Bundle as an effective strategy for preventing VAP.*

***Keyword*** : Intensive Care Unit, Mechanical Ventilation, Ventilator-Associated Pneumonia, Ventilator Bundle