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# Prevention of Ventilator Associated Pneumonia

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# Problem/Background

Ventilator Associated Pneumonia is a serious infection in the lungs that stems from pathogens such as bacteria that have invaded the sterile respiratory tract (Cooper, 2021).

VAP affects all individuals who are being mechanically ventilated for more than 48 hours.

ICU nurses should follow certain prevention guidelines to maintain the health of the patient.

# Theoretical Framework

Faye Abdellah formulated the 21 Nursing Problems Theory.

We chose the theory “To promote safety by preventing accidents, injuries or other trauma and to prevent the spread of infection”

This theory focuses on nursing education and is used to guide care in hospital institutions and community health nurses as well.

Following this theory aligns with the practices used to help prevent VAP.

# Evidence-Based Practice

## Oral care with chlorhexidine

-Evidence shows that CHX mouth rinse or gel when used as an oral hygiene care regimen may reduce the incidence of VAP from 26% to 18% (Cooper, 2021).

## Minimize sedation

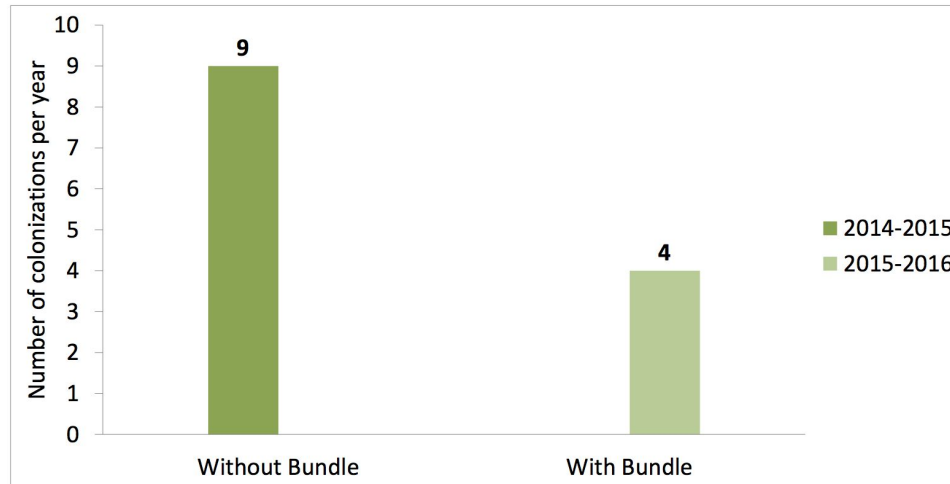
-Implementing daily sedative interruptions as well as assessing readiness to be extubated may reduce the length of mechanical ventilation by 2 to 4 days (Klompas et al., 2014)

# Evidence-Based Practice

## **Elevated headboard**

-The objective is to prevent contaminated secretions from migrating to the lungs from mechanically ventilated patients (Vargas & de Souza, 2021)

# Evidence-Based Practice



\* Different from Group without bundle (Mann-Whitney Test,  $P=0.054$ )

Figure 2. Number of colonizations per year between groups without the bundle and with the bundle. Canoas (RS), Brazil, 2016.

# Recommendation for practice



# Conclusion

Prevention bundles are key in protecting the already critically ill patient, and should be implemented by every healthcare provider. We hope by providing a template for a VAP prevention bundle, a new policy may be created by the facility and utilized by every nurse, respiratory therapist, and physician which will help prevent a decline in the patients health.



# References

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