

Oral Care and the Prevention of Hospital Acquired Pneumonia in Non-Ventilated Patients

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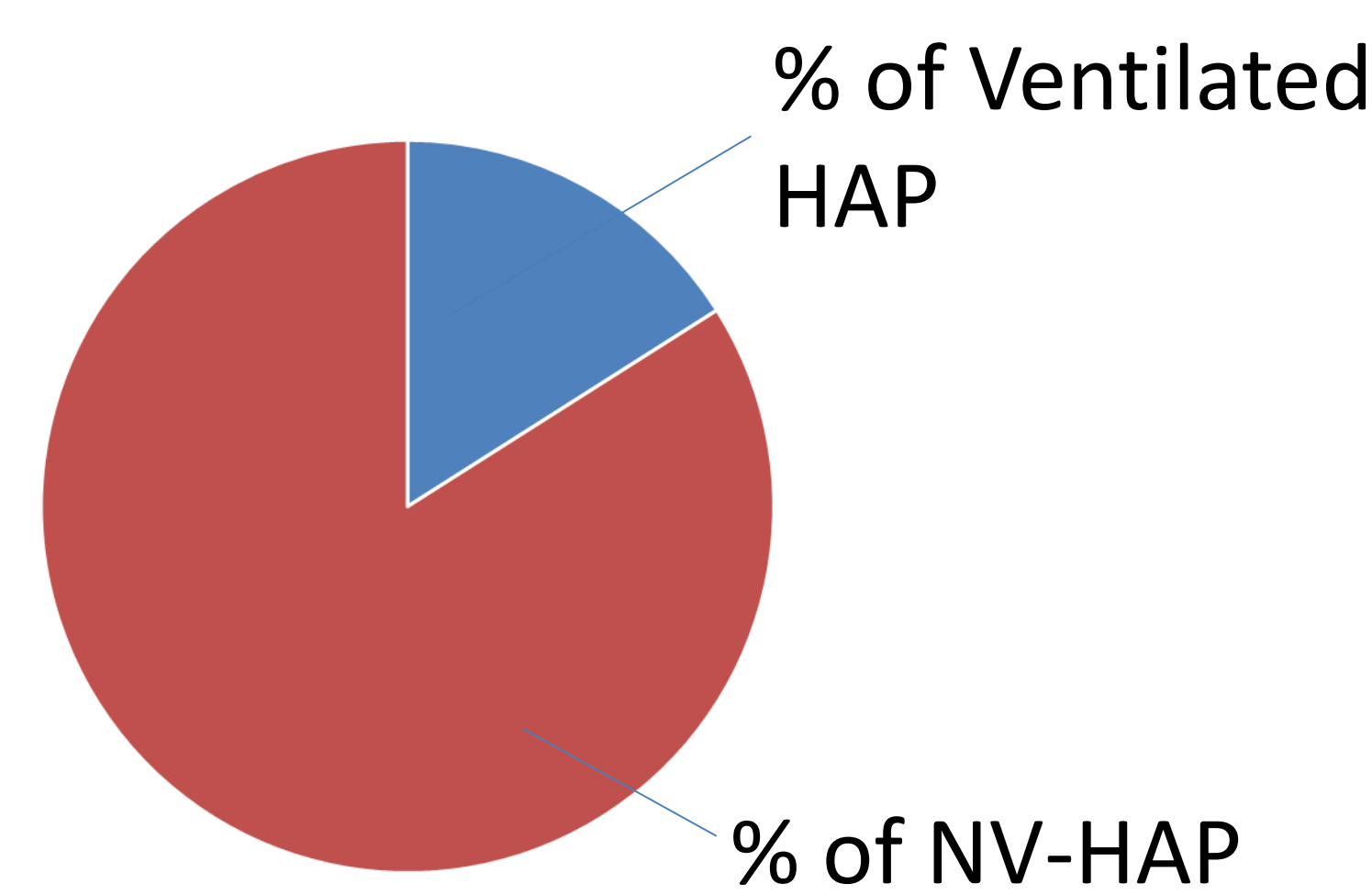


Goal:

- Increase nursing awareness of the preventative power of oral care in combatting Hospital Acquired Pneumonia in non-ventilated patients (NV-HAP)
- Decrease NV-HAP rates by implementing an oral care protocol founded on Evidence Based Practice (EBP)

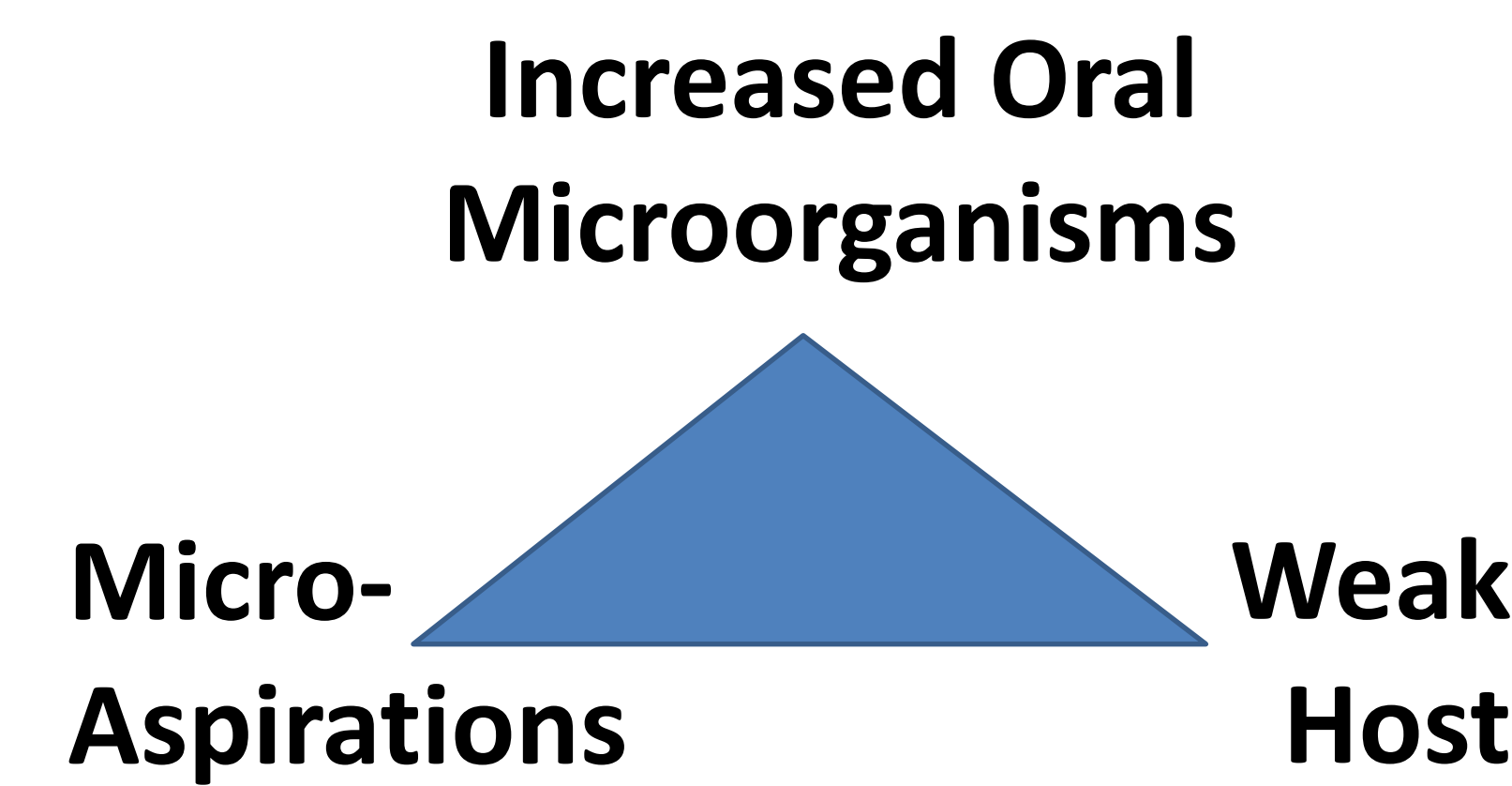
Background:

- HAP is a leading nosocomial infection
- Oral microorganisms replicate by 4 billion every 4-6 hours
- Organisms introduced into the pulmonary tract by micro-aspirations have been found in pneumonia cultures of non-ventilated patients
- Ventilated patients account for less than 20% of HAP cases



The Triangle:

- Microorganisms in the oral cavity **dramatically increasing biofilm** Oral microorganisms are introduced into the pulmonary tract through **micro-aspirations**
- Hospitalized patients have a **compromised immune system**, putting them at greater risk for developing infection



Recommendation:

Evidence Based Practice:

- Decreasing the oral bioburden introduced into the lower pulmonary tract via micro-aspirations by implementing an oral care protocol disrupts the triangle and decreases the risk of developing NV-HAP
- Studies show a decrease in NV-HAP by 60% with implementation of oral care protocol in non-ventilated patients
- Annual savings in treating NV-HAP approximate \$2 billion/year

Practice Change:

Implement pilot oral care program on a post-operative unit that includes the following components:

1. Provide oral care (i.e., brushing teeth) at least two times daily
2. Document oral care provided
3. Educate patients on correlation between oral microorganisms, micro-aspirations, and pneumonia

Results:

Limitations:

- Misconception of oral care as a comfort measure rather than a preventative measure influences staff compliance
- Oral care provided not always reflected in documentation
- Pilot program was implemented on the surgical unit and does not take into account patients transferred from other units when auditing oral care compliance

Conclusion:

- Oral microorganisms have been found in lower pulmonary tract of patients with HAP
- Oral care disrupts the Triangle and is a crucial preventative measure against HAP
- Staff compliance is a key component in implementing a successful oral care protocol
- Successfully implemented oral care protocols reduce NV-HAP

Next Step:

- Expand oral care protocol to all units of hospital
- Continue education on importance of oral care to new nursing staff with expansion of protocol

References:

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