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

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

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

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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