Guidelines for Prevention of Ventilator Associated Pneumonia
Tammy M. DeRouen, RN, CCRN
Our Lady of Lourdes Regional Medical Center
Cecile Broussard

Problem:
Ventilator Associated Pneumonia (VAP) is a common nosocomial infection that is associated with poor clinical patient outcomes. VAP leads to a significant increase in ventilator days and ICU length of stay, and substantially increases hospital costs.

Evidence:
The Institute for Healthcare Improvement (IHI) started the “100,000 Lives Campaign” to engage U.S. hospitals to implement changes in care with evidence based guidelines. VAP initiatives include elements of head of the bed elevation and oral hygiene. Research findings demonstrate VAP initiatives for mechanically ventilated patients reduce the incidence of VAPs.

Strategy:
The intensive care units initiated a ZAP the VAP program in June 2005 involving all ICU RNs, and Certified Nurse Assistant. Interdisciplinary team of nursing, pharmacy, infection control, case management, and dietary included initiatives in the patient’s plan of care.

Practice Change:
Implementation of initiatives in ventilator patients’ in both the Medical and Surgical Intensive Care Units:
• Elevation of the Head of Bed to 30 degrees
• Oral Hygiene every 4 hours (kits included oral cleansing tools, cleansing solutions, and suctioning systems)

Evaluation:
Measurements included VAP rate, utilization of oral care supplies, frequency of documented interventions of oral hygiene, and daily assessment of the head of bed elevation. Data graphs compilation to the staff.

Results:
The ZAP the VAP initiative has decreased the rate of ventilator associated pneumonia from 7.72 per 1000 ventilator patient days in June 2005 to 0.98 per 1000 ventilator patient days in December 2008. Success demonstrates a current rate of 23 months with no VAPs.

Recommendations:
Ongoing education and follow up of ICU RNs, and Nursing Assistants. Ventilator patient’s plan of care must include 30 degree head of bed elevation, and vigorous oral hygiene. Interdisciplinary team care planning should model best practice guidelines.
Lesson Learned:
Nursing empowerment to change practice and improve patient outcomes based on clinically proven research findings.

Bibliography:


