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EFFICACY OF VENTILATOR-ASSOCIATED PNEUMONIA BUNDLE IN THE SURGICAL INTENSIVE CARE UNIT

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Purpose: To evaluate the impact of a ventilator associated pneumonia (VAP) bundle on the incidence of VAP in our surgical intensive care units.

Methods: From January 2012 through October 2014, we initiated bundled care to reduce VAP. These measures included elevating the head of the bed of ventilated patients to 30°–40° degree (assuming there were no contraindications), daily extubation assessment, sedation break, chlorhexidine for oral care and clearance of water from ventilator tubing.

Results: Before the bundled intervention, the rate of ventilator-associated pneumonia (VAP) was 5.98 per 1000 ventilator days (2012). Compliance with the VAP bundle increased over the study period from 40.67% (Feb 2014) to 96.7% (Oct 2014), and rate of VAP decreased to 3.03 per 1000 ventilator days.

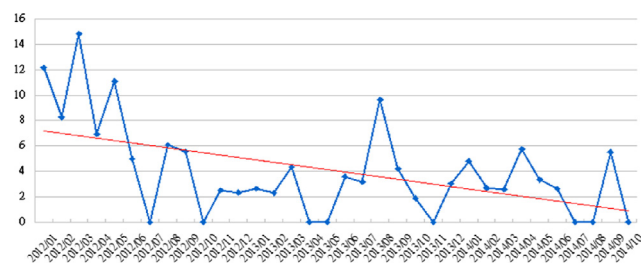


Figure: 2012-2014 ventilator-associated pneumonia (VAP) rate in Surgical Intensive Care Unit.

Conclusion: Promoting better compliance of VAP bundle indeed led to a decrease in the incidence of VAP.

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REGIONAL HOSPITAL USING CATHETER-RELATED AND BUNDLE CARE TO LOWER BLOODSTREAM INFECTION IN ICU

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Preface: Healthcare related infection, HAI, is an important indicator of health care quality and patient safety. During hospitalization, the event of central venous catheter-related bloodstream infection (CVCRB hereafter) will increase patient's illness severity, length of hospitalization days and medical costs, and even death rate.

According to statistics of the Centers of Disease Control showed in 2013, the density of CVCRB infection in regional hospital was 1.68‰; however, the data of our ICU from January to October 2013 was 1.87‰, was higher than average. Implementation of evidence-based medicine and combined measures of infection control help reduce catheter-related bloodstream infections.

Methods: This study collected and used descriptive statistics to analyze medical and infection rate data of ICU patients who used central venous catheter from January 1, 2013 to October 30, 2013 and March 1, 2014 to October 30, 2014. Based on past documentation and central catheter care quality to promote the use of bundle care, the content includes: (a) hand hygiene, (b) the maximum range of protective draping: staff wear caps, surgical masks, sterile gloves and sterile surgical gowns and the patient covering the sterile drape from head to toe, and (c) applying to 2% alcoholic chlorhexidine disinfection on the place where will be insertion, (d) select the appropriate insertion site, avoiding femoral vein insertion, (e) removing the unnecessary catheter as soon as possible.

Results: The result of ICU implementing of central venous catheter placement plan was accounted for 32.5%, an average of 14 days hospitalization and mostly used microbial strain of *Candida albicans* and *Enterococcus faecium*-VRE. With building a standard operating procedure of central venous catheter placement, evaluate hand hygiene compliance rate went up from 90% to 96.7%, correction rate went up from 85.2% to 93.1%; femoral vein placement rate dropped to 12.5% and central venous catheter-related bloodstream infections density decreased from 1.87‰ to 1.14‰ (↓ 0.73‰).

Conclusions: Promoting combined central venous catheter care through medical team proved CVC bundle care can reduce bloodstream infections, days of hospitalization, and medical costs hence ensure patient's safety and improve the quality of hospital care and achieving the goal of "zero tolerance" for central venous catheter-related bloodstream infections.

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THE AUTHENTIC COMPLIANCE OF HAND HYGIENE OF HCP IN A MEDICAL CENTER

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Purpose: We have carried out movement of hand hygiene for many years in our hospital. In order to improve the understanding of proper timing of hand-washing and avoid cross contamination of microbe in hospital, we audit the compliance of "five timings of hand-washing" according to the WHO hand hygiene guidelines.

Methods: Put hand hygiene into practice is easier said than done, according to various worldwide reports.

Results: In developed countries, the compliance of hand-washing was about 30-40% but was up to 98% in our previous audit reports in our hospital. These results were doubtful and might be attributable to the "Hawthorne Effect". Since August of 2014, we audit the hand-washing in secret and the compliance decreased from 99.6% to 29.3%. The compliance rates of various staffs were as followed: attending physician 40.7%, residents 36.8%, medical students 31.4%, nurses 30.3% and nursing students 37.5%.

Conclusions: Hand hygiene authenticity the compliance of hospital staffs.

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USING ATP BIOLUMINESCENCE TECHNIQUE TO ENHANCE RESPIRATORY THERAPIST OPPORTUNITY HAND WASHING COMPLIANCE

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Purpose: Hand hygiene is the prevention of Healthcare associated-infections (HAIs), the most simple and effective method. The primary goal of 2005 World Health Organization to "Clean Care is Safer Care" as the global patient safety challenge; Since 2009 re-initiated "Save Lives: Clean Your Hands", Taiwan is also in response to WHO hand hygiene activities. This hospital also grouped in 2009 began to respond to date, hand hygiene compliance and correctness are up more than 9 percent, this hospital adhere to, "Clean Care is Safer Care" concept continued to review and promoting. In 2013 the promote hand washing to five opportunity, it was found to perform to before clean / aseptic procedure compliance minimum of 90.5%, distribution categories in the respiratory therapy department.

Methods: Therefore, in order to enhance the respiratory therapist hand washing opportunity compliance, infection control group using the Field Study, We found Respiratory Therapist earlier hands washing after further adjustment respirator, continued suction technique of hand hygiene is not performed. However, the behavior of the recorded increases, it will increase to wash their hands before performing the action suction technology. The main difference is that there is no touching the patient, considered