

Implementation of Care Bundles to Reduce Ventilator-Associated Pneumonia and Catheter-Associated Urinary Tract Infection in Taiwan (2015-2017)

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Ventilator-associated pneumonia (VAP) and catheter-associated urinary tract infections (CAUTI) are common healthcare-associated problems, especially for patients in high-risk units. The application of care bundles to reduce infection rate has successfully become an important measure in many countries. This project was conducted in different levels of hospitals, including medical centers, regional hospitals and district hospitals, located in different areas of Taiwan from 2015-2017. In high-risk units, such as adults ICUs, respiratory care units, respiratory care wards were incorporated to implement care bundle intervention in order to reduce VAP and CAUTI, for which were built on evidence-based infection control measures.

In total 52 hospitals were recruited in this project included medical center(11), District hospital(23) and Local hospital(18). The infection density of VAP declined from 1.32% to 0.87% and CAUTI also declined from 3.10% to 2.53% (all $P < 0.01$). It also showed the catheter utilization rate was decreased from 37.04% to 32.55%. It was estimated to save about 4.34 millions USD and that did not include the VAP and/or CAUTI associated mortality.

The feasibility for the implementation of VAP or CAUTI bundles in the healthcare system plays an important role for the quality and policy of infection control. The final outcome of this study will determine the quality of decisions and implementation of the care bundle policy.

Biography:

As a President of Infection Control society of Taiwan from 2009 to 2015, he plays a key role in the development of infection control program in Taiwan. He cooperates with Taiwan-CDC to initiate many infection prevention projects, such as setup infection control guideline, Hand hygiene campaign, CLABSI care bundle pioneer research, Reducing HAI and AMR by environmental cleaning standards, CAUTI, VAP care bundle pioneer research, National CLABSI care bundle campaign et ct. to pursue the zero tolerance. His interests are in infection control, antimicrobial resistance, infectious disease, as well as quality improvement. He is an experienced trainer in infection control.