

Our aim was to study the impact of CVL insertion bundle on incidence of CLABSI and study the causative microbial agents in an intensive care unit in Kuwait” Salama et al (2015).

Reference:

Salama, M.F., Jamal, W., Mousa, H.A. and Rotimi, V. (2015) Implementation of central venous catheter bundle in an intensive care unit in Kuwait: Effect on central line-associated bloodstream infections. Journal of Infection and Public Health. June 29th. .

Abstract:

Central line-associated bloodstream infection (CLABSIs) is an important healthcare-associated infection in the critical care units. It causes substantial morbidity, mortality and incurs high costs. The use of central venous line (CVL) insertion bundle has been shown to decrease the incidence of CLABSIs. Our aim was to study the impact of CVL insertion bundle on incidence of CLABSI and study the causative microbial agents in an intensive care unit in Kuwait. Surveillance for CLABSI was conducted by trained infection control team using National Health Safety Network (NHSN) case definitions and device days measurement methods. During the intervention period, nursing staff used central line care bundle consisting of (1) hand hygiene by inserter (2) maximal barrier precautions upon insertion by the physician inserting the catheter and sterile drape from head to toe to the patient (3) use of a 2% chlorhexidine gluconate (CHG) in 70% ethanol scrub for the insertion site (4) optimum catheter site selection. (5) Examination of the daily necessity of the central line. During the pre-intervention period, there were 5367 documented catheter-days and 80 CLABSIs, for an incidence density of 14.9 CLABSIs per 1000 catheter-days. After implementation of the interventions, there were 5052 catheter-days and 56 CLABSIs, for an incidence density of 11.08 per 1000 catheter-days. The reduction in the CLABSI/1000 catheter days was not statistically significant ( $P=0.0859$ ). This study demonstrates that implementation of a central venous catheter post-insertion care bundle was associated with a reduction in CLABSI in an intensive care area setting.

**Thank you to our partners for supporting IVTEAM**