



Intravenous literature: Al-Tawfiq, J.A., Amalraj, A. and Memish, Z.A. (2013) Reduction and surveillance of device-associated infections in adult intensive care units at a Saudi Arabian hospital, 2004-2011. International Journal of Infectious Diseases. August 8th. .

Abstract:

**BACKGROUND:** Device-associated infections (DAI) are recognized as a marker of patient safety. Data regarding DAI rates in Saudi Arabia are sparse.

**METHODS:** This was a prospective surveillance study of DAI rates conducted in the adult intensive care units of the Saudi Aramco Medical Services Organization, carried out using the DAI definition provided by the Centers for Disease Control and Prevention’s National Healthcare Safety Network. DAI prevention bundles were introduced in 2006 for ventilator-associated pneumonia (VAP), in mid-2010 for catheter-associated urinary tract infections (CAUTI), and in 2008 for central line-associated blood stream infections (CLABSI).

**RESULTS:** DAI rates for VAP, CLABSI, and CAUTI are reported for the study period from 2004 to 2011. CAUTI was the most common DAI (42.2%), followed by CLABSI (38.5%) and VAP (19.3%). The overall rate of each infection type per 1000 device-days was 8.18 for CAUTI, 10 for CLABSI, and 4.52 for VAP. Annual DAI rates showed a significant reduction over time from the beginning of the study to the end of the study for CLABSI (16.3 vs. 6.06), CAUTI (6.75 vs. 3.41), and VAP (9.8 vs. 1.3) ( $p < 0.05$ ).

CONCLUSIONS: CAUTI was the most common infection, and the use of DAI prevention bundles was associated with a significant decrease in DAI rates over time.

