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OBJECTIVE:

To determine the rate, extra length of stay (LOS) and extra mortality of Device-associated infections (DAI) in 14 ICUs of 13 hospitals members of the INICC in Turkey.

METHODS:

Prospective cohort surveillance of DAI was conducted on adult patients admitted to tertiary-care ICUs. INICC designed the protocol, forms and data uploading and analysis system. Data were gathered at the ICUs. CDC-NNIS definitions were applied.

RESULTS:

From 07/04 to 01/07, we enrolled 3,899 patients, representing 45,767 bed days. The overall DAI rate was 39.7 per 100 patients, and 33.8 per 1000 bed days.

The CVC-BSI rate was 16.5 per 1000 CVC days, the VAP rate was 25.8 per 1000 device days, and the CA-UTI rate was 8.1 per catheter days.

The LOS of patients without DAI was 6.6 days; of patients with CVC-BSI was 18.8 days (P, < 0.001); LOS of those with VAP was 16.1 days (P, < 0.001); and LOS of those with CA-UTI was 16.9 days (P, < 0.001).

Extra mortality for VAP was 14.9%, (P=< 0.001); for CVC-BSI, 5.0% (P=0.2166); and for CAUTI, 5.9% (P=0.309).

21.9% DAIs were caused by *Acinetobacter sp*; 19.0% by *S aureus*—89.3% of which were MRSA; 19.0% by Enterobacteriaceae —48.2% resistant to ceftriaxone, 52.0% to ceftazidime, and 30.0% to piperaciline tazobactam; 18.7% by *Pseudomonas sp* infections—51.1% resistant to ciprofloxacin, 50.3% to ceftazidime, 39.0% to imipenem, and 30.0% to piperaciline tazobactam; 12.6% by *Candida sp*; and 2.2% by *Enterococcus sp*.—1.9% resistant to vancomycin.

CONCLUSION:

This study has identified that CVC-BSI, VAP, and CA-UTI rates are high, increased the LOS of patients, and VAP is significantly associated with higher mortality.