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**Device-Associated Infection Rates, Extra Length of Stay, Mortality and Microorganism Profile in 70 Adult ICUs of 38 cities of 12 Developing Countries. Findings of the International Nosocomial Infection Control Consortium (INICC).**

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**OBJECTIVE:** To determine the rate, extra LOS and extra mortality of Device-associated infections (DAI) in ICUs of hospital members of the INICC in Argentina, Brazil, Colombia, Croatia, India, Kosovo, Macedonia, Morocco, Mexico, Peru, Philippines and Turkey.

**METHODS:** Prospective cohort surveillance of device associated infection (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 01/02 to 04/07 we enrolled 37,554 patients, representing 232,905 bed days. The overall DAI rate was 12.2 per 100 patients, and 19.7 per 1000 bed days. The CVC-BSI rate was 10.9 per 1000 CVC days, the VAP rate was 20.8 per 1000 device days, and CA-UTI rate was 7.0 per catheter days. Overall 30.0% of all DAI were caused by Enterobacteriaceae—56.7% of which were resistant to ceftriaxone, 54.5% were resistant to ceftazidime, and 28.2% were resistant to piperaciline tazobactam; 17.4% were caused by *Pseudomonas sp.* infections—54.2% of which were resistant to ciprofloxacin, 51.0% were resistant to ceftazidime, 36.7% were resistant to imipenem, and 32.7% were resistant to piperaciline tazobactam; 16.2% were caused by *Staphylococcus aureus* infections—82.2% of which were resistant to methicilin; 14.6% were caused by *Acinetobacter sp.*—78.1% of which were resistant to piperaciline tazobactam; 11.2% were caused by *Candida sp.*; 5.7% by *Coagulase-negative-staphylococci*; 2.6% were caused by *Enterococcus sp.*-2.8% of which were resistant to vancomycin; 0.7% by *Streptococcus sp.*; 0.4% by *Corynebacter sp.*; 0.4% by *Haemophilus sp.*; 0.5% by *Stenotrophomonas sp.*; 0.1% by *Alcaligenes sp.*; and finally 0.1% by *Aeromonas sp.*

LOS of patients without HAI was 4.6 days; LOS of patients with CVC-BSI was 14.4 days (RR, 3.11), representing 9.8 extra days; LOS of patients with VAP was 15.3 days (RR, 3.30), representing 10.7 extra days; and LOS of patients with CA-UTI was 13.5 days (RR, 2.92), representing 8.9 extra days. A total of 5,107 out of 33,629 (15.2%) patients without HAI died; 262 out of 877 patients (29.9%) with CVC-BSI died, and the extra mortality for CVC-BSI was 14.7% (RR, 1.97; 95% CI, 1.74-2.23; P, 0.00001); 465 out of 1,040 patients (44.7%) with VAP died, and the extra mortality of VAP was 29.5% (RR, 2.94; 95% CI, 2.68-3.24; P, 0.00001); and 188 out of 542 patients (34.7%) with CA-UTI died, the extra mortality of CA-UTI being 19.5% (RR, 2.28; 95% CI, 1.97-2.64; P, 0.0001).

**CONCLUSIONS:** This study has identified that the DAI rates were high and increased the length of stay from 8.9 to 10.7 days, and that they are significantly associated with higher mortality.

