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Device-Associated Infection Rates, Extra Length of Stay, Mortality and Microorganism Profile in One Hospital of El Salvador. Findings of the International Nosocomial Infection Control Consortium (INICC).

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OBJECTIVE: To determine the rate, extra length of stay (LOS) and extra mortality of Device-associated infections (DAI) in a pediatric intensive care unit (ICU) of a hospital member of the INICC in El Salvador.

METHODS: Prospective cohort surveillance of device associated infection (DAI) was conducted on pediatric patients admitted to the ICU. INICC designed the protocol, forms and data uploading and analysis system. Data were gathered at the ICU. CDC-NNIS definitions were applied.

RESULTS: From 01/07 to 0307 we enrolled 190 patients in the pediatric ICU, representing 1,305 bed days. The overall DAI rate was 5.4 per 100 patients, and 11.2 per 1000 bed days.

The CVC-BSI rate was 8.16 per 1000 CVC days, the VAP rate was 11.1 per 1000 device days, and the CA-UTI rate was 7.53 per 1000 catheter days. Overall 25.0% of all DAI were caused by Enterobacteriaceae infections, 25.0% were caused by Candida sp.; and 50% by Pseudomonas sp.

The LOS of patients without DAI was 5.3 days; the LOS of patients with CVC-BSI was 18.6 days (RR, 3.48; 95% CI, 2.81-4.31; P,< 0.001), representing 13.3 extra days; the LOS of patients with VAP was 20.3 days (RR, 3.80; 95% CI, 3.18-4.53; P, < 0.001), representing 14.9 extra days; and the LOS of patients with CA-UTI was 15.5 days (RR, 2.90; 95% CI, 2.03-4.15; P, < 0.001), representing 10.2 extra days.

Extra mortality for VAP was 28.6%, (RR, 2.44; P= 0.213); we did not calculate the extra mortality of patients with CVC-BSI and CA-UTI due the small sample size.

CONCLUSION: This study has identified that CVC-BSI, VAP, and CA-UTI rates were high, and they increased from 10.2 to 14.9 days the length of stay of patients at the ICU.