

Extra Length of Stay and Device-Associated Nosocomial Infection Rates in Intensive Care Units in three Hospitals of Brazil.

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OBJECTIVES:

Measure the incidence of device-associated nosocomial infections (NI) and extra length of stay (ELOS) in ICUs.

METHODS:

We performed a prospective NI surveillance study in five ICUs of three Brazilian hospitals of three different cities. These hospitals are members of the “International Nosocomial Infection Control Consortium” (INICC). NIs were identified using the CDC-NNIS definitions. We calculated E-LOS subtracting nosocomial average length of stay (ALOS) of patients with and without NI.

RESULTS:

From April 2003 to March 2005 (1 year and 11 months), we enrolled 1,404 patients, representing 13,628 bed days (BD). The overall NI rate was 36.4 (496/13628) per 1000 BD.

Table: NI rates and length of stay

NI	NI (n)	Proportion	Device days	NI rate per 1000 device days	ALOS	ELOS
IVD-BSI	115	23.2%	12,501	9.2	13.6	7.8
VAP	244	49.2%	8,396	29.1	14.9	9.1
CA-UTI	137	27.6%	11,180	12.3	14.6	8.9

IVD-BSI: intravascular devices associated blood stream infection, VAP: ventilator associated pneumonia. CA-UTI: catheter associated urinary tract infection. ELOS: extra length of stay.

CONCLUSION:

Invasive device-associated NI rates are still above the desirable standards, therefore infection control practice needs to be improved.