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Extra Mortality of Nosocomial Infections at Hospitals members of International Nosocomial Infection Control Consortium (INICC) in Argentina, Brazil, Colombia, India, Mexico, Morocco, Peru, and Turkey

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OBJECTIVE: Our goal was to determine the extra mortality (EM) of the health care associated infections (HAI) at 55 intensive care units (ICU) of 46 hospital members of INICC in 8 counties.

METHODS: We conducted a case control analysis nested in a prospective cohort study in 55 ICUs at 46 hospitals members of the INICC, between 2002 and 2005 (4 years) to analyze the extra mortality of patients with central vascular catheter associated blood stream infection (CVC-BSI), mechanical ventilator associated pneumonia (VAP), and catheter associated urinary tract infection (CA-UTI). All patients were assessed for mortality. Adult patients who died were called cases, while those who did not die, were called controls.

RESULTS: The CVC-BSI rate was 12.5 per 1000 CVC days, the VAP rate was 24.1 per 1000 device days, and CA-UTI rate was 8.9 per catheter days. 3,127 out of 18,272 (17.1%) patients without HAI died; 187 out of 532 patients (35.2%) with CVC-BSI died, the extra mortality of CVC-BSI was 18.0%, (RR, 2.05; 95% CI, 1.77-2.38; P, 0.0000); 304 out of 677 patients (44.9%) with VAP died, the extra mortality of VAP was 27.8%, (RR, 2.62; 95% CI, 2.33-2.95; P, 0.0000); 152 out of 396 patients (38.4%) with CA-UTI died, the extra mortality of

CA-UTI was 21.3%, (RR, 2.24; 95% CI, 1.91-2.64; P, 0.0000).

CONCLUSION: This study has identified that CVC-BSI, VAP, and CA-UTI are significantly associated with higher mortality.