

Rosenthal VD, Aiquin J, Guanche Garcell H, et al. Mortality, Length of Stay and Bacterial Resistance of Device-Associated Infections in 107 Intensive Care Units of 19 Developing Countries. Findings of INICC In: Proceedings and Abstracts of the 48th Annual Scientific Meeting of the Interscience Conference on Antimicrobial Agents and Chemotherapy; 2008 October 25-28; Washington DC 2008.

Mortality, Length of Stay and Bacterial Resistance of Device-Associated Infections in 107 Intensive Care Units of 19 Developing Countries. Findings of INICC

Author Block: V. D. ROSENTHAL¹, J. AIQIN², H. GUANCHE GARCELL³, Y. HUSSAIN⁴, S. ABUBAKAR⁵, S. KANJ-SHARARA⁶, F. E. UDWADIA⁷, D. ARMAN⁸, Inicc Group;

¹Intl. Nosocomial Infection Control Consortium, Buenos Aires, Argentina, ²The First Affiliated Hosp. of Guangxi Med Univ, Nanming, China, ³“J. A. Dominguez” Univ Hosp., Havana, Cuba, ⁴Shaukat Khanum Cancer Hosp. & Res. Ctr., Lahore, Pakistan, ⁵Aminu Kano Teaching Hosp., Kano, Nigeria, ⁶American Univ of Beirut Med Ctr., Beirut, Lebanon, ⁷Breach Candy Hosp. Trust, Mumbai, India, ⁸Gazi Univ Med Sch., Ankara, Turkey.

Abstract:

Objective: To determine bacterial resistance, extra mortality (EM) and length of stay (LOS) of device-associated infections (DAI) in INICC ICUs.

Methods: Prospective cohort, active DAI surveillance was conducted on 107 adult, pediatric and neonatal ICUs of 47 cities in Argentina, Brazil, Chile, China, Colombia, Costa Rica, Cuba, India, Kosovo, Lebanon, Macedonia, Mexico, Morocco, Nigeria, Peru, Philippines, El Salvador, Turkey and Uruguay. CDC-NNIS definitions were applied. Protocol and forms were developed by INICC. Data were collected in the ICUs, and uploaded and analyzed at INICC offices.

Results: From 01/02 to 03/08, 45736 patients were enrolled.

Agent	Overall DAI Percentage	Resistance
<i>Pseudomonas</i> sp	19%	37% to Imipenem
<i>Acinetobacter</i> sp	15%	81% to piperaciline-tazobactam
S aureus	15%	81% to methicilin
<i>Klebsiella</i> sp	11%	69% to ceftazidime
E. Coli	9%	56% to ceftazidime
Coagulase-negative-staphylococci	6%	78% to methicilin
<i>Enterobacter</i> sp	5%	61% to ceftazidime; 7% to Imipenem
<i>Enterococcus</i> sp	3%	7% to vancomycin

Without DAI, 14.5% of patients died; with CLABSI 31%, (EM 16.5% (RR, 2.13.; 95% CI, 1.92 - 2.36; P, < 0.001)); with VAP 41.4%, (EM 26.9% (RR, 2.85; 95% CI, 2.62 - 3.09; P, < 0.001)); with CAUTI 36.2% (EM 21.7% (RR, 2.48; 95% CI, 2.19 - 2.82; P, < 0.001)).

Without DAI, LOS was 4.9 days; with CLABSI, 16.4 days (RR, 3.35) (11.5 extra days); with VAP, 15.2 days (RR, 3.10) (10.3 extra days); and with CAUTI, 13.9 days (RR, 2.83) (9 extra days).

Conclusions: This study found high bacterial resistance, and that DAI increased significantly LOS, and mortality.

:

Author Disclosure Information: V. D. Rosenthal, None.

Category (Complete): K

Keyword (Complete): Surveillance ; Device-associated Infections ; Mortality

Grant Information (Complete):

Status: Complete

[American Society for Microbiology](#)

1752 N Street N.W

Washington, D.C. 20036

ICAAC Phone: (202) 737-3600

[Infectious Diseases Society of America](#)

1300 Wilson Blvd., Suite 300

Arlington, VA 22209

IDSA Phone: (703) 299-0200

Powered by [OASIS](#), The Online Abstract Submission and Invitation System SM

© 1996 - 2008 [Coe-Truman Technologies, Inc.](#) All rights reserved.