

---

Education And Performance Feedback Effect On Rates Of Central Vascular Catheter - Associated Bloodstream Infections In New Born Intensive Care Units  
In a Private Hospital of Sucre, Colombia

Villamil Gómez W<sup>1</sup>, Ruíz Vergara G<sup>1</sup>, Marrugo Pertuz A<sup>1</sup>, Rosenthal VD<sup>2</sup>.

1- Santa María Medical Center, Sucre, Colombia

2- Medical College of Buenos Aires, Argentina.

**Background:**

To ascertain the effect of an infection control program utilizing education and performance feedback on a new born intensive care unit (NICU) rates of intravascular device (IVD)-associated bloodstream infection (BSI).

**Methods:**

Level III new born intensive care unit of one hospital in Colombia. All new born patients admitted to study units who had a central vascular catheter (CVC) in place for at least 24 hours. A prospective before/after trial in which rates of IVD-associated BSI were determined during a period of active surveillance without education and performance feedback (phase 1) were compared to rates of IVD-associated BSI after implementation of an infection control program utilizing education and performance feedback (phase 2). Phase one was from October 2003 to April 2004. And phase two was from May 2004 to November 2004.

**Results:**

73 IVD-days were accumulated in phase one, 166-days during phase two. Compliance with hand-washing, and CVC site care improved from baseline during the study period. Overall rates of IVD-associated BSI were significantly lowered from baseline rates after implementation of education and performance feedback, 54.8 BSI per 1000 CVC days (4/73) versus 6.0 BSI per 1000 CVC days (1/166), RR = 0.11, 95% CI = 0.01 – 0.98, P-value = 0.0163). The BSI rate reduction was 89% in six months.

**Conclusion:**

Implementation of an infection control program, utilizing education and performance feedback resulted in significant reductions in rates of IVD-associated BSI.