Despite a lower device use ratio in our ICUs, our device-associated healthcare-associated infection rates are higher than National Healthcare Safety Network...” Mehta et al (2015).

Abstract:

OBJECTIVE: To report the International Nosocomial Infection Control Consortium surveillance data from 40 hospitals (20 cities) in India 2004-2013.


RESULTS We collected data from 236,700 ICU patients for 970,713 bed-days. Pooled device-associated healthcare-associated infection rates for adult and pediatric ICUs were 5.1 central line-associated bloodstream infections (CLABSI)/1,000 central line-days, 9.4 cases of ventilator-associated pneumonia (VAP)/1,000 mechanical ventilator-days, and 2.1 catheter-associated urinary tract infections/1,000 urinary catheter-days. In neonatal ICUs (NICUs), pooled rates were 36.2 CLABSI/1,000 central line-days and 1.9 VAP/1,000 mechanical ventilator-days. Extra length of stay in adult and pediatric ICUs was 9.5 for CLABSI, 9.1 for VAP, and 10.0 for catheter-associated urinary tract infections. Extra length of stay in NICUs was 14.7 for CLABSI and 38.7 for VAP. Crude extra mortality was 16.3% for CLABSI, 22.7% for VAP, and 6.6% for catheter-associated urinary tract infections in adult and pediatric ICUs, and 1.2% for CLABSI and 8.3% for VAP in NICUs. Pooled device use ratios were 0.21 for mechanical ventilator, 0.39 for central line, and 0.53 for urinary catheter in adult and pediatric ICUs; and 0.07 for mechanical ventilator and 0.06 for central line in NICUs.

CONCLUSIONS: Despite a lower device use ratio in our ICUs, our device-associated healthcare-associated infection rates are higher than National Healthcare Safety Network, but lower than International Nosocomial Infection Control Consortium Report.

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