

Abstract:

BACKGROUND: Many institutions that have adopted evidence-based infection prevention practices have achieved reductions in the rate of central line-associated bloodstream infection (CLABSI) in their intensive care units (ICUs). Few studies have investigated the impact of CLABSI prevention strategies in non-ICU settings, however. This study was conducted to assess whether a multifaceted educational initiative significantly improved health care workers’ adherence to clinical practices that have been demonstrated to reduce CLABSI rates.

METHODS: This prospective interventional study compared central line utilization and other variables in medical ICU (MICU) and non-ICU settings at an inner city community teaching hospital. The study included 3 phases: preintervention, intervention, and postintervention.

RESULTS: A total of 128 central venous catheter (CVC) placements were reviewed. After the intervention, the proportion of patients transferred out of the MICU with a CVC in place decreased significantly (P = .05), and the percentage of patients transitioned from a CVC to a peripherally inserted venous catheter increased (P = .004). The mean duration of CVC use decreased from 8.2 days to 5.7 days (P = .004), which was confirmed by linear regression (P = .003).

CONCLUSIONS: Our data indicate that multidisciplinary, evidenced-based educational interventions can significantly improve targeted measures of CVC use. Our program was successfully implemented with limited resources and should be reproducible at other hospitals.