



The purpose of this 18-month cross-sectional study was to evaluate the effectiveness of bundle applications in the prevention of umbilical venous catheter (UVC)-associated bloodstream infections” Kulali et al (2018).

Reference:

Background: Central line-associated bloodstream infection is the most common infection associated with health care in preterm infants. The purpose of this 18-month cross-sectional study was to evaluate the effectiveness of bundle applications in the prevention of umbilical venous catheter (UVC)-associated bloodstream infections.

Methods: This study included patients in whom UVCs were inserted and who were diagnosed with central line-associated bloodstream infection between July 1, 2016, and December 31, 2017, according to the Centers for Disease Control and Prevention criteria. During the second 9-month period of the study (April 1, 2017, to December 31, 2017), bundles were implemented.

Results: In the prebundle period, 589 patients were admitted to the neonatal intensive care unit, and 6,769 hospitalization days and 485 UVC days were recorded. Similarly, during the bundle period, 508 patients were admitted to the neonatal intensive care unit, and 7,789 hospitalization days and 508 UVC days were recorded. The UVC-associated bloodstream infection rate was 12.4 per 1,000 catheter days in the prebundle period and decreased to 3.9

per 1,000 catheter days in the bundle period. Thus, after introducing bundle applications, the rate of infection decreased by 68% ($P < .01$). Conclusions: This study showed that bundle application effectively reduced UVC-associated bloodstream infection.

You may also be interested in...

Central line maintenance bundle for dislodgement and infection prevention

Umbilical cord simulator model for emergency umbilical catheter placement training

Evidence-based guidelines for the prevention of central line-associated bloodstream infections

Reference:

Kulali, F., Yeliz Oruç, S.C., Demiray, N. and Devrim, I. (2018) Impact of central line bundle for prevention of umbilical catheter-related bloodstream infections in a neonatal intensive care unit: A pre-post intervention study. *American Journal of Infection Control*. November 28th. .

DOI: <https://doi.org/10.1016/j.ajic.2018.10.002>

