These findings reflect the complexity of CLABSIs with multiple patient and hospital factors influencing incidence. It suggests the need for further studies to re-calibrate the zero CLABSI model towards one with greater relevance” Strickler et al (2018).

Abstract:

BACKGROUND: In the USA, central line associated blood stream infections (CLABSIs) have been designated as ‘never events’, prompting initiatives towards a ‘zero CLABSI’ standard. We propose that there are cascading risk factors predisposing certain patient cohorts to higher CLABSI rates.

METHODS: A retrospective review of all CLABSI infections over a 12-month period was undertaken. Risk factors examined included catheter type, insertion site and parenteral nutrition (PN) status. Additional factors analysed included acute kidney injury (AKI), chronic kidney disease (CKD) and hospital-acquired infections (HAIs).

RESULTS: Thirty-four CLABSIs were identified in 33 adult patients (median age = 57 years). Temporary central venous catheters accounted for 12 (35%), peripherally inserted central catheters for five (14.7%), and permanent catheters for 17 CLABSIs (50%); the median duration from insertion was 15 days (interquartile range = 9-26). Among patient factors, immunosuppression and hyperglycaemia were the most common (n = 19, 55%), followed by PN and CKD (n = 17, 50.0%), AKI (n = 16, 47.1%) and HAIs (n = 13, 38.2%). A majority of patients with CLABSIs (n = 20 58.8%) had at least three risk factors.

DISCUSSION: These findings reflect the complexity of CLABSIs with multiple patient and hospital factors influencing incidence. It suggests the need for further studies to re-calibrate the zero CLABSI model towards one with greater relevance.

Reference:


Thank you to our partners for supporting IVTEAM