

Abstract:

Objective: To examine the impact of central line-associated bloodstream infection (CLABSI) on hospital length of stay (LOS) and to identify the factors associated with prolonged LOS.

Methods: The research setting was King Saud University Medical City (KSUMC) in Riyadh, Kingdom of Saudi Arabia. A retrospective cohort design was applied with a sample of adult CLABSI patients. Patients developed CLABSI following central line insertion at KSUMC between March 2016 and February 2018.

Results: The CLABSI-related prolongation of LOS was 13.13 ± 9.53 days for a total of 283 patients. This figure rose for patients with any CLABSI-related sequela, and the result was statistically significant ($p < 0.033$). It was also significantly higher in patients with delayed central line removal ($p < 0.001$). A patient's setting (i.e., in the intensive care unit prior to or following infection) was not a factor associated with prolonged LOS. Nevertheless, the requirement for inotropes after the infection was linked to prolonged LOS in a statistically significant way ($p < 0.048$).

Conclusions For ill patients who need hemodynamic support following infection, CLABSI can significantly increase hospital LOS. Delayed decisions or slow central line removal are associated with significant increases in LOS.

Reference:

Alotaibi NH, Barri A, Elahi MA. Length of Stay in Patients With Central Line-Associated Bloodstream Infection at a Tertiary Hospital in the Kingdom of Saudi Arabia. *Cureus*. 2020 Oct 6;12(10):e10820. doi: 10.7759/cureus.10820. PMID: 33173628; PMCID: PMC7645296.