Abstract:

Background: Bathing with 2% chlorhexidine (CHG) wipes is an important measure regarding infection prevention in critically ill patients. The aim of this study was to evaluate the impact of CHG wipes bath to prevent central-line associated bloodstream infection (CLABSI) in critically ill patients and determine if such measure is cost-saving.

Methods: a quasi-experimental study, conducted from July 2017 to April 2019. Daily bath with 2% CHG was used in all patients at the unit in the intervention period. The following were evaluated: CLABSI incidence density in both periods, 30- day mortality, guided antimicrobials used to treat CLABSI and 2% CHG costs.

Results: CLABSI incidence density dropped from 8.69 to 1.83 per 1.000 central line-days (p = 0.001), mainly by Klebsiella pneumoniae Carbapenem Resistant (Kp-KPC) (p = 0.05). Costs with guided antimicrobials for the treatment in pre-intervention were US$ 46,114.36, and in the intervention period, US$ 4,177.50. The 2% CHG monthly cost was US$ 2,698.00, achieving 30% savings when comparing both periods.

Discussion: An expressive reduction of 79% in CLABSI incidence density was observed, mainly due to Kp-KPC infection and also a reduction in guided antimicrobial costs.

Conclusions: Bathing with 2% CHG led to evident CLABSI reduction.

Reference: