

Abstract

Background: Despite hand hygiene practices, universal protective precautions, and isolation measures implemented by hospitals; mortality from staphylococcus aureus bacteremia continues in hospitals worldwide. The need for higher quality preventative interventions led this study to evaluate an infection audit tool to track decolonization compliance and provide ICU nurses with bacteremia prevention reeducation to decrease all cause staphylococcus bacteremia infection rates.

Methods: A convenience sample of adult patients admitted to a Mid Atlantic urban tertiary community hospital intensive care unit and ICU staff nurses from September 2020 through February 2021 were included in this study. The study utilized a pre and posttest design for nurse's knowledge scores and measurement of decolonization compliance was measured by implementation of the infection audit tool. Staphylococcus bacteremia rates were evaluated at baseline and then compared to post intervention rates.

Results: There was no change in Staphylococcus bacteremia rates in the ICU. Among 24 nurses enrolled, 9 nurses completed the pre and posttest, and eight nurse's knowledge scores improved by a mean difference of 24% after receiving the education intervention.

Conclusion: This study findings showed that implementing an education intervention to improve nurse's knowledge and auditing electronic health records to measure compliance with decolonization, resulted no change or new incidence of staphylococcus bacteremia rates.