

Abstract

Background: Sepsis is the leading cause of death in hospitalized patients in the United States, disproportionately affecting patients on medical-surgical floors. Early recognition by the bedside nurse and timely treatment can increase the likelihood of survival for patients with sepsis. This Doctorate of Nursing Practice (DNP) quality improvement project sought to use simulation education to evaluate adult medical-surgical nurses' competency and knowledge in the skills of early recognition of sepsis. The project also aimed to decrease the average time to antibiotic administration for patients with sepsis.

Methods: This project used a quantitative descriptive post-test design to evaluate knowledge and confidence following a 30-minute sepsis simulation scenario. Chart review was performed for 16 weeks following the intervention to assess sepsis recognition and antibiotic administration.

Results: A total of 30 Registered Nurses (RNs) participated in the intervention, with 90% (n=27) of RNs demonstrating satisfactory scores on the knowledge assessment, and 90% (n=27) reporting feeling favorable about their self-confidence after engaging in simulation. Following the intervention, chart review (n=3) revealed that the average time to antibiotic administration decreased by 62 minutes, from the prior organizational average of 180 minutes to administration.

Conclusions: Sepsis simulation holds value as an adjunct to traditional education methods in allowing nurses to develop skills of early sepsis recognition. This pilot quality improvement study showed that simulation can support nurses in establishing competency, contribute to feelings of self-confidence, and positively impact patient outcomes from sepsis.