

## Sepsis Educational Intervention for Emergency Department Nurses

### Abstract

**Background & Significance:** Sepsis is a life-threatening complication of infection. Early recognition and treatment are crucial to improving patient outcomes.

**Problem:** The current sepsis treatment compliance of fluid bolus administration of crystalloids within 30 minutes of severe sepsis/septic shock at a hospital Emergency Department (ED) in the suburb of New York City, is lower than the state average, which is the benchmark for sepsis care.

**Methods:** One group, pre/post test, quality improvement evaluation of an educational intervention targeting emergency department registered nurses (RNs). RN sepsis knowledge was measured 2 weeks prior and within 2 weeks after the intervention. Hospital reports of fluid metrics for the ED were compared for the quarter preceding and following the intervention for patients identified with severe sepsis/septic shock in the ED. The fluid metric was the average time from severe sepsis/septic shock identification to fluid administration.

**Results:** Sixty-one RNs participated in the educational intervention while the survey was completed by 35 prior and 33 following the intervention. Though there were no significant changes in overall RNs' knowledge, there was improvement in nurses anticipating interventions to prevent complications and selecting the correct amount of fluids. The nurses voiced concerns during the intervention concerning system-level opportunities for improvement in sepsis outcomes.

#### **Implications for practice**

Although education is not usually sufficient to make a major impact in changing care, it is the first step to empower nurses to engage in system-level solutions. Future projects should follow hospital data for longer than 3 months. Recommend continual educational reinforcement and follow up posttest evaluation.

**Keywords:** sepsis education, emergency department nurses, quality improvement, and education