Abstract

Background and Purpose: Gaps in acute care nurses' identification of respiratory distress at a rural hospital in the U.S. Midwest increases the overall incidence of permanent disability and in-hospital mortality for patients with hospital-acquired pneumonia. This quality improvement project sought to improve nurses' early recognition of respiratory distress secondary to hospital-acquired pneumonia in the acute care setting.

Methods: A usual practice versus intervention group design was utilized comparing indicators of clinical competence (Objective Structured Clinical Examination [OSCE] scores) at baseline and after the intervention. The intervention was an educational PowerPoint presentation.

Results: A total of 19 participants who met inclusion criteria were recruited from the unit. The change in median OSCE scores was not statistically significant ($p = .757$). There was an increase in the percentage of participants who escalated patient care by activating the rapid response team post intervention (42.9% versus 25%). Approximately 88.9% of participants ($n = 8$) felt empowered to make clinical decisions and more confident in providing interventions that foster patient.

Conclusions: The increased percentage of participants escalating patient care following the intervention suggests improved nurse recognition of clinical deterioration. Due to the small sample size we cannot rule out that any difference in OSCE scores was not due to random error.

Implications: This quality improvement project found that in-situ simulation is an effective method for identifying practice gaps in the acute care setting.

Keywords: quality improvement, respiratory distress, clinical deterioration, hospital-acquired pneumonia, clinical competence, high-fidelity simulation training, rapid response team