

Abstract

Purpose: This quality improvement (QI) project sought to assess emergency room (ER) staff knowledge, attitudes and beliefs of infection control practice guidelines using an Attitude Regarding Practice Questionnaire and to develop and implement a hand hygiene and isolation precaution educational intervention to increase staff compliance with hand hygiene and personal protective equipment (PPE) use.

Methods: This project used a pretest/posttest design to assess whether assessment of ER staff knowledge, attitudes, and beliefs of infection control practice guidelines followed by the implementation of a multimodal education intervention (WHO-5: visual cues, education, feedback, leadership and accountability, and adequate hand hygiene supplies and personal protective equipment) will increase staff knowledge of and compliance with hand hygiene and PPE use over a 12-week period. The education component of the intervention involved staff members attending a one-hour infection control education session. Content of the education was derived from the CDC, WHO and the organization's infection control policies.

Results: Results from the pre-intervention knowledge, attitudes and beliefs survey showed 1) knowledge deficit, 2) complexity of protocols, 3) lack of visual cues, 4) lack of supplies/accessibility of supplies and 5) the time-consuming nature of infection control practices as the most reported barriers to staff compliance. Observed compliance with hand hygiene was demonstrated at 91%, as compared to 66% before the start of this project. Data on PPE use was not included in the analysis due to hospital-wide mandatory use of PPEs on all units at all times as a result of the current COVID-19 pandemic.

Implications: This quality improvement project was associated with an increase in compliance with hand hygiene and PPE use among ED staff. This finding aligns with results from other hand hygiene initiatives consisting of similar intervention components that found improvements in hand hygiene and transmission-based precaution compliance. This project also confirmed that investment in periodic staff re-education and addressing barriers to adoption and consistent use of evidence-based infection control practices/guidelines is necessary.