

Background

- The literature suggests that comprehensive infection control does not take place in healthcare facilities to the specifications of the CDC guidelines.
- Roughly 1.7 million HAIs are occurring in the U.S. annually, resulting in nearly 100,000 deaths and \$20 billion in healthcare costs.¹
- Nurses, in particular, have low rates of infection control guideline compliance, with fewer than 1 in 5 nurses complying with all nine standard precautions for infection prevention.²

Overview

- Fall 2019 study aimed to collect data on the current state of infection control practices by Registered Nurses.
- Observations of hand hygiene and PPE use took place on 3 medical-surgical units at an urban hospital in the United States.
- A gap was found regarding infection control practices on live inpatient units and current CDC standards.
- The data was disseminated to the units, with recommendations for additional observations and education.

Methods

- October/November 2019 - one week of observations, at varying shifts and times.
- Observed Registered Nurses performing hand hygiene and PPE use during their regular patient care tasks.

Results

- 105 hand hygiene observations
 - 51 were before entering the patient's room and 54 were upon exiting
 - 73 of 105 (69.52%) total occurrences of appropriate hand hygiene
 - 13 of 21 (61.9%) hand hygiene observations associated with isolation precautions were appropriate
- 27 PPE use observations
 - All 27 observations (100%) had clear isolation signage and easily accessed supplies
 - 18 of 22 (81.82%) observations of appropriately donned PPE
 - 16 of 16 (100%) doffing observations were performed appropriately
 - 18 of 19 (94.74%) observed episodes revealed participants remained in the patient's room while PPE donned

Study Conclusions

- There is a practice gap between CDC infection control guidelines and nursing practice.
- Continued observations of PPE use and hand hygiene practices recommended.
- Share observation results with nursing staff.
- Provide regular education regarding infection control practices tailored to observation results.

COVID-19 Pandemic

- March 2020: COVID-19 is declared a global pandemic.
- Original observation units care of hundreds of COVID-19 patients in 2020 and 2021.
- 2022 follow up with units:
 - Some additional infection control education provided, mainly focused on COVID-19.
 - Continued use of electronic hand hygiene monitoring with no additional observations.
 - Unit managers expressed notable increase in awareness of and compliance with infection control practices during COVID-19 pandemic care.

1. Hermann, C. (2018). Infection control today: Responding to the Joint Commission's new hand hygiene standards. *Infection Control Today*. Retrieved from <http://cleanhandssafehands.com/2018/03/20/infection-control-today-responding-joint-commissions-newhand-hygiene-standards/>

2. Powers, D., Armellino, D., Dolansky, M., & Fitzpatrick, J. (2016). Factors influencing nurse compliance with standard precautions. *American Journal of Infection Control*, 44(1), 4-7.

