
Abstract:

Background – Critically ill patients are susceptible to health care–associated infections because of their illnesses and the need for intravenous access and invasive monitoring. The critical care work environment may influence the likelihood of infection in these patients.

Objective – To determine whether or not the critical care nurse work environment is predictive of nurse-reported health care–associated infections.

Methods – A retrospective, cross-sectional design was used with linked nurse and hospital survey data. Nurses assessed the critical care work environment and provided the frequencies of ventilator-associated pneumonias, urinary tract infections, and infections associated with central catheters. Logistic regression models were used to determine if critical care work environments were predictive of nurse-reported frequent health care–associated infections, with controls for nurse and hospital characteristics.

Results – The final sample consisted of 3217 critical care nurses in 320 hospitals. Compared with nurses working in poor work environments, nurses working in better work environments were 36% to 41% less likely to report that health care–associated infections occurred frequently.

Conclusion – Health care–associated infections are less likely in favorable critical care work environments. These findings, based on the largest sample of critical care nurses to date, substantiate efforts to focus on the quality of the work environment as a way to minimize the frequency of health care–associated infections.