

Preventing CAUTI One K-Card at a Time

Laura Lang, DNP, RN, NPD-BC

Background & Significance: Catheter-associated urinary tract infections (CAUTI) are preventable healthcare-associated infections (HAI) with nursing team engagement and empowerment in evidence-based practice (EBP). CAUTIs are a priority healthcare-acquired infection (HAI) to be prevented to improve patient outcomes and organization cost and volume (Institute for Healthcare Improvement (IHI), 2022). The individual patient experiences the negative impacts of this preventable HAI. CAUTI rates were on the rise on a neuroscience unit, with five CAUTI incidences in 2022 prior to project implementation.

Clinical Question: In healthcare providers in an adult neuroscience inpatient unit (P), how does the implementation of CAUTI Kamishibai (K-) Cards (I), compared to nurse education and quarterly audit tool only (C), affect the rate of indwelling urinary catheter-related infections (O) within an 8-week time frame (T)?

Evidence: A literature review and synthesis was undertaken of current evidence. Themes examined were risk factors for CAUTI, care bundles for CAUTI prevention, and CAUTI knowledge. Overall, an educational intervention and bundle or checklist of bundle elements approach improved CAUTI outcomes.

Intervention Implementation: An organization-endorsed EBP bundle monitoring tool, CAUTI prevention Kamishibai (K-) Cards, engaged and empowered the staff population in quality assurance at the bedside. The rapid cycle plan, do, study, act (PDSA) framework and Lewin's change theory informed each step of the project, as K-Cards were a new process for the nursing staff. The education consisted of a two-part education experience; a learning management system module and an at-the-elbow educational experience. Directly related to the nursing team's knowledge, skills, and attitudes in caring for patients with indwelling urinary catheters (IUC) is CAUTI incidence (Mong et al., 2022).

Evaluation: The project goal was to improve patient outcomes through increased nursing staff knowledge and skill related to EBP CAUTI prevention. The data collected was monthly monitoring of CAUTI incidence, with the support of interprofessional stakeholders in infection prevention, per established hospital procedures, K-Card completion compliance, and staff self-confidence related to CAUTI prevention knowledge and skill.

Results: During the implementation time, one incidence occurred, and following project completion, had zero CAUTI occurrences over many months. Data analysis demonstrated no statistically significant findings to indicate that the K-Cards had an impact on CAUTI rates. Contextual current health care environment factors of competing organizational initiatives, COVID-19 pandemic, on-going staffing challenges, and staff moral injury effects on engagement impacted the completion rate of the K-Cards.

Significance/Conclusion: The implementation of a EBP bundle monitoring tool, such as K-Cards, empowers nursing staff to engage in quality assurance. Implications for practice are that contextual factors play a significant role in project outcomes. Further study could include long-term monitoring of K-Card completion forms, staff feedback during CAUTI audits, CAUTI incidence case review on the unit of incidence, and EHR documentation compliance with CAUTI prevention elements from K-Cards.