

**Catheter-associated urinary tract infections: Literature Review**

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## **Catheter-associated urinary tract infections: Literature Review**

Catheter-associated urinary tract infection is among the most common hospital-acquired infections that cause morbidity, prolonged hospital stay, and mortality in the United States. According to Pashnik et al. (2017), 75% of nosocomial infections are attributed to the use of an indwelling urinary catheter because twelve to sixteen percent of adult hospitalized patients have an indwelling catheter inserted during treatment. In addition, the increased risk of catheter-associated urinary tract infections (CAUTIs) significantly impacts morbidity, mortality, lengthy hospitalization, and costs (Pashnik et al., 2017). The prevalence of indwelling catheters and their prolonged usage predispose patients to increased risk of developing CAUTIs. Reducing unnecessary catheterization usage, reinforcing asepsis techniques, and promoting alternative methods are desirable for improved patient care outcomes. Failing to take those preventive measures prolongs patients' hospital stay and causes morbidity and potential deaths. The purpose of the literature review is to reinforce asepsis catheter care techniques and reducing unnecessary use of indwelling catheters.

## **Preventing Catheter-Associated Urinary Tract Infection: A Multipronged Collaborative Approach.**

About thirteen thousand patients die in the United States every year due to catheter-associated urinary tract infections (CAUTIs), an estimated 35 percent to 40 percent of nosocomial infections related to CAUTIs. In addition, about fifteen to twenty-five percent of inpatients have improperly inserted indwelling urinary catheters during their care (Mundle et al., 2019). The unnecessary catheterization procedures and the lack of asepsis techniques significantly impact patient care outcomes, increasing the risk of CAUTIs. Continuing to engage in such an approach ultimately has devastating outcomes leading to high rates of morbidity and death related to CAUTIs. The general purpose of the article is to implement using a standardized collection of measures to reduce CAUTI rates and expenses related to the treatment of infections.

### **Key Points**

Standardizing indications for indwelling catheter care and using alternative approaches are keys to preventing CAUTIs. The study reported that a decrease in catheter usage significantly reduced the CAUTI rates between thirty percent and fifty percent. In addition, another study reported that using an alternative approach reduced the CAUTI rates by one-third (Mundle et al., 2019). The best way of CAUTIs prevention is reducing catheterization usages because it reduces patient's exposure to contracting infections related to catheter use. Scrupulous respect and observance of indications to using indwelling catheters and reducing unnecessary catheterization usage are preventive measures against CAUTIs.

### **Assumptions**

Standardizing indications related to catheter care, promoting alternative methods over catheter use, and using the bundled interventions would be a solution. The bundled interventions include catheter-restricting protocols that institute appropriate instructions related to catheter insertions and alternative methods. In addition, the use of electronic reminder strategies or stop orders that urge

catheter removal at a convenient time and finally, educating nurses on proper clinical skills and be aware of the issue (Mundle et al., 2019). These preventive components of catheter-associated urinary tract infections will improve both nursing practices and patient outcomes by reducing morbidity and mortality related to CAUTIs.

### **Deficit/Conclusion**

Catheter-associated urinary tract infections are still the greatest threats to patients' safety that increase morbidity and mortality rates 2.8 times higher when compared to patients who were not victims of CAUTIs. More than ten thousand victims of CAUTIs die every year in the United States (Mundle et al., 2019). Using standard indications for catheter care and considering alternatives methods over indwelling catheter usage will significantly prevent CAUTIs. After launching new strategies, the study reported that CAUTI rates significantly decreased from 9.23 CAUTI per 1000 indwelling catheters in 2016 to 1.94 CAUTI per 1000 indwelling catheters in 2018 (Mundle et al., 2019). This study has proved that the authors' reasoning is reliable because the evidence is justifiable and supports the author's claim. Some implications for this article include applying catheter restriction procedures that promote appropriate instructions for inserting catheters and utilizing electronic devices that can either remind caregivers or induce a stop order to remove catheters quickly. Finally, educating caregivers on proper clinical skills and being aware of the problem (Mundle et al. 2019). If nursing fails to accept this line of reasoning, CAUTI incidence rates will significantly increase, ultimately affecting healthcare-associated expenses with infection treatment and patient' care delivery experience. In addition, this will prolong patient's length of hospitalization and dramatically increase morbidity and mortality related to CAUTIs (Mundle et al., 2019).

## References

Mundle, W., Howell-Belle, C., Jeffs, L. (2020). Preventing catheter-associated urinary tract infection: A multipronged collaborative approach. *Journal of Nursing Care Quality*, 35(1), 83-87.

<https://doi.org/10.1097/NCQ.0000000000000418>

Pashnik, B., Creta, A., Alberti, L. (2017). Effectiveness of a nurse-led initiative, peer-to-peer teaching, on organizational CAUTI rates and related costs. *Journal of Nursing Care Quality*, 32, 324-330.

<https://doi.org/10.1097/NCQ.0000000000000249>

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### **Conclusion**

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Discuss how the information can improve:

- Patient outcomes
- Nursing practice
- Evidence-based practice/Quality Improvement efforts
- Healthcare as a whole

## **References**

Albright, C., & Whelan, P. (2019). Learning reflection: A nursing student recounts her experience with a medical emergency team. *Alberta RN*, 67(6), 27. [www.nurses.ab.ca](http://www.nurses.ab.ca).

\*As you can see the reference is centered and is bolded. The first line is NOT tabbed over, all other lines are, this is called hanging indentation. All references are double spaced. All sources should be listed in alphabetical order. Be sure to use the APA 7<sup>th</sup> edition and guide for your reference page.