



Knowledge and Practices on Urethral Catheter-Related Infection Among Nurses in Selected Private Hospitals in Iloilo City

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ABSTRACT :

Background: Catheter-associated urinary tract infections (CAUTIs) are a leading cause of preventable healthcare-associated infections globally. This study assessed nurses' knowledge and practices in CAUTI prevention and their relationship with demographic variables.

Methods: A descriptive-correlational design was used among 60 nurses from selected private hospitals in Iloilo City. Data were collected using a validated questionnaire on knowledge and infection control practices. Statistical analysis included descriptive statistics and Pearson's correlation.

Results: More than half (53.3%) had high knowledge, and 48.3% had excellent practice scores. A strong positive correlation was found between knowledge and practice ($r=0.68$, $p<0.001$). Years of experience showed the highest correlation with both knowledge and practice.

Conclusion: Higher knowledge and greater experience positively influence infection control compliance. Continuous education and mentorship are recommended.

Keywords: Catheter-associated urinary tract infection, infection control, nursing practice, Iloilo City

Introduction

Catheter-associated urinary tract infections (CAUTIs) account for up to 40% of all healthcare-associated infections and contribute significantly to patient morbidity, mortality, and healthcare costs. The World Health Organization and Centers for Disease Control and Prevention emphasize evidence-based measures such as aseptic insertion, timely catheter removal, and consistent hand hygiene to prevent CAUTIs. In the Philippines, DOH Administrative Order No. 2022-0051 mandates national infection prevention protocols, but adherence varies, especially in private hospitals. Iloilo City lacks local data assessing nurses' knowledge and practices in CAUTI prevention, creating a gap that this study addresses.

Review of Literature

Global studies report CAUTI incidence rates between 3–7 per 1,000 catheter-days, with higher rates in low-resource settings. Knowledge gaps among nurses remain a barrier to effective prevention, even in institutions with established protocols. Local studies in the Philippines reveal varying compliance between public and private sectors, with resource constraints, workload, and lack of consistent supervision as key barriers. International evidence supports nurse-led interventions, continuous training, and institutional culture as critical factors in sustaining CAUTI prevention.

Methodology

A descriptive-correlational design was applied under the post-positivist paradigm. Purposive sampling included 60 nurses from selected private hospitals in Iloilo City with at least six months of clinical experience in wards, ICUs, or emergency rooms. A structured questionnaire measured demographic profile, knowledge (15 multiple-choice items), and infection control practices (4-point Likert scale). Content validity was established through expert review, and reliability testing yielded Cronbach's alpha scores of 0.82 for knowledge and 0.87 for practice. Data collection followed ethical clearance and hospital approval, and analysis used SPSS for descriptive and correlation statistics, with significance set at $p<0.05$.

Results

Most respondents were aged 31–40 (31.7%), held a BSN (58.3%), and had 1–5 years of experience (35%). High knowledge scores were achieved by 53.3% of nurses, while 48.3% demonstrated excellent infection control practices. Pearson's correlation revealed a strong positive relationship between

knowledge and practice ($r=0.68$, $p<0.001$). Years of experience ($r=0.56$), educational attainment ($r=0.51$), and age ($r=0.45$) significantly correlated with both knowledge and practice.

Discussion

The findings affirm that higher knowledge is associated with better CAUTI prevention practices. Experience and advanced education further enhance compliance, aligning with international literature linking professional maturity to infection control performance. Barriers identified in other studies—such as time constraints, lack of resources, and inadequate supervision—were consistent with the local context. These results underscore the need for targeted training for less experienced nurses and stronger institutional monitoring systems.

Conclusion

Nurses' knowledge and years of experience significantly influence their infection control practices for CAUTI prevention. Hospitals should invest in continuous professional development, mentorship programs, and consistent policy enforcement to bridge the gap between knowledge and practice.

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