

Upskilling Urinary Catheterization Nursing Skills to Reduce Urethral Catheter Injury (UCI)



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Lessons Learned

Education strategies including knowledge evaluation focused on the insertion of indwelling urinary catheterization in male patients mitigates risks for UCIs.

Description

UCIs are the most common causes of urethral trauma in male patients, which remains unacknowledged and addressed across healthcare. Improper catheterization is the leading cause of UCIs due to premature balloon inflation in the urethra and/or a false passage creation during insertion. The incident rates of UCIs amongst male patients is approximately 13 per 1000 catheterizations. Predisposing factors for UCIs are due to lengthy and intricate male urethral structures, hence causing risks for obstruction when diagnosed with benign prostatic hyperplasia. Upskilling indwelling urinary catheterization nursing skills should result in a reduction in adverse events, morbidity, length of stay, and healthcare costs.

Actions Taken

- Literature review conducted.
- Key stakeholder involvement to plan education strategies using a PDSA cycle.
- Content creation, including a pre- and post-knowledge test.
- Dissemination of education strategies during corporate nursing orientation.

Summary of Results

Indwelling urinary catheterization education was well received by new nursing staff. The results based on the pre- and post-knowledge tests signified knowledge enhancement of urinary catheterization insertion skills. An improved understanding on safe catheterization on male patients mitigates risks for UCIs. Extending education strategies to existing nursing staff in relevant clinical programs will continue to promote safe indwelling catheterization.

- Continue empowering nurses to provide safe and high quality patient care
- Revise Indwelling Urinary Catheterization content to continue to meet fluctuating organizational needs and improve patient and staff satisfaction
- Identify the future improvements

- Identify the key stakeholders
- Collaborate with stakeholders for consensus to develop the content of Indwelling Urinary Catheterization
 - Identify the learners' learning styles
 - Develop pre & post knowledge test

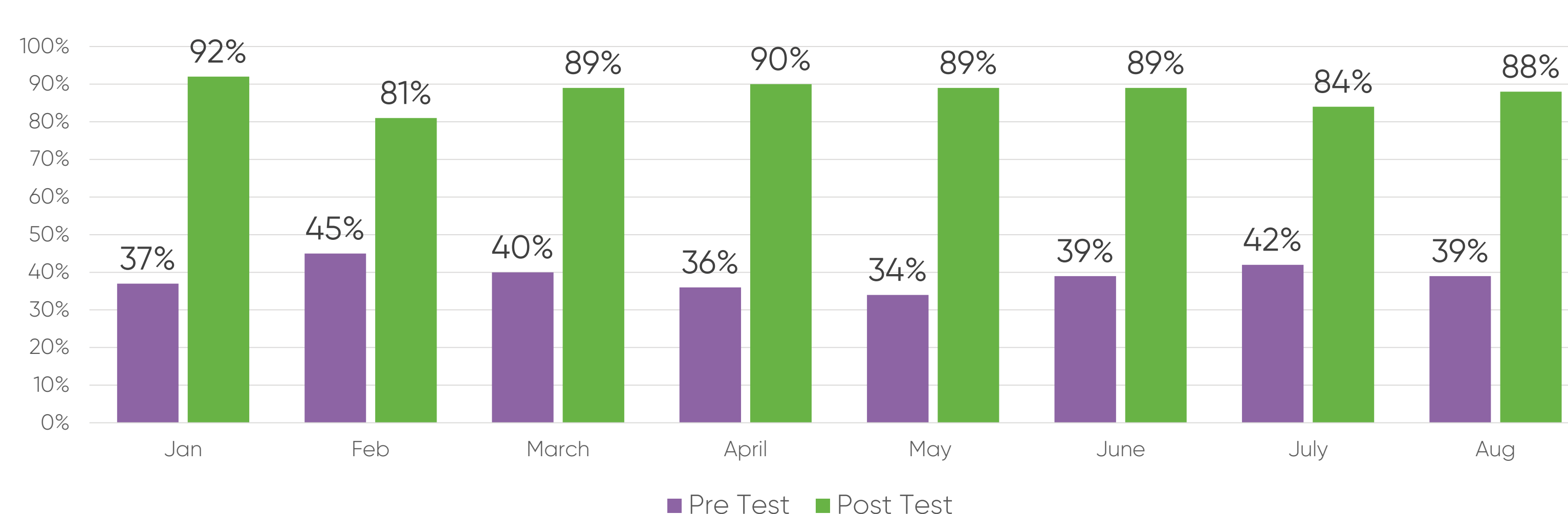
- Use the pre & post knowledge test data to analyze the results
- Update the education content
- Decrease the urethral catheter injuries
- Improve patient care
- Improve patient and staff satisfaction

- Receive stakeholders' approval
- Assign a designated clinical practice to lead the education session
- Utilize adult learning principles to deliver the education
 - Video
 - Story Telling
 - Group Discussion
 - Simulation
 - Flipped Classroom
- Implement pre & post knowledge test to evaluate the outcome of the education session

Figure 1. Continuous PDSA cycles were used to improve education strategies.

Figure 2. Indwelling urinary catheterization pre- and post-knowledge test results.

Knowledge Evaluation on Indwelling Catheterization



References

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