



# Indwelling Catheter Care: Areas for Improvement

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# DISCLOSURE

- **AUTHOR:** Monina Gesmundo  
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- **LEARNER OBJECTIVE:** The learner will be able to identify areas of indwelling catheter care practice that require improvement in the light of existing evidence-based guidelines
- **CONFLICT of INTEREST:** None
- **EMPLOYER:** Counties Manukau District Health Board, Auckland, New Zealand
- **SPONSORSHIP:** None

# BACKGROUND: Burden of CAUTI

In the US,  
36-40% of  
HAIs are  
due to  
CAUTI  
**(MOST  
COMMON)**

80% of  
these HAIs  
are due to  
IDCs

With the  
IDC in  
place,  
**DAILY**  
bacteriuria  
risk is about  
**3 to 7%**

With the  
IDC in for a  
**WEEK,**  
bacteriuria  
risk  
**increases  
to 25%**

**At one  
MONTH,  
bacteriuri  
a risk is  
nearly  
100%**

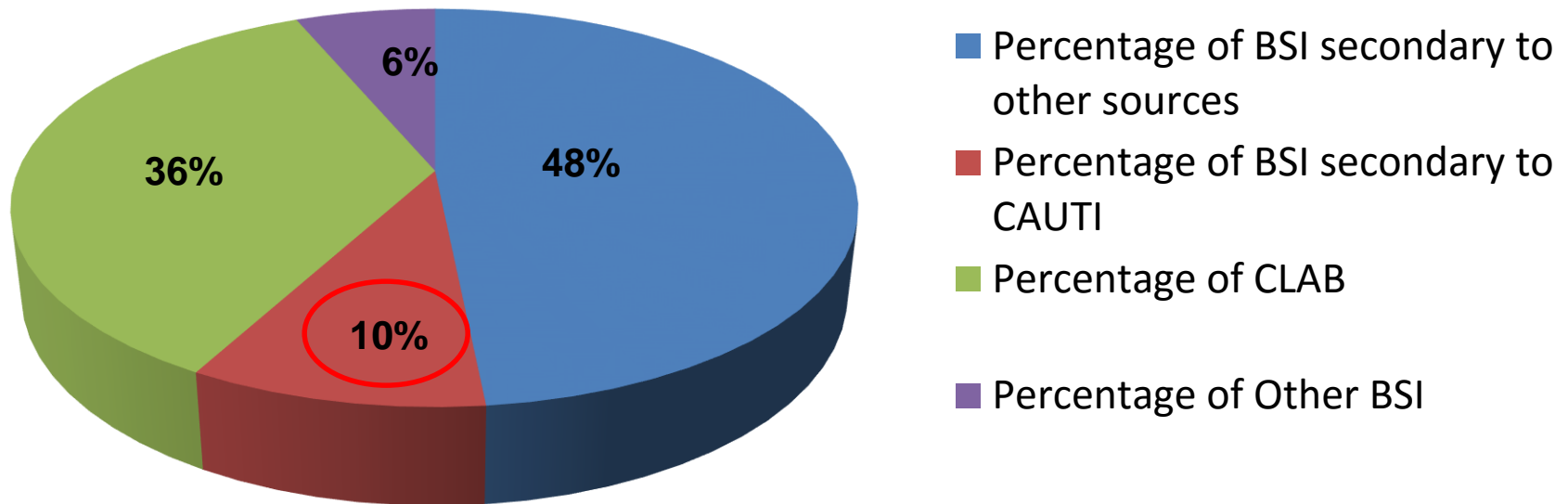
**3% will further develop  
bacteraemia –which has  
10% mortality**

Among those with bacteriuria,  
10% will develop UTI  
symptoms; this will lead to  
**excess length of stay of 2-4  
days**

# CAUTI in the Research Setting

- **Need to complete surveillance data**

**Bloodstream Infections, 2013**



## Objectives:

1. To describe perioperative nurses' current attitude and indwelling catheter management practices
2. To analyse and identify areas of indwelling catheter care practice that require improvement in the light of existing evidence-based guidelines



## Research Question:

What areas of indwelling catheter care experience of perioperative nurses in a tertiary public hospital require improvement in the light of existing evidence-based guidelines?

**Design:** Qualitative research design

**Setting:** Two surgical wards of a tertiary hospital in Auckland, New Zealand

**Participants:**

Convenience sample of perioperative nurses (n=13)

- Invitation through e-mail
- Additional information through flyers
- Voluntary participation, with utmost respect for human dignity and autonomy

# Methods:

- Two focus groups formed
- Interview prompt sheet utilised
- Proceedings were audio-recorded, transcribed and made accessible only to the researcher





# **Focus Group Discussion (FGD) FINDINGS**

## **KEY THEMES**



# Preparation for Catheter Management

- Lack of confidence due to lack of catheter care training
- Feelings of insufficiency with regard to undergraduate training:
  - teaching method utilised,
  - time allotted for the training,
  - focus of the training itself,
  - lack of opportunity to practice skills,
- Despite these challenges, nurses cope by asking colleagues for support



# Nursing Skills and Knowledge

- Catheter management perceived as task-oriented
- Catheter care decisions are heavily reliant on doctors
- Growing recognition of need to make important care decisions
- Organisational protocols empower nurses
- Awareness of importance of catheter care documentation, but this is not reflected in actual documentation
- Failure to relate assessment findings with patient's health status

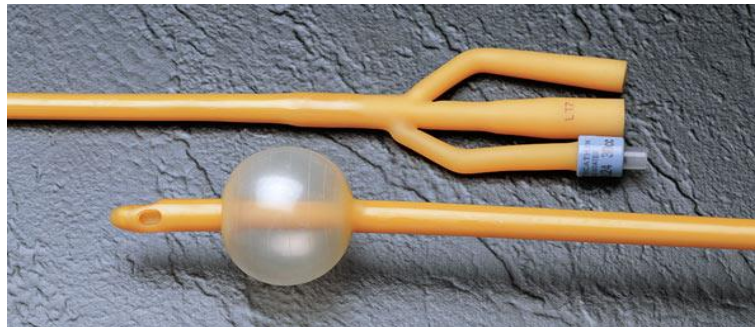
# Current Clinical Practice

- Collaborative care
- Nurses perceived to be mainly responsible for catheter insertion, maintenance and removal
- Doctors perceived to need support in recognising presence of unnecessary catheters
- Nurses expressed that cognitively able patients play a role in catheter care
- Patient care perceived as unique due to patient's involvement



# Current Clinical Practice

- Nurses responsible for educating and empowering patients
- Catheter care involves advocating for patient's interests
  - Nurses feel vulnerable and fear to go against patient's preference
  - Nurses aware that patient's moral, cultural and religious values need to be considered in patient centred care
  - Nurses overcome feeling of concern through open communication with patient



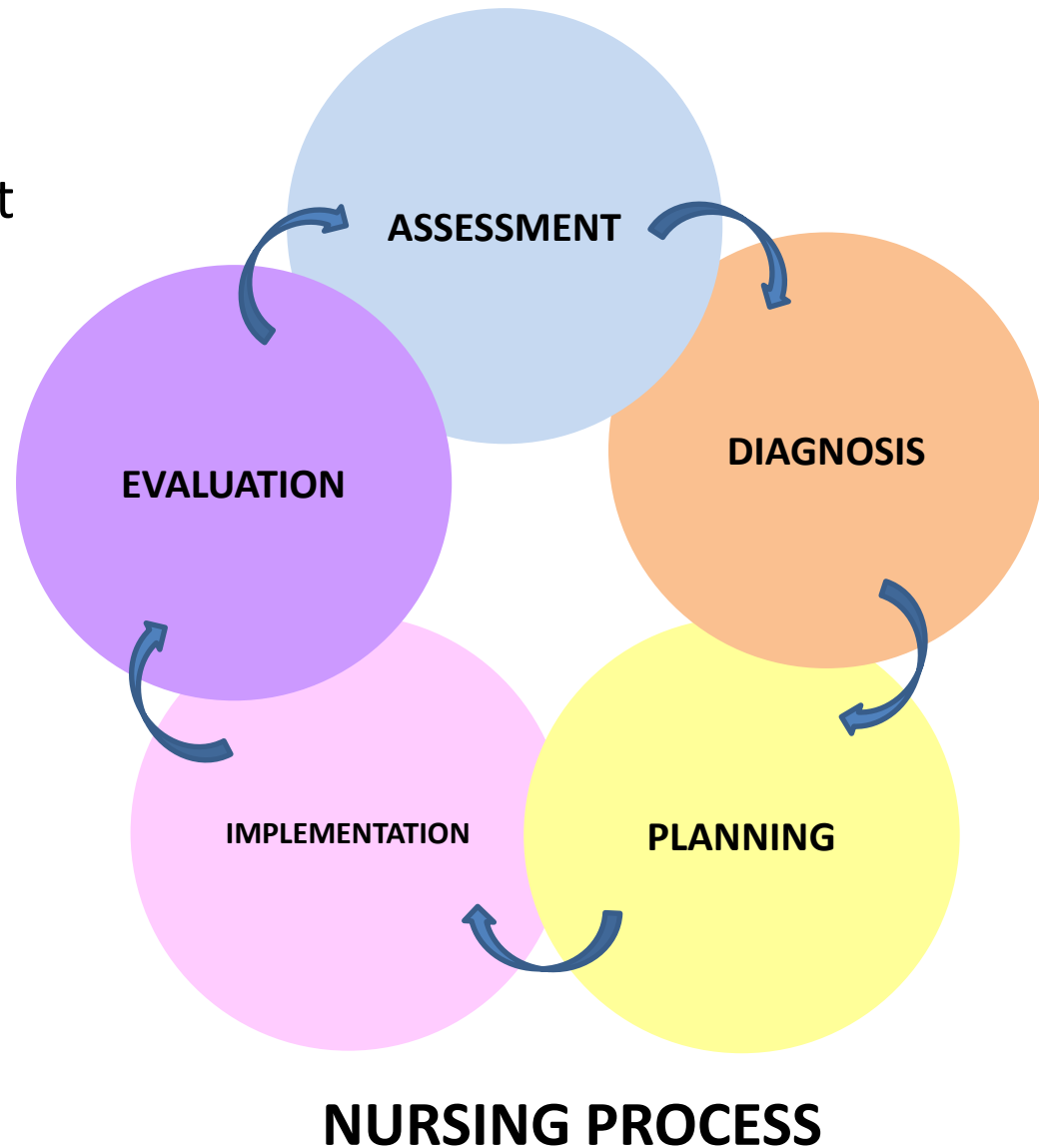
# Current Clinical Practice

- Nurses' gender identified as a barrier to care due to unwritten, agreed rules of behaviour that guide practice
- Nurses reported clinical practices that put patient's safety at risk and indicated poor knowledge and clinical practice
- Nurses are aware that clinical practice require skills, decision-making, critical thinking and a complete grasp of ethical principles



# Catheter Management Resources

- Organisational policies are available intranet, however some nurses cannot locate it
- Support from colleagues prove to be valuable when nurses cannot access online policies
- Catheter removal policies standardised processes and guided decision-making
- When policy statements are not suitable for patient conditions, nurses turn to nursing process and collaborative care to make important decisions



# CONCLUSION

These catheter care areas can be improved further:

- diversity in catheter care practices
- variability in actual documentation of care
- failure to relate assessment findings with the patient's health status
- heavy reliance on doctors' decision to insert, re-insert and remove a catheter
- gender as a barrier to catheter care, and,
- difficulty in accessing organisational policies





# RESEARCH RECOMMENDATIONS

- Standardisation of in-service training programmes
- Multi-pronged approach to delivery of education
- Development of policies that are consistent with day to day workflow and are accessible
- Utilisation of decision-support tools that address deviations from specific organisational guidelines
- Empowerment through evidence-based protocols
- Standardised documentation of patient assessment and catheter status

STANDARDIZATION IS ...

THE CONSISTENCY  
OF THE WORK SEQUENCE.



# REFERENCES

- Centers for Disease Control (2014). January 2014 Catheter-Associated Urinary Tract Infection (CAUTI) Event. Retrieved from <http://www.cdc.gov/nhsn/pdfs/pscmanual/7psccauticurrent.pdf>
- Gould, C. V., Umscheid, C. A., Agarwal, R. K., Kuntz, G., Pegue, D. A. & Healthcare Infection Control Practices Advisory Committee (2009). Guideline for prevention of catheter-associated urinary tract infections 2009. Retrieved from <http://www.cdc.gov/hicpac/pdf/cauti/cautiguide2009final.pdf>
- Hovde, B., Jensen, K. H., Alexander, G.L. & Fossum, M. (2015). Nurses' use of computerised clinical guidelines to improve patient safety in hospitals. *Western Journal of Nursing Research*, 37(7), 877-898. doi:10.1177/0193945915577430
- Institute for Healthcare Improvement (2011). How to guide: Prevent catheter-associated urinary tract infection. Retrieved from <http://www.ihl.org/knowledge/Pages/Tools/HowtoGuidePreventCatheterAssociatedUrinaryTractInfection.aspx>
- Kiyoshi-Teo, H., Krein, S. & Saint, S. (2013). Applying mindful evidence-based practice at the bedside: Using catheter-associated urinary tract infection as a model. *Infection Control and Hospital Epidemiology*, 34(10), 1099-1101. doi:10.1086/673147
- Meddings, J. & Saint, S. (2011). Disrupting the life cycle of the urinary catheter. *Clinical Infectious Diseases; Clin.Infect.Dis.*, 52(11), 1291-1293. doi:10.1093/cid/cir195

**THANK YOU!**