

Developing a clinical question with Nursing Clinicians in Cardiology

Mary Boyde
RN, MN, MEd, PhD, RCNA
Princess Alexandra Hospital

Background

- Evidence based practice : “the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients”¹
- Clinical evidence from systematic research
- Best evidence to answer clinical question
- EBP steps involve asking focused questions²
- First step is asking an answerable question³



¹. Sackett et al., 1996; ². Schardt et al., 2007; ³. Polit & Beck, 2010

Good research questions

Characteristics

- Feasible
- Interesting
- Novel
- Ethical
- Relevant⁴

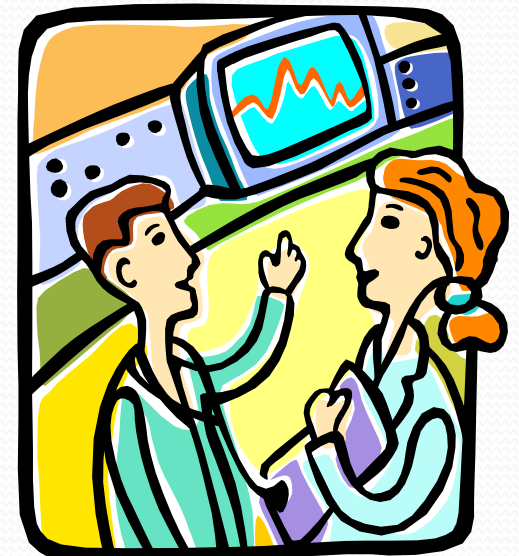


For Busy Clinicians

- Large volume of patients
- Important patient outcomes
- Additional funding not required
- Measurement tools available
- Data collection integrated into usual care routines
- Interesting topic
- Within scope of practice⁵

Aim

To engage clinicians in the research process by building skills in developing a clinically relevant research question



Methods



Setting

- Cardiology, Tertiary Referral Hospital, Brisbane

Nursing Staff

- NUM, Nurse Educator, Clinical Nurses, Registered Nurses, Endorsed Enrolled Nurses
- Nurse Researcher

Knowledge development

- In-service

Research team

- Cardiology clinical nursing staff; Nurse Researcher; Nursing Academic

Methods

Brainstorming using focus groups aiming for 10 potential questions

- high volume patients
- patient problems
- common nursing interventions
- common symptoms managed by nurses
- important patient outcomes
- commonly used medications
- commonly used technology⁵

⁵ Chulay, 2006

Methods

Key topics in cardiology used to generate ideas included:-

- 10 top DRGs
- specific cardiology patient issues
- nursing care for acute cardiology patients
- cardiology monitoring and technology
- cardiac devices
- resuscitation
- common co-morbidities



Methods



Over 65 topics/questions initially generated

Examples:-

- Do nurses have a systematic process for applying research-based nursing interventions to clinical practice?
- Can patients manage their chest pain when they get home?
- Do patients understand their medications and can they recall the information they receive?
- Does handover meet the nurses' needs for correct and timely information?
- Are nurses practicing health promotion behaviours themselves?
- How do nurses communicate cancellations to the patient and their family?
- How do nurses transfer knowledge into their clinical practice?

Methods

10 general questions developed

1. Do cardiology nurses practice cardiovascular risk factor modification strategies when making decisions regarding their own lifestyle?
2. What aspects of working in a health care environment impact positively or negatively on nursing staff morale?
3. What factors impede patient flow through the cardiology unit and what effect do these issues have on patients and their care?
4. Are cardiology nurses able to apply their theoretical knowledge to their clinical practice?
5. What dressing techniques for PPM sites are most effective and provide the best outcomes for the patient?

Methods

6. Can patients diagnosed with ACS undertake appropriate risk factor management and implement appropriate health care following discharge?
7. What are the pre-discharge information needs of ACS patients?
8. What knowledge and risk factor management strategies are newly diagnosed ACS patients learning prior to discharge?
9. Are cardiology nurses teaching risk factor management to patients effectively?
10. Do 8 and 12 hour shifts impact differently on nurses' psychological variables?

Question Development

Developing researchable questions⁶

- P - patient
- I - intervention
- C - comparison
- O - outcomes

Designed to focus clinical questions²



⁶ Sackett et al., 1997; ² Schardt et al., 2007

Research question development

Example:

In _____ (population) what is the effect
of _____ (intervention) in comparison to
_____ (comparison) on _____ (outcome)?³

Example:

Does mobilization at 3, 4, or 6 hours after sheath removal affect the rate and type of groin vascular complications in patients after PCI?⁷

³ Polit & Beck 2010; ⁷Walker et al., 2008



Results

- 10 clinically relevant topics developed
- achieved consensus
- researchable question refined

Cardiology Research question



**Do cardiac patients
modify their
lifestyle following
admission to
hospital after a
cardiac event ?**

Conclusion

- Researchable questions can be developed by clinicians
- Team work and leadership
- Access to Nurse Researcher
- Structured approach
- Engagement with the research process

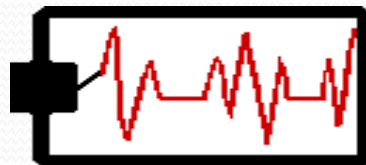
The challenge in developing a good research question is ensuring ideas are generated and transformed into a feasible and relevant clinical question that results in the completion of a valid study.



Outcome

Retention of Self-Care Information Post Myocardial Infarction

- Research study commenced in March 2011
- Pre-test, post-test study
 - Recruited 135 patients
 - Follow-up 114 patients
- Data collection and analysis completed
- Results to be presented at a conference next month



Questions



References

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