Inspiring a Passion: Nursing Research as a Critical Tool for Patient Care

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First...

Me + Research ≠
Now...

Me + Research =
Objectives

1. Explore the importance of nursing research in patient care
2. Describe the nursing research process
3. Identify areas for future research
What is Research?

A systematic investigation to answer questions and solve problems
What is Nursing Research?

Systematic inquiry which generates knowledge relevant to nursing stakeholders
What is Evidence-Based Practice?

Practice that is based on empirical evidence to make the “best” decision
Why is Nursing Research Important?

It provides the tools we need to advocate for health equity and improved health outcomes around the globe

_It is our moral imperative_
“Nursing research worldwide is committed to rigorous scientific inquiry that provides a significant body of knowledge to advance nursing practice, shape health policy, and impact the health of people in all countries.”

~American Association of Colleges of Nursing, Position Statement on Nursing Research

http://www.aacn.nche.edu/publications/position/nursing-research
The Synergistic Relationship
IOM Report on the Future of Nursing

- Our current healthcare system needs to be transformed to meet the needs of 21st century patients
- Nurses are uniquely positioned to fulfill this role
  - We now have documented evidence to prove this
- We will need to redefine our profession to reach this goal

http://books.nap.edu/openbook.php?record_id=12956
The Ultimate Battle
Nurses versus NURSES
Practice Concerns

• Issues that arise and stimulate interest in further inquiry
• Examples
  ▫ Iatrogenic infections (e.g., central line infections)
  ▫ Staff turnover
  ▫ Pressure ulcers
  ▫ Patient and family satisfaction
  ▫ Relevance of practice standards and guidelines
Research Questions

- Driven by an issue of concern or interest
- Examples
  - What are the experiences of caregivers of children with chronic illnesses?
  - How do nurse-patient ratios influence patient satisfaction?
  - What are the best items to include in a brief domestic violence screening tool for the ED?
  - What factors predict readmission following coronary artery bypass?
Methodology

• Driven by the question(s) asked
• Examples
  ▫ Qualitative
    • Surveys
    • Chart reviews
    • Secondary analysis of hospital-wide datasets
  ▫ Quantitative
    • Focus groups
    • Interviews
  ▫ Mixed and multi-method research
  ▫ Literature reviews
Evaluation

- Driven by the methodology
- Examples
  - Qualitative
    - Descriptive statistics
    - Regression models
    - PATH analyses
  - Quantitative
    - Thematic content analysis
    - Grounded theory
    - Narrative analysis
Dissemination

- As broadly (and strategically as possible)
- Consider target audience who will benefit the most (e.g., neonatal intensive care nurses or hospital administrators)

Examples
- Journal articles
- White papers
- Conference presentations
- Staff in-services
- Consortiums
- Position statements
Concern

Research Question

Dissemination

Evaluation

Methodology

FUNDING!!!
Identify a Grant Mechanism

• Several different funding sources
• Consider amount of the award, timeline, etc.
• Examples
  ▫ Some hospitals release internal awards
  ▫ Federal grants (e.g., NIH, PCORI, CDC)
  ▫ Foundation awards (e.g., Bill Gates)
  ▫ Organizations and societies (e.g., STTI and ANF)
Assemble an Investigative Team

- Be sure to have someone with expertise in each aspect of the grant
- Balance junior investigators with more senior investigators and/or consultants
- Think out of the box to do transdisciplinary research
  - Do you need an engineer to help you develop a device?
  - Can someone from city planning help you better understand the environment your patients are discharged to?
Prepare the Grant Application

- **Nail the specific aims!**
- Tell a story with the narrative
- Draw out the public health significance and impact
- Budget accordingly
- White space is your friend
- Generate preliminary data and publications to support the application
- Revise and resubmit if needed (never give up!)
Manage the Research Study

• Hire appropriate, qualified staff
• Consider patient and other key stakeholder concerns
• Timely reporting of IRB issues
• Begin preparing for dissemination before you even have the data
• Think about the next logical grant idea
# Research in Patient Care Settings

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Strategies</th>
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<tbody>
<tr>
<td>• Need for additional skills</td>
<td>• Use all available resources (e.g., Director of Nursing Research or online tools)</td>
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<td>• Finding time to conduct the work</td>
<td>• Talk to nurse manager about buying out time</td>
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<td>• Unpredictability in study population/sample accrual</td>
<td>• Let go of things you can’t control, and plan for things you can</td>
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<td>• Obtaining patient consent</td>
<td>• Identify less stressful times; provide enough detail without being overwhelming</td>
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<td>• Securing buy-in</td>
<td>• Involve key stakeholders from the inception</td>
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Stick with it!
Hands-on Activity

Research decision-making
Michelle Randall, BSN, RN

Michelle read an article in a nursing journal that made her stop and think about her nursing practice. The paper talked about predictors of resilience and their influence on recovery following a renal transplant. She heard a phenomenal presentation by Dr. Bridgette Brawner, and considered doing a study of her own.
Should Michelle...

• **A:** Start her own study
• **B:** Leave the idea alone
A: Start her own study

- Michelle talked to her colleagues to see who else would be interested
- Assembled an investigative team and began meeting about writing the grant
- Seeks to better understand the concept of resilience among renal transplant patients
Should the team...

• A: Do a quantitative study
• B: Do a qualitative study
A: Do a quantitative study

- Michelle receives PCORI funding to review medical records and administer a 45-minute survey to post-op renal transplant patients ($N = 350$)
- She identifies predictors of resilience and finds very similar results to the article that stimulated her interest
  - Patients with higher resiliency scores recover faster and are discharged sooner
- The team doesn’t, however, fully understand the role of resilience in the healing process
B: Do a qualitative study

- Michelle receives funding from STTI to conduct a grounded theory investigation with post-op renal transplant patients ($N = 10$)
- The participants describe their experiences with chronic kidney disease and other relevant contextual life events
- The team generates a solid understanding of the role of resilience in the recovery process, however, they are unsure how prevalent it is
Possible design issue

• The team wanted to better understand the concept of resilience in the target population. A qualitative study may have been most appropriate to begin, and a sequential exploratory mixed methods study would provide the richest data.
Happily ever after

• Michelle and her team applied for additional funding to conduct a larger mixed methods investigation
• They identified salient, modifiable factors that promoted resilience and improved health outcomes
• An intervention was developed based on these factors and is currently being tested in an RCT
• Michelle is on the brink of changing post-op care
B: Leave the idea alone

- Michelle put the journal down and continued her shift
- She shared the idea with Amanda, another nurse, who was excited about the project
- Amanda went to the nurse manager and asked to take the lead on the investigation (but did not include Michelle)
Should Michelle...

- A: Tell Amanda that she can’t do the study because it was her idea first, and refuse to work on it unless she is the PI
- B: Partner with Amanda to conduct the study, with Amanda being the PI
A: Tell Amanda no

- Amanda is offended and tells Michelle that she is being childish—“if you wanted to do the study then you should’ve done it”
- Amanda refuses to work with Michelle on the grant, and their relationship is strained in patient care
- Amanda and her team receive PCORI funding to review medical records and administer a 45-minute survey to post-op renal transplant patients \((N = 350)\)
B: Work with Amanda

• The team receives funding from STTI to conduct a grounded theory investigation with post-op renal transplant patients ($N = 10$)
• The participants describe their experiences with chronic kidney disease and other relevant contextual life events
• The team generates a solid understanding of the role of resilience in the healing process, however, they are unsure how prevalent it is
Possible moral issue

• Although the project was technically Michelle’s idea, she did not have anything in writing saying that it was her study
• A more diplomatic approach with Amanda may have proven to be more productive
• We have to remember the ultimate end goal (improved patient outcomes), and avoid temptations toward self-elevation—seen on both Michelle and Amanda’s parts
Happily ever after

- The nurse manager noticed the rift between Michelle and Amanda and called them into the office
- Both shared how everything made them feel, and they reached a resolution
- Michelle and Amanda applied for an intervention grant and are on the brink of changing post-op care
Identifying “good” evidence

You have the results, now what?
Once you have the evidence, how do you evaluate it?
  ▫ Can’t read one study (or talk to one person) and change practice
Questions to consider to determine level of confidence you put in what you read
  ▫ What is the journal’s ranking?
  ▫ Did the paper undergo peer-review?
  ▫ Is it an opinion piece or based in scientific evidence?
  ▫ Who funded the study?
Several assessments are available
JHNEBP Research Evidence Appraisal Form
In summary

- Nursing research is a systematic process of answering questions and solving problems relevant to the discipline
- A wide array of resources are available to assist persons interested in embarking on the research journey
- Barriers exist, however, strategies can be implemented to overcome them
- Important questions in your patient care areas are waiting for **YOU** to answer them!
“I think one's feelings waste themselves in words; they ought all to be distilled into actions which bring results.”

~Florence Nightingale
THANK YOU!

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