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

Bridgette M. Brawner, PhD, APRN Assistant Professor of Nursing Center for Health Equity Research Center for Global Women's Health University of Pennsylvania School of Nursing



## 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

<u>It is our moral imperative</u>

"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

<u>http://www.aacn.nche.edu/publications/position/nur</u> <u>sing-research</u>

## The Synergistic Relationship

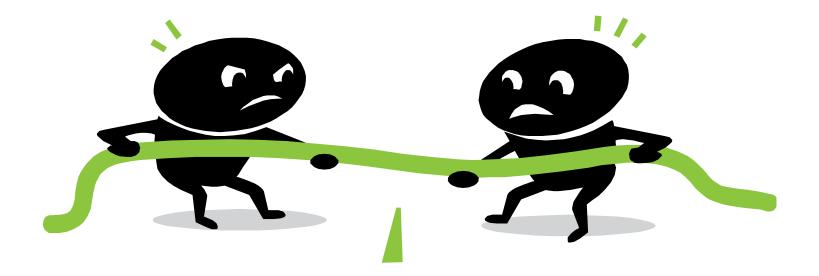


## IOM Report on the Future of Nursing

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

http://books.nap.edu/openbook.php?record\_id=1295

# 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



## 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

# <u>Nail the specific aims!</u>

- 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
- <u>Begin preparing for dissemination before</u> you even have the data
- Think about the next logical grant idea

# Research in Patient Care Settings

#### Challenges

- Need for additional skills
- Finding time to conduct the work
- Unpredictability in study population/sample accrual
- Obtaining patient consent
- Securing buy-in

#### **Strategies**

- Use all available resources (e.g., Director of Nursing Research or online tools)
- Talk to nurse manager about buying out time
- <u>Let go of things you can't</u> <u>control, and plan for</u> <u>things you can</u>
- Identify less stressful times; provide enough detail without being overwhelming
- Involve key stakeholders from the inception

## 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 postop 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 45minute 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 http://www.nursingworld.org/DocumentVault/NursingPractice/ Research-Toolkit/JHNEBP-Research-Evidence-Appraisal.pdf

## 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 <u>YOU</u> 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!

brawnerb@nursing.upenn.edu