Translating Evidence into Practice: Is Nursing the Missing Link?

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Objectives

• Recognize the steps and processes that support the movement of evidence into nursing practice
• Identify the role of nursing in the utilization, translation and creation of evidence
• Understand how the nursing research process parallels the tenets of translational research
Nursing Practice: Then and Now

- Practice was based solely on tradition, experience or “gut” feelings rather than science.

- Requires that nurses use current literature to stay informed, especially studies related to their specialty area.
The Power of the Nurse

- Unique role
  - Clinical expert
  - Coordinator of care
  - Touching lives
  - Relieving burdens
“With great power comes great responsibility”

- Nursing voted most trusted profession for 7 consecutive years (American Gallup)
- 84% of Americans believe nurses’ honesty and ethical standards are high or very high
- Nursing “power” should be used to empower patients and bring about optimal outcomes
Staying Up-to-Date…not optional

• What drives your clinical decision-making?
  – Research & evidence
  – Policy/procedure
  – Habits, routines…
    “the way we’ve always done it”

• Hard to be a critical thinker if you don’t have current information
  – Evidence is at your fingertips
Nursing Evidence

- **Types**
  - *Empirical*: based on scientific research
    - “The Science of Nursing”
  - *Ethical*: based on nurse’s knowledge of & respect for patient’s values/preferences
    - “The Ethics of Nursing”
  - *Personal*: based on the nurse’s experience in caring for the particular patient
    - “Interpersonal relationships of nursing”
  - *Aesthetic*: based on the nurse’s intuition, interpretation, understanding and values
    - “The art and act of nursing”
A Balancing Act

External

Research (empirical)

Patient Preference (ethical)

Internal

Clinical Expertise (aesthetic)

Nurse-Patient Relationship (personal)

Evidence for Clinical Decision-making
Evidence-based Practice (EBP)

- The conscientious use of current best evidence in making decisions about patient care
- Translation is the primary reason to conduct an EBP review
R h

Clinical Expertise
Availability of Health Resources
Patient history & physical

Research
Clinical Practice Guidelines

Patient/Family Preferences & Values

Clinical Decision-making
To **translate**

- To bear, remove, or change from one place, state, form, or appearance to another **transfer**, **transform** <translate ideas into action> [www.merriam-webster.com/dictionary](http://www.merriam-webster.com/dictionary)

- Translation involves synthesis, application, evaluation, and dissemination of evidence
EBP Process
A Framework for Translation

Utilization Phase

Assess & Question
Gather the best evidence
Appraise the evidence
Integrate with expertise and patient factors to implement into practice
Evaluate the outcomes
Share the results of the evidence-based change
First Steps Toward *Translation*

- The importance of the “right” question
  - Searchable & answerable
  - PICO (templates)
- Identifying the best sources of evidence
  - Cochrane Database of Systematic Reviews
- Appraising the evidence
  - Grading tools
Translation Framework

Assess & Question
Gather the best evidence
Appraise the evidence
Integrate with expertise and patient factors to implement
Evaluate the outcomes
Share the results

Translation Phase

“Knowledge is the translation of what one knows into what one does.”
Should the evidence be translated?

- Should we implement this practice recommendation?
- Would this change improve clinical outcomes?
- Would this change improve patient or nurse satisfaction?
- Would this change reduce the cost of care for patients?
- Would this change improve unit operations?
Steps of Translation

- Assess the appropriateness and feasibility of the recommendation
- Create an action plan
- Pilot and evaluate the change
- Report
- Foster support
- Develop a plan for wider implementation
- Communicate findings
Creators of Evidence

Assess & Question

Gather the best evidence

Appraise the evidence

Integrate with expertise and patient factors to implement

Evaluate the outcomes

Share the results
Contribution of Nurses

• Impetus for research brought about by EBP process
  – Problems/issues identified by nurses
  – Gaps of evidence uncovered
  – Replication studies
  – Original research

• Collaborators
  – Research Participants
  – Data collectors
  – Co-investigators
Mission of Nursing Research

- Johnson (1979) publication entitled “Translating Research into Practice”;
  - A time honored phrase in nursing
- Nursing Language
  - Research Translation 1970s
  - Research Utilization 1980s
  - Evidence-based Practice 1990s
  - Research Translation after 2000
Goals of Nursing Research

• Contribute to the scientific knowledge base of nursing and thereby improve nursing practice and optimize patient outcomes

• Nursing phenomena
  – Description
  – Exploration
  – Explanation
  – Prediction/Control
Nursing Research Process

- Identify the problem
- Review the literature
- State the purpose and come up with the hypothesis
- Design the study
- Carry it out
- Analyze the data
- Disseminate the results
Translational Research

• Bringing basic biological and behavioral sciences to the diagnosis, treatment, and prevention of human disease and health problems

• 5 stage model
  – Basic research
  – Pilot research or methods development
  – Efficacy trials (ideal situation)
  – Effectiveness trials (uncontrolled setting)
  – Dissemination trials (real world conditions that support or impede uptake of new interventions)
Translational Research

- Eric Rose, M.D., Dean for Translational Research, Columbia University Medical Center proposed a translational pathway that does not begin with basic science discovery, but in the clinical setting.
Rose Translational Pathway
Bridge from Discovery to Delivery

Patient Problem (Clinical Setting)

Observation back to the lab/research setting

Solution designed

Work through clinical trials and regulatory approval

Deliver solution to patients
Bi-directional Process

Bench ↔ Brains ↔ Bedside
Linking Practice & Research

• “The best efforts of nurse researchers are fruitless unless nurses make use of their research findings to improve patient care in their day-to-day practice.”

• “Ideally, every nurse should be involved in research, but practically, all nurses should, as a minimum, use research results to improve their practices.” (Black, 2007)
So...are we the missing link?
Research – Practice Gap

- “Up to two decades may pass before the findings of original research becomes part of routine clinical practice.” [www.ahrq.gov](http://www.ahrq.gov)
- @21% of nurses report utilizing research to inform their practice during the previous six months
- @50% of nurses reported that they do not read or subscribe to a nursing journal
Knowledge Creep

• Slow percolation of research ideas and findings into the minds, and eventually practice, of clinicians
• If nurses have “knowledge creep”, what does that mean for healthcare?
What’s the problem?

- Lack of knowledge and awareness
- Negative views of EBP and research
- Large amounts of information in professional journals
- Lack of time and resources to search for and appraise the evidence
- Pressure to continue with practices steeped in tradition
What can organizations do?

• Creation/support of a culture of inquiry
  – Evidence readily available (databases/journals)
  – Adopt or create an EBP model
  – EBP/Research mentors and champions
  – Comprehensive EBP education in nursing curriculums and/or new graduate residencies
  – EBP fellowships
  – EBP portfolios
  – Organizational recognition of EBP projects
  – Organized EBP/Research councils or committees
What can nurses do?

• Self Assessment
  – What do you believe about EBP?
    • Does it lead to quality care?
  – Is it (EBP) a way of thinking?
  – Do you view EBP as an “add-on” to your current practice?
  – To what extent is your care evidence-based?
  – How much knowledge of the EBP process do you possess and how much do you use?
Do your scales tip?

External

Research
(empirical)

Patient Preference
(ethical)

Internal

Clinical Expertise
(aesthetic)

Nurse-Patient Relationship
(personal)

Evidence for Clinical Decision-making
Do your part to bridge the gap

- Gain knowledge and skills of EBP/research
- Be an EBP/Research mentor or find one
- Make a conscious effort to be a user and generator of evidence
- Role model a spirit of inquiry
The Preferred Nurse

• What are the characteristics of the nurse you want to:
  – Work with
  – Care for you, your friends or family
  – Emulate

• Seeks knowledge and stays up-to-date
• Resistant to practice changes
• Utilizes, translates and creates evidence
• Content with “status quo”
• Critical thinker
• Task oriented
• “Naysayer”
Be the “Preferred” Nurses

Don’t wait for the best evidence to come to you. Seek out the best evidence or generate it for yourself.

Nurses Make a Difference
Questions/Discussion

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References


• [www.cumc.columbia.edu/news/in-vivo/vol4_iss1_mar_apr_05](http://www.cumc.columbia.edu/news/in-vivo/vol4_iss1_mar_apr_05)
Additional Information & Resources
Research Utilization (RU) vs. EBP

- RU uses only research evidence; EBP incorporates non-research activity; RU is dependent on research publication and availability
Resources - PICO

- PICO (Clinical question formation)
  - What is the practice issue/area
  - How was the issue identified
  - What is the scope of the problem
  - What are the PICO components
    - Problem/Patient/Population
    - Intervention
    - Comparison with other treatments
    - Outcomes
  - State the question in a searchable/answerable form
Levels of Evidence:

- Systematic Review (RCTs)
- At least (1) RCT
- Case control and cohort studies
- Systematic Review of Descriptive Studies
- At least (1) Descriptive Study
- Expert Opinions
Resources – Rapid Appraisal

- Are the results of the study valid?
  - Random assignment of subjects
  - Blinded subjects and providers
  - Instruments valid and reliable
  - Control group appropriate

- What are the results?
  - How large is the intervention/treatment effect
  - How precise is the intervention/treatment

- Will the results help me in caring for my patients?
  - Risks/benefits of treatment
  - Feasible in clinical setting
  - Patient/family values and preferences
Library resources

- UAMS students/employees
- Contact Susan Steelman, UAMS Resource Librarian, to schedule a free one-on-one consultation
  - 501-686-6737
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