

Comparing and contrasting nursing research, evidence-based practice, and quality improvement:
A differential diagnosis.

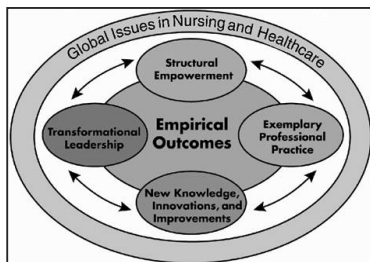
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Capital District Nursing Research Alliance
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Session Objectives

- **At the end of this session participants will be able to:**
 - define nursing research, evidence-based practice, and quality improvement; and the nurse’s role in each area; and,
 - differentiate among nursing research, evidence-based practice, and quality improvement.

2

New Magnet Model



ANCC, 2009

3

Sources of Nurses' Knowledge

1. **Colleagues**
2. **Information learned in nursing school**
3. **Information learned about patients**
4. **In-services**
5. **Personal experience**
6. **Policies and procedures**

Thompson, 2003
4

“...many traditions are so embedded in our culture that their validity or usefulness has never been challenged or evaluated.”

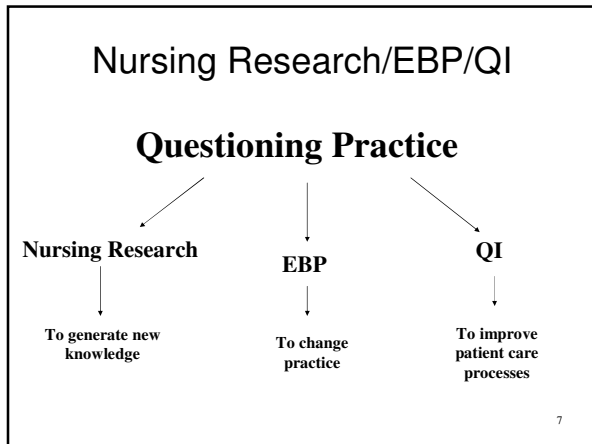
Polit, Beck, & Hungler, 2005

5

Overview

- **Confusion exists about:**
 - the similarities and differences in EBP, NR, and QI
 - what needs IRB approval
 - what may be published
 - what information is strong enough to change or confirm practice

6



Nursing Research

“Nursing research is a formal, systematic, & rigorous process of inquiry used to generate & test theories about the health-related experiences of human beings within their environments & about the actions & processes that nurses use in practice.”

Fawcett & Garity, 2009

8

- Purposes of Nursing Research
- **The purposes of nursing research are to:**
 - answer the research question
 - test the hypothesis
 - describe
 - explain
 - predict
 - explore
 - discover
- 9

Nurse's Role in Research

- **Standards of Professional Performance**

“The registered nurse actively participates in research activities at various levels appropriate to the nurse’s level of education and position.”

American Nurses Association, 2004
10

Nurses' Roles in Nursing Research

- **Activities may include:**
 - identifying clinical problems specific to nursing research (patient care & nursing practice)
 - participating in data collection (surveys, pilot projects, formal studies)
 - participating in formal committee or program
 - sharing research activities &/or findings with peers & others
 - conducting research
 - critically analyzing & interpreting research for application to practice
 - using research findings in the development of policies, procedures, and standards of practice in patient care
 - incorporating research as a basis for learning

American Nurses Association, 2004 11

Roles of the AD Graduate

- **Understand and have an awareness of the value and relevance of research in nursing**
- **Help identify problems in nursing practice**
- **Assist in data collection**
- **Use research findings in practice**
- **Develop and revise or implement clinical standards, protocols, and critical paths**

LoBiondo-Wood & Haber, 2006 12

Roles of the BS Graduate

- **Be intelligent consumers of research**
- **Understand every step in the research process**
- **Understand how each step relates to the others**
- **Critically read and understand research reports, studies**
- **Determine strength of evidence of studies**

LoBiondo-Wood & Haber, 2006¹³

Roles of the BS Graduate

- **Generate clinical questions to identify nursing research projects**
- **Participate in the implementation of nursing research**
- **Disseminate findings of nursing research studies**
- **Participate on nursing research-related committees (NR, QI, EBP)**

LoBiondo-Wood & Haber, 2006¹⁴

Roles of the Master's Graduate

- **Be active research team member**
- **Assume the role of clinical expert**
- **Collaborate with an experienced researcher in proposal development, data collection, data analysis, and interpretation**
- **Take active role in quality improvement projects to improve nursing practice in the clinical situation**

LoBiondo-Wood & Haber, 2006¹⁵

Roles of the Doctorally-Prepared Nurse

- Appraise, design, and conduct research
- Serve as role model, mentor, guide, and encourage nurses to engage in the nursing research process
- Collaborate and consult with social, educational, government, and health care institutions in research
- Disseminate research findings to the scientific community

LoBiondo-Wood & Haber, 2006

16

Nursing Research

- **Research Methods/Approaches**
 - Qualitative research
 - Quantitative research
- **Determined by purpose and research question**

17

Evidence-Based Practice

- EBP is the integration of:**
- best clinical research evidence
 - clinical expertise
 - patient values

Sackett, et al., 2000

18

Purposes of Evidence-Based Practice

- The purposes of EBP are to:
 - translate research into practice
 - increase the effectiveness of treatment
 - encourage some consistency in practice
 - utilize interdisciplinary approach in process
 - encourage practice not based on tradition
 - “...because that’s the way we have always done it...”

19

Nurses’ Roles in EBP

- **Selected Standards of Practice**
 - “Identifies expected outcomes that incorporate scientific evidence and are achievable through implementation of evidence-based practices.”
 - “Supports the use of clinical guidelines linked to positive patient outcomes.”
 - “Integrates current trends and research affecting care in the planning process.”
 - “Identifies assessment, diagnostic strategies, and therapeutic interventions within the plan that reflect current evidence, including data, research literature, and expert clinical knowledge.”

American Nurses Association, 2004

20

Nurses’ Roles in EBP

- Identify the clinical problem
- Search for the best evidence
- Critically appraise the evidence
- Synthesize evidence
- Apply the evidence
- Evaluate outcomes

21

EBP Process

- Ask a focused clinical question
- Find the best clinical evidence
- Critically appraise the evidence
- Apply evidence to practice
- Evaluate outcomes

22

Asking A Clinical Question

- P population
- I intervention
- C comparison
- O outcome

23

Palliative Sedation Protocol - RGH

- **P** – Adult patients with refractory symptoms/
life expectancy < two weeks.
- **I** – Palliative sedation
- **C** – Pain management strategies that are
minimally or ineffective for refractory
symptoms
- **O** – Safe delivery of palliative sedation in
adult patients with refractory symptoms

24



- ### EBP at RGH
- Evidence-Based Practice Advisory
 - Evidence-Based Practice Liaisons
 - Evidence-Based Practice Reviews
 - Pathways
 - Protocols
- 26

Quality Improvement

“The goal of quality improvement studies is to evaluate the effectiveness of nursing interventions and to provide direction for further improvement in the achievement of quality clinical outcomes and cost effectiveness.”

27

Purposes of Quality Improvement

- **The purposes of QI are to:**
 - **bring about immediate improvement of care in a specific setting**
 - **to compare organization to standards or benchmarks**
 - **increase cost effectiveness**
 - **make processes more efficient/better**

Baily, et al., 2006; Bernard & Groman, 2003; Reinhardt & Ray, 2003

28

Nurses' Roles in QI

- **Standards of Professional Performance**

“The registered nurse systematically enhances the quality and effectiveness of nursing practice...”

- **Uses the results of quality improvement activities to initiate changes in nursing practice and in the healthcare delivery system.**
- **Incorporates new knowledge to initiate changes in nursing practice if desired outcomes are not achieved...**
- **Participates in quality improvement activities...**

American Nurses Association, 2004 ²⁹

Nurses' Roles in QI

- Identify practice that requires improvement
- Collect data
- Analyze data
- Generate recommendations
- Implement processes for change
- Analyze organizational barriers
- Analyze cost effectiveness of changes
- Implement processes to decrease barriers and cost

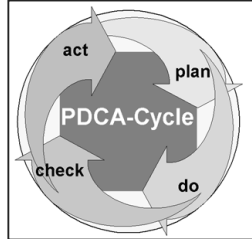
American Nurses Association, 2004

30

PDCA-Cycle

- Iterative strategy within quality management utilized in QI projects at RGH.

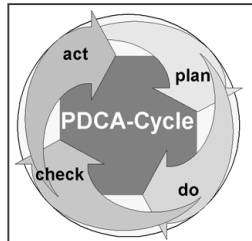
1. **Plan** (create objectives & processes)
2. **Do** (implement the above)
3. **Check** (evaluate & monitor defined processes)
4. **Act** (modify processes for improvement)



31

PDCA-Cycle example

- From needs assessment a community hospital decided town residents ≥ 50 years should receive education on how to recognize symptoms & how to reduce causes of hypertension.
- Educational program was planned (plan) & implemented (do). When participant target fell below 70%, reasons for drop were determined (check). Action was taken to increase recruitment (act).



32

Comparing & Contrasting

	Nursing Research	EBP	QI
Purpose	-Generate new knowledge	-Change practice	-Improve patient care
Method	-Qualitative - Quantitative -Long -Complex	-Qualitative articles -Quantitative articles -Expert opinion -Guidelines -Lengthy	-PDCA -Short -Simplistic

33

Comparing & Contrasting

	Nursing Research	EBP	QI
Sample	-Related to purpose & research question -Representative	-Related to identified population	-Unit or organization
Data Collection	-Ensure external and internal validity & trustworthiness - Long term	-Critical appraisal of articles -Searching for best evidence	-Short term -Action plan & evaluation

34

Comparing & Contrasting

	Nursing Research	EBP	QI
Human Subjects	-IRB	-Assess IRB process described in article	-Old school - no IRB
Results	-Seeks to add to professional literature	-Seeks to impact practice	-Seeks to improve processes in unit and organization

35

Comparing & Contrasting

	Nursing Research	EBP	QI
Implications	-Comprehensive understanding of issues in a phenomenon - QI implications	-Use of research to impact practice -QI implications	-Change processes -Decrease cost -Increase efficiency -Increase patient & staff safety -Improve satisfaction
Dissemination	-Scientific community -National & international	-Standards of practice -Pathways and protocols	-Unit and organization

36

QI and Ethical Considerations

IRB must be considered regarding:

- Level of risk
- Level of benefit
- Confidentiality/Anonymity
- Generalizable to a larger population
- Plans to publish results & recommendations

37

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38

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39
