



Introduction to Nursing Research

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What is research?

- A systematic inquiry that uses disciplined methods to answer questions and solve problems.
- The ultimate goal of research is to:
 - ✓ develop,
 - ✓ refine,
 - ✓ expand a body of knowledge

Why get excited about research?

- “The essence of all research= curiosity (a desire to find out how & why things happen)”
- How can...?
- Why is...?
- What is the best way to...?
- What causes...?
- What are the effects of...?



Scientific Method

- ✓ Select/define a problem
- ✓ Formulate research question/hypothesis
- ✓ Collect data
- ✓ Analyze data
- ✓ Report results





What is nursing research?



Nursing research

Is systematic inquiry **تحقيق منهجي** to develop trustworthy evidence about issues of importance to the nursing profession. i.e. nursing practice, education, administration, & informatics.

Nursing Research

- Application of scientific method to areas of interest to nursing
- Primarily involves **studying people**
- People do not behave consistently as do objects/chemicals in a laboratory!
- **This adds special challenges!**





Clinical nursing research

- Research designed to guide nursing practice & to improve the health & quality of life of nurses' clients.
- Typically begins with questions stemming from practice-related problems/problems such as ones you may have already face during your clinical training



Roles of Nurses in Research

- With the current emphasis on EBP, it is every nurse's responsibility to engage in one or more roles along a **continuum of research** participation.
- In the old days, most nurse researchers were academics who taught in schools of nursing
- Research now is increasingly being conducted by practicing nurses who want to find what works best for their clients.



Continuum of Nursing Research

*Consumers
of Nsg
research*

*producers of
Nsg
research*

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- **Users (consumers)** of nursing research:
nurses who read research reports to develop new skills & to keep up to date on relevant findings that may affect their practice.
 - **Producers** of nursing research:
nurses who actively participate in designing & implementing studies

How nurses can participate in this continuum?



Continuum of participation

Consumers of research:

- ✓ Read & evaluate
- ✓ Participate in the research process,
- ✓ utilize findings
- ✓ Conduct research



Sources of Evidence for Nursing Practice

- Tradition
- Authority
- Clinical experience; trial and error; intuition
- Logical reasoning (inductive and deductive)
- Assembled information (e.g., quality improvement data)
- Disciplined research



Why do nursing research?



2 main purposes for research

- 1) To achieve varying levels of explanation
- 2) To link to Evidence-based practice (EBP)

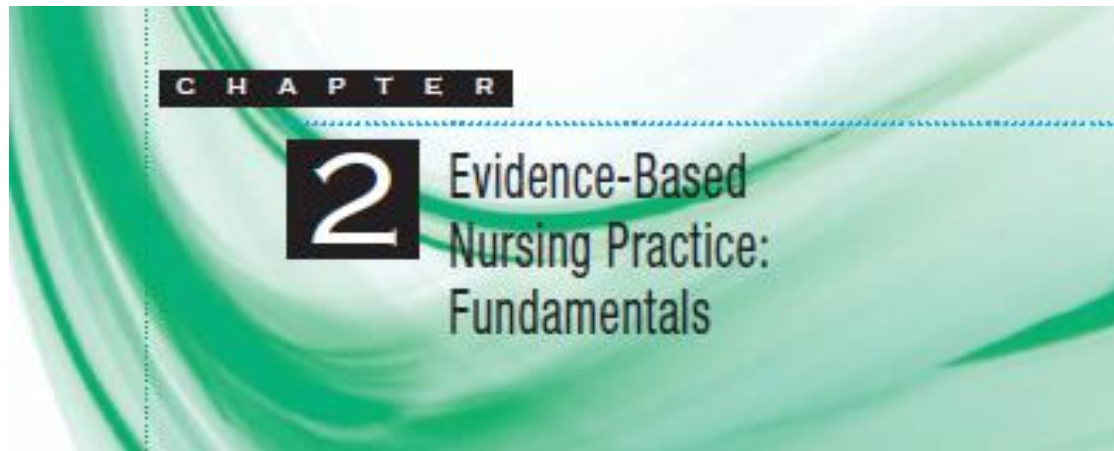


Specific Purposes of Nursing Research

	<u>Quantitative</u>	<u>Qualitative</u>
• Identification		X
• Description	X	X
• Exploration	X	X
• Prediction and control	X	
• Explanation	X	X



Evidence-Based Nursing Practice





Definitions

Evidence-based nursing (EBN) is an approach to health care practice that enables nurses to provide the highest quality care based on the best evidence available to meet the needs of their patients.

The integration of the best research evidence with clinical expertise & patient values.



Why Practice EBN?

- ✓ Standard of Care
- ✓ Assures patient receives most up-to-date care possible
- ✓ Assists practitioner in dealing with increasing volume of medical literature
- ✓ Allows patient & practitioner to work together to make informed decisions



Evidence Hierarchies

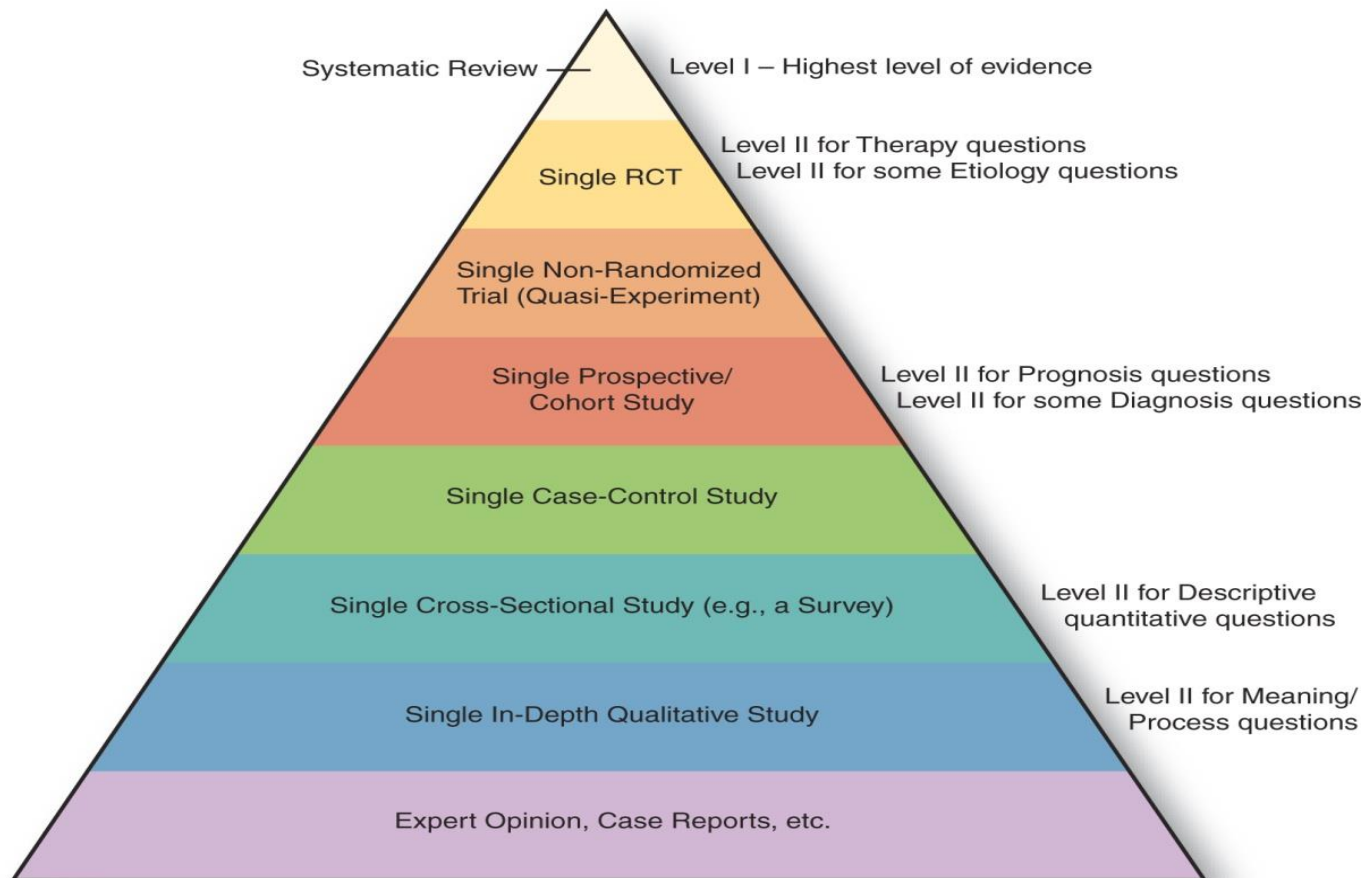
- Involve ranking evidence sources according to the strength of evidence they provide
- Ranking may depend on the type of question being asked.
- Within any level, evidence quality can vary considerably.



Levels of Evidence Hierarchy (Stetler et al.)

- Level I: **Meta-analysis of multiple RCTs ('gold standard')**
- Level II: Individual RCTs
- Level III: Quasi-experimental
- Level IV: Non-experimental; qualitative
- Level V: Program evaluation; case reports
- Level VI: Opinion of respected authorities

Example of an Evidence Hierarchy





Best Evidence

Refers to research findings that are:

- ✓ methodologically appropriate,
- ✓ rigorous,
- ✓ clinically relevant for answering pressing questions



Major Steps in EBP

- 1. Ask questions** that reflect uncertainties in clinical practice.
- 2. Search for** and assemble evidence (discovery)
- 3. Appraise** and synthesize evidence
- 4. Integrate** evidence with other sources (translation)
- 5. Assess effectiveness** of decision or advice (evaluate impact/effectiveness/ outcomes)



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