Objectives

• By the completion of this presentation the participant will be able to:
  • Describe the significance of generating new knowledge
  • List five sequential phases in the research process
  • List three characteristics of a well planned study
Research Defined

- Diligent systematic inquiry
- Discovery of new knowledge
- Validate and refine existing knowledge

(Burns & Grove, 2007)

Significance of Nursing Research

- Building a body of knowledge for the nursing profession
- Knowledge generated can be used to improve:
  - Clinical practice
  - Nursing education
  - Nursing administration
  - Nursing roles

A knowledge base to draw from -- to support and enhance what we do in practice

Phases of the Research Process

The research process has five formal phases, with a logical flow, that are completed in order

Five major phases:
1. Conceptual phase
2. Design and planning
3. Collection of data
4. Analysis
5. Dissemination of findings

(Poole & Beck, 2008)
Nursing Research Series

Essentials of Science: Methods, Appraisal and Utilization

Conceptual Phase

1. Conceptual phase
   - Develop a research question from the problem to be examined
   - Review the related literature
   - Examine the clinical influences
     • Observe current practices
     • Discuss topic with clinicians and field experts
   - Select conceptual framework
   - Formulate purpose, aims, and hypotheses

Design and Planning

2. Design and planning phase
   - Select a research design
   - Define variables and decide how to measure
   - Identify the population and sample
   - Develop the protocol
   - Protect human rights and privacy

Collection of Data

3. Collection of data phase
   - Chart review
     Physiological data
     Treatments
     Medication
   - Surveys
   - Interviews
   - Observation
4. Analysis phase

- Quantitative: Use of statistics—a set of concepts, rules, and procedures based in probability theory that help us to organize and interpret numerical information.
  - Demographics
  - Descriptive
  - For comparison and relationships

- Qualitative: Content analysis—a set of concepts, rules, and procedures that help us to organize and interpret potential patterns

  - Interpretation of the findings
    - Nonsignificant and significant results
    - Unexpected results
    - Clinically significant
    - Recommendations

5. Dissemination phase

- Research report and manuscript
- Posters and podium presentations

The overall goal is to use findings in practice

A Well Planned Study

- **Fit**
  - Is it the right research design to answer the question?
  - Does the research question align with what is found in the literature?
  - Is the data collection method extracting the information desired?
  - Is there correct data analyses to answer the question?

- **Flow**
  - Do the steps of the process flow in logical order to obtain desired answer?

- **Feasibility**
  - Does the level of expertise of the researchers match requirements of the study?
  - What is the availability of subjects, facilities, and equipment?
  - Are ethical considerations addressed and rights are protected?
  - Is there time, money, and organizational support committed to the study?

(Burns & Grove, 2007)
In Summary

The research process has five formal phases, with a logical flow, that are completed in order.

1. Conceptual phase
2. Design and planning
3. Collection of data
4. Analysis
5. Dissemination of findings

The research process provides:
- Generation of new knowledge
- Confirmation and validation of existing knowledge
- Evidence to apply in practice

Research Resources

- Nurse Scientists
- Expert Clinicians
- Statisticians
- Research program and activities at your facility
Reach for the Stars

Be part of the discovery of new knowledge through research!

References to Consider


For more information please contact:
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http://nursingpathways.kp.org/scai/research/index.html

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