**Understanding Nursing Research**

**Introduction to Nursing Research and Evidence-Based Practice**

1. The primary purpose of nursing research is to:

|  |  |
| --- | --- |
| a. | bring prestige to the discipline. |
| b. | fund nursing education. |
| c. | generate scientific knowledge to guide nursing practice. |
| d. | promote the importance of nursing in society. |

ANS: C

The ultimate goal of nursing research is the generation of an empirical knowledge base to guide practice.

Although high-quality research would bring prestige to nursing, that is not the reason for conducting the research. The ultimate goal of nursing research is the generation of an empirical knowledge base to guide practice.

Although high-quality research could promote the importance of nursing, that is not the reason for conducting the research. The ultimate goal of nursing research is the generation of an empirical knowledge base to guide practice.

A research grant may provide assistance with educational expenses for persons connected with it. The research itself does not fund education, nor is funding education the purpose of the research. The ultimate goal of nursing research is the generation of an empirical knowledge base to guide practice.

2. A research study investigating the benefits of ambulation after cesarean section would be an example of which type of research evidence?

|  |  |
| --- | --- |
| a. | Control |
| b. | Description |
| c. | Explanation |
| d. | Prediction |

ANS: B

Description involves identifying and understanding the nature of nursing phenomena and the relationships among these phenomena.

Control can be described as the ability to write a prescription to produce the desired outcome.

Explanation clarifies the relationships among phenomena and identifies why certain events occur.

Through prediction, the probability of a specific outcome can be estimated in a given situation.

3. A research study validates the positive effect that a nursing intervention, patient journaling, has on decreasing spiritual distress during cancer recovery. This would be an example of which type of research evidence?

|  |  |
| --- | --- |
| a. | Control |
| b. | Description |
| c. | Explanation |
| d. | Prediction |

ANS: A

Control indicates the ability to use a prescribed intervention to produce a desired outcome.

Description involves identifying and understanding the nature of nursing phenomena and the relationships among these phenomena.

Explanation clarifies the relationships among phenomena and identifies why certain events occur.

Through prediction the probability of a specific outcome can be estimated in a given situation.

REF: p. 9

4. A nurse who reads research articles and incorporates research findings into nursing practice would demonstrate which of the following research roles?

|  |  |
| --- | --- |
| a. | Collaborator |
| b. | Consumer |
| c. | Primary investigator |
| d. | Producer |

ANS: B

A research consumer reads research reports, critiques the reports, and makes decisions about incorporating research into practice.

A collaborator is someone who works closely with the primary investigator in conducting a research study.

A primary investigator leads a research team in the completion of a study.

Producers of research conduct studies to generate and refine the knowledge needed for nursing practice.

REF: p. 27

5. Florence Nightingale is most noted for which of the following contributions to nursing research?

|  |  |
| --- | --- |
| a. | Case study approach to research |
| b. | Data collection and analysis |
| c. | Framework and model development |
| d. | Quasi-experimental study design |

ANS: B

Nightingale is known for her data collection and analysis of the plight of injured soldiers during the Crimean War. Her research led to interventions that reduced the mortality rate from 43% to 2%.

REF: p. 10

6. A major focus of nursing science during the 1970s was:

|  |  |
| --- | --- |
| a. | communication of research findings. |
| b. | health care delivery. |
| c. | illness prevention. |
| d. | nursing education. |

ANS: A

Communication of research findings was a major issue for nursing in the 1970s. National and international research conferences were held, and several new research journals were published during this decade.

Health care delivery became a focus in the 1980s and 1990s.

Illness prevention has become the focus of current research in nursing.

Nursing education was focused on more in the 1950s.

REF: p. 12

7. One major focus of nursing research during the 1980s was:

|  |  |
| --- | --- |
| a. | communication of research findings. |
| b. | illness prevention. |
| c. | increased funding for nursing research. |
| d. | nurses’ job satisfaction. |

ANS: C

Most of the federal funds before this time were designated for medical studies involving the diagnosis and cure of disease.

The communication of research findings was a major issue in the 1970s.

Current (2000s) research focus and funding is expanding from the treatment of illness to include health promotion and illness prevention interventions.

The conduct of clinical research was the focus of the 1980s.

REF: p. 13

8. Which of the following historical events had a major impact on the funding for nursing research?

|  |  |
| --- | --- |
| a. | Development of a Nursing Research Council as part of the American Nurses Association |
| b. | Development of local, national, and international nursing research conferences by Sigma Theta Tau |
| c. | Formation of the National Center for Nursing Research |
| d. | Initiation of the Agency for Health Care Policy and Research |

ANS: C

The National Institute of Nursing Research, originally the National Center for Nursing Research, is a federally funded arm of the National Institutes of Health, providing nursing with federal support for nursing research priorities.

The National Research Council helps guide the focus of nursing research.

These conferences served to disseminate research in a much more consistent fashion.

The Agency for Health Care Policy and Research facilitates conduct of outcomes research.

REF: p. 13

9. Benner (1984) emphasizes the importance of acquiring clinical knowledge and expertise through:

|  |  |
| --- | --- |
| a. | authorities. |
| b. | borrowing from other disciplines. |
| c. | personal experience. |
| d. | research. |

ANS: C

Based on her research, Benner proposes that a nurse’s personal experience affects the breadth and depth of that nurse’s knowledge and expertise.

Benner did not emphasize acquiring clinical knowledge and expertise through authorities.

Benner did not emphasize acquiring clinical knowledge and expertise through borrowing from other disciplines.

Although research is important, it was not the focus of Benner’s description of knowledge acquisition.

REF: p. 17

10. An example of inductive reasoning is:

|  |  |
| --- | --- |
| a. | going from a single diabetic patient to all diabetic patients. |
| b. | moving from all chronically ill patients to a single chronically ill patient. |
| c. | using a standard nursing care plan to care for a specific patient. |
| d. | using a computerized nursing care plan to care for insulin-dependent diabetic patients. |

ANS: A

Inductive reasoning moves from the specific to the general.

Moving from all chronically ill patients to a single chronically ill patient is an example of moving from the general to the specific. This is deductive reasoning.

Using a standard nursing care plan to care for a specific patient is an example of moving from the general to the specific and is an example of deductive reasoning.

Using a computerized nursing care plan to care is for insulin-dependent diabetic patients is an example of moving from the general to the specific. This is an example of deductive reasoning.

REF: p. 18

11. Scientific knowledge is generated through:

|  |  |
| --- | --- |
| a. | authorities. |
| b. | borrowing from other disciplines. |
| c. | personal experience. |
| d. | research. |

ANS: D

Research is needed to provide a sound scientific basis for nursing. Other ways of knowing (e.g., tradition, authority, borrowing, trial and error) help to inform nursing knowledge, but knowledge based on factual information is necessary to develop scientific knowledge.

Authorities may contribute to scientific knowledge by conducting research, but not by their “authority.”

Borrowing does not generate scientific knowledge. Research is needed to provide a sound scientific basis for nursing.

Personal experience may lead one to conduct research, but does not by itself generate scientific knowledge.

DIF: Cognitive level: Comprehension REF: p. 19

12. Quantitative and qualitative research approaches are particularly useful in nursing because they:

|  |  |
| --- | --- |
| a. | are easy to implement. |
| b. | are process oriented. |
| c. | provide different views. |
| d. | require few resources. |

ANS: C

Quantitative and qualitative research approaches complement each other because they generate different kinds of nursing knowledge useful in practice.

Neither type of study is particularly easy to implement; all methods take significant effort.

Qualitative research is process oriented. Qualitative research focuses on the holistic view of the phenomenon under study.

All research requires resources, some more than others, but related to the particular study, not the type of study. Typically the generation of an extensive literature review occurs early in the research process for quantitative studies, and later in qualitative studies, because of the nature of their processes.

DIF: Cognitive level: Comprehension REF: p. 19

13. Outcomes research in health care is oriented toward establishing:

|  |  |
| --- | --- |
| a. | characteristics and description of nursing phenomena. |
| b. | critical indicators. |
| c. | predictive relationships. |
| d. | quality and effectiveness. |

ANS: D

Outcomes research is focused on the end results of care or determining changes in health status for patients.

Outcomes research is primarily concerned with patients and their families and is focused on the end results of care or determining changes in health.

Critical indicators would more likely come from quantitative research.

Quantitative research looks for predictive relationships.

DIF: Cognitive level: Comprehension REF: p. 21

14. What type of research has a major focus on examining the long-term, short-term, negative, and positive results of care across a variety of settings?

|  |  |
| --- | --- |
| a. | Correlational |
| b. | Ethnographic |
| c. | Historical |
| d. | Outcomes |

ANS: D

Outcomes research is focused on the end results of care or determining changes in health status for patients.

Correlational research examines relationships between and among variables.

Ethnographic research explores members of a culture.

Historical research is a narrative description or analysis of past events.

DIF: Cognitive level: Analysis REF: p. 22

15. What knowledge is required to fully define nursing research?

|  |  |
| --- | --- |
| a. | An exhaustive list of the research that has already been conducted in nursing |
| b. | Ways to perform the major descriptive and inferential statistics needed for analysis |
| c. | Research studies well received by other disciplines for collaborative projects |
| d. | A determination of what nurses need to know to provide the best patient care |

ANS: D

Defining nursing research requires determining the relevant knowledge needed by nurses.

An exhaustive list is not necessary to define nursing research.

Nursing research is not defined by the ways to perform the major descriptive and inferential statistics needed for analysis.

Nursing research is not defined by research studies well received by other disciplines for collaborative projects.

DIF: Cognitive level: Comprehension REF: p. 4

16. The main purpose of studying research for a BSN student is to:

|  |  |
| --- | --- |
| a. | learn how to conduct a small research study. |
| b. | learn how to generate new scientific knowledge to use in practice. |
| c. | mentor associate-degree prepared nurses in research projects. |
| d. | understand the basic principles of research. |

ANS: D

A BSN graduate must become a consumer of research and has a significant role in critiquing and synthesizing research findings for use in nursing practice.

Although a BSN graduate may learn how to conduct a small research study, it is not an expectation of the BSN graduate.

Generating new knowledge is the responsibility of the doctoral-prepared nurse.

Although a BSN graduate may act as a mentor, it is not an expectation of the BSN graduate.

DIF: Cognitive level: Comprehension REF: p. 27

17. A study was conducted to determine which palliative care measures patients prefer. Statistical analysis revealed that most of them ranked evening back rubs and calming music the highest in helpfulness. This research would most likely fall under which of the following categories?

|  |  |
| --- | --- |
| a. | Qualitative research |
| b. | Quantitative research |
| c. | Outcomes research |
| d. | There is not enough information to answer this question. |

ANS: B

Quantitative research would ask patients what they prefer from a list of possibilities or simply create a frequency distribution of their answers. These responses would then be tabulated, and descriptive statistics could be reported; thus the finding that back rubs and calming music are the most popular answers.

Qualitative research might ask the patient what is most helpful, but there would not be statistical analysis, nor would the responses be ranked.

Outcomes research would ask questions about the quality and effectiveness of health care.

There is enough information to answer the question. Quantitative research would ask patients what they prefer from a list of possibilities or simply create a frequency distribution of their answers. These responses would then be tabulated, and descriptive statistics could be reported, thus the finding that back rubs and calming music are the most popular answers.

DIF: Cognitive level: Analysis REF: p. 20

18. Which of the following studies would not be considered nursing research?

|  |  |
| --- | --- |
| a. | Assessing the knowledge base of caregivers of Alzheimer’s patients |
| b. | Developing innovative pin insertion techniques for fracture treatment |
| c. | Evaluating the effectiveness of wound care in diabetic patients |
| d. | Reviewing staff nurse retention policies in rural hospital settings |

ANS: B

Nursing research involves direct or indirect generation of new knowledge. This research is applicable to biomedical and medical sciences.

Research focuses on important aspect of practice in assessing caregivers.

Research focuses on care/practice aspect of nursing.

Research focuses on cost and a quality-effectiveness approach to health care delivery.

19. According to *Healthy People (HP) 2010* and the mission of the National Institute of Nursing Research (NINR), focus for future nursing research includes which of the following?

|  |  |
| --- | --- |
| a. | Development of new indications for existing drug therapies in hypertension |
| b. | Evaluating therapeutic life style changes for effectiveness in reducing hypertension |
| c. | Investigating the role of incretins in managing glycemic control in diabetic patients |
| d. | Reducing medical errors caused by inaccurate dispensing of prescriptions |

ANS: B

Nursing research focus, per NINR and *HP 2010*, is to establish basis for care of individuals across the lifespan.

Drug development is beyond the scope of nursing research.

Investigating the role of incretins in managing glycemic control in diabetic patients involves extensive biological research and is beyond the scope of nursing research.

Reducing medical errors caused by inaccurate dispensing of prescriptions involves a critical review in pharmaceutical distribution to reduce error and is beyond the scope of nursing research.

20. Which of the following would be considered level 1 research evidence when evaluating evidence for the establishment of IV site care and maintenance for a medical-surgical unit?

|  |  |
| --- | --- |
| a. | Case study review of dressings used at a similar-sized hospital |
| b. | Expert opinion of best dressings used in hospital settings |
| c. | Quasi-experimental study evaluating types of dressings used at selected hospitals |
| d. | Randomized clinical trial study conducted on types of dressings used in hospital settings |

ANS: D

Randomized clinical trials (RCT) provide the strongest evidence for establishing evidence-based practice guidelines because of the strength of the research process.

Case studies provide neither the same rigor in the process nor generalizable results.

Expert opinion provides the lowest level of strength because it is not a conducted study.

Quasi-experimental studies often lack randomization and have limited generalizability of results.

21. Which would not be considered evidence for the establishment of an evidence-based protocol for reducing falls in frail elderly people? A report or paper on the:

|  |  |
| --- | --- |
| a. | correlational study investigating the use of pain medications and incidence of falls in hospitalized elderly people. |
| b. | ethical position paper on restraining elderly people in extended care facilities. |
| c. | expert opinion statement regarding balance training and therapy. |
| d. | meta-analysis of reporting falls among elderly people in extended care facilities. |

ANS: B

Ethical position statements examine the potential violation of rights. These documents are not reports of conducted research and are not considered research evidence.

Correlational studies are used as evidence in reviews for the establishment of evidence-based guidelines.

Expert opinions are used; however, they are considered the lowest level for inclusion.

Meta-analyses are used as evidence in reviews for the establishment of evidence-based guidelines.

22. The main purpose of leveling or reviewing research evidence in the establishment of evidence-based guidelines is to:

|  |  |
| --- | --- |
| a. | critique the usefulness of the research in expanding knowledge. |
| b. | develop guidelines for providing care to clients. |
| c. | generate new nursing research projects. |
| d. | review research methods for appropriateness within a research report. |

ANS: B

The main purpose of leveling research evidence in the establishment of evidence-based practice guidelines is to develop standard guidelines for providing care to clients that are based on the strongest evidence known, to improve the quality of care.

The purpose of a critique of a research article is to establish usefulness in one’s particular practice.

This would be a potential “offshoot” of research evidence review; it is not the main purpose.

The purpose of a peer review before publication is to see that the establishment of the stated purpose or aim of the research was achieved.

23. Sources for credible, rigorous evidence-based guidelines for healthcare practice include the:

|  |  |
| --- | --- |
| a. | AACN |
| b. | CCNE |
| c. | NGC |
| d. | NLN |

ANS: C

The National Guidelines Clearinghouse (NGC), established by the Agency Health Research & Quality, was initiated in 1998 to establish evidence-based guidelines for evidence-based practice in the United States.

The American Association of Colleges of Nursing (AACN) was established to promote and uphold the educational standards of nursing education in the United States.

The purpose of the Certification of Colleges of Nursing Education (CCNE) is to accredit or certify colleges or schools of nursing in the United States.

The National League for Nursing (NLN) advocates for nursing practice, education and research, also is involved in accrediting schools and programs of nursing in the United States.

24. A hospital wishes to develop a new protocol for immediate postoperative recovery of trauma patients in the post anesthesia care unit (PACU). A team of nurses must be selected to comprise the group to develop the new protocol. Ideally the minimum educational preparation of the leader of their group should have earned a/an:

|  |  |
| --- | --- |
| a. | Associate of Science in Nursing. |
| b. | Bachelor of Science in Nursing. |
| c. | Master of Science in Nursing. |
| d. | Doctorate in Nursing. |

ANS: C

Master’s-prepared nurses are able to critically appraise and synthesize findings from studies to revise of develop protocols for use in practice.

Associate-prepared nurses provide direct patient care, and are limited to the implementation of established research-based interventions.

Baccalaureate-prepared nurses are prepared to identify best evidence, and can plan and implement evidence-based interventions based on research.

Doctoral-prepared nurses can critique, implement, plan, and develop new or revised guidelines, as well as generate and replicate knowledge via conduction of research.

**MULTIPLE RESPONSE**

1. Why can research be considered a “world” of its own? (Choose all that apply.) Because it:

|  |  |
| --- | --- |
| a. | involves new rules and new experiences. |
| b. | is a new way of experiencing reality. |
| c. | is conducted in certain geographical areas of the world. |
| d. | requires learning a unique language. |

ANS: A, B, D

Nursing research is a new way of experiencing reality; it requires a unique language, and it involves new rules and new experiences.

Nursing research is a new way of experiencing reality; it requires a unique language, and it involves new rules and new experiences.

Nursing research is a new way of experiencing reality; it requires a unique language, and it involves new rules and new experiences.

Nursing research is not confined by geographic area.

2. A doctoral-trained nurse is prepared to do which of the following? (Choose all that apply.)

|  |  |
| --- | --- |
| a. | Coordinate research teams. |
| b. | Expand the basic body of nursing knowledge. |
| c. | Mentor other nurses in research. |
| d. | Seek and obtain grants. |

ANS: A, B, C, D

The doctoral-prepared nurse is capable of coordinating research teams.

The doctoral-prepared nurse is capable of expanding the basic body of nursing knowledge.

The doctoral-prepared nurse is capable of mentoring other nurses in research.

The doctoral-prepared nurse is capable of seeking and obtaining grants.

3. Which of the following questions might be asked by a qualitative researcher? (Choose all that apply.)

|  |  |
| --- | --- |
| a. | How does the experience of being in a car accident affect a person’s driving speed? |
| b. | What is it like to live with a terminal illness? |
| c. | Which medication is most effective in treating pain resulting from an amputation? |
| d. | What percentage of patients enjoys the food served to them while in the hospital? |

ANS: A, B

Qualitative researchers askquestions that explore the experience of individuals and how life affects them.

Qualitative researchers askquestions that explore the experience of individuals and how life affects them.

Questions about the most effective pain medication would be addressed using either a survey or poll. These are quantitative means.

Questions that evoke numerical responses are quantitative question.