# Chapter 2, Theory, Research, and Evidence-Based Practice

1.	After reviewing several research articles, the clinical nurse specialist on a medical surgical unit rewrites the procedure on assessing placement of a nasogastric tube. What source of nursing knowledge did the nurse use in this situation?
A)	Scientific knowledge
B)	Traditional knowledge
C)	Authoritative knowledge
D)	Philosophical knowledge
Ans:	A
	Feedback:
	The clinical nurse specialist utilized scientific knowledge, which is gained through the research-based scientific method. Philosophical knowledge is not a source of nursing knowledge, but is a type of general knowledge. Authoritative knowledge comes from an expert and is accepted as truth based upon the person's perceived expertise. Traditional knowledge is that part of nursing practice passed down from generation to generation and is not based upon scientific inquiry.
2.	Which of the following theories emphasizes the relationships between the whole and the parts, and describes how parts function and behave?
A)	General systems theory
B)	Nursing theory
C)	Adaptation theory
D)	Developmental theory
Ans:	A
	Feedback:
	General systems theory describes how to break whole things into parts and then learn how the parts work together in "systems." Nursing theory attempts to describe, explain, predict, and control desired outcomes of nursing care practices. Adaptation theory defines adaptation as the adjustment of living matter to other living things and to environmental conditions. Developmental theory outlines the process of growth and development of humans as orderly and predictable.
3.	A nurse researcher is studying perceptions of vocational rehabilitation for clients after a spinal cord injury. What type of research method will be used to study the perceptions of this group of individuals?
A)	Qualitative research
B)	Quantitative research
C)	Basic research
D)	Applied research
Ans:	A
	Feedback:

The nurse researcher will use qualitative research methods to investigate perceptions, and the researcher will analyze

words instead of numbers, which are analyzed in quantitative research. Basic and applied research are quantitative research methods.

A staff development nurse is asking a group of new staff nurses to read and be prepared to discuss a qualitative study that focuses on nursing events of the past. This is done in an attempt to increase understanding of the nursing profession today. What method of qualitative research is used in this article?

- A) Historical
- B) Phenomenology
- C) Grounded theory
- D) Ethnography

Ans: A

## Feedback:

This article uses historical methodology, which examines events of the past to increase understanding of the nursing profession today. Phenomenology is used to describe experiences as they are lived by the subjects being studied. Grounded theory is the discovery of how people describe their own reality and how their beliefs are related to their actions in a social scene. Ethnography is used to examine issues of a culture that are of interest to nursing.

- In understanding the historical influences on nursing knowledge, nursing as a profession struggled for years to establish its own identify and to receive recognition for its contributions to health care. Why?
- A) The conceptual and theoretical basis for nursing practice came from outside the profession.
- B) Nurses were too busy working in practice to increase the public awareness associated with the role of the nurse.
- C) Nurses spent most of their time in laboratory settings conducting research.
- D) Women were independent and refused to work collectively.

Ans: A

# Feedback:

Despite Florence Nightingale's belief in the uniqueness of nursing, the training of nurses was initially carried out under the direction and control of the medical profession. Because the conceptual and theoretical basis for nursing practice came from outside the profession, nursing struggled for years to establish its own identify and to receive recognition for its significant contributions to health care.

An obstetrical nurse wishes to identify whether clients' perceptions of a high level of support from their partner is associated with a decreased length of the second stage of labor. Which type of quantitative research is most appropriate

- 6. for this research question?
- A) Correlational research
- B) Descriptive research
- C) Quasi-experimental research
- D) Experimental research

Ans: A

#### Feedback:

Correlational quantitative research is used to examine relationships between two or more variables. In this case, the variables are perceptions of partner support and length of Stage 2 labor. There is no manipulation of the variables as there would be in an experimental or quasi-experimental study. The focus on the relationship between the two variables

	goes beyond simple description of events.
7.	Nurse researchers have predicted that a newly created mentorship program will result in decreased absenteeism, increased retention, and decreased attrition among a hospital's nursing staff. Which of the following does this predicted relationship represent?
A)	Hypothesis
B)	Dependent variable
C)	Abstract
D)	Methodology
Ans:	A
	Feedback:
	A hypothesis is an expected statement of the relationship between variables in a study. In this study, the dependent variables are absenteeism, retention, and attrition while the independent variable is the mentorship program. The methodology of a study is the logistical framework that guides the planning and execution of the study. An abstract is a summary of a research study published in a journal.
8.	The practice of changing patients' bedclothes each day in acute care settings is an example of what type of knowledge?
A)	Authoritative
B)	Traditional
C)	Scientific
D)	Applied
Ans:	В
	Feedback:
	Changing bedclothes daily in acute care settings is an example of traditional knowledge. The practice is not based on research findings, but is rather a part of nursing practice passed down from generation to generation.
9.	A student nurse learns how to give injections from the nurse manager. This is an example of the acquisition of what type of knowledge?
A)	Authoritative
B)	Traditional
C)	Scientific
D)	Applied
Ans:	A
	Feedback:
	Authoritative knowledge comes from an expert and is accepted as truth, based on the person's perceived expertise. Authoritative knowledge generally remains unchallenged as long as the presumed authority maintains his or her perceived expertise.
10.	A client undergoing chemotherapy for a brain tumor believes that having a good attitude will help in the healing process. This is an example of what type of knowledge?

A)

Science

- B) Philosophy
- C) Process
- D) Virtue

Ans: B

#### Feedback:

Philosophy is the study of wisdom, fundamental knowledge, and the processes used to develop and construct one's perceptions of life. Philosophy provides a viewpoint and implies a system of values and beliefs. Each individual develops a personal philosophy to give meaning to experiences and to guide behavior and attitudes. Personal philosophies are developed by learning from interpersonal relationships, through formal and informal educational experiences, through religion and culture, and from the environment.

- 11. Which of the following accurately describes Florence Nightingale's influence on nursing knowledge?
- A) She defined nursing practice as the continuation of medical practice.
- B) She differentiated between health nursing and illness nursing.
- C) She established training for nurses under the direction of the medical profession.
- D) She established a theoretical base for nursing that originated outside the profession.

Ans: B

#### Feedback:

Nightingale influenced nursing knowledge and practice by demonstrating efficient and knowledgeable nursing care, defining nursing practice as separate and distinct from medical practice, and differentiating between health nursing and illness nursing.

- During the first half of the 20th century, a change in the structure of society resulted in changed roles for women and, in turn, for nursing. What was one of these changes?
- A) More women retired from the workforce to raise families.
- B) Women became more dependent and sought higher education.
- C) The focus of nursing changed to "hands-on training."
- D) Nursing research was conducted and published.

Ans: D

## Feedback:

As a result of World Wars I and II, women increasingly entered the workforce, became more *independent*, and sought higher education. At the same time, nursing began to focus more on education than hands-on training, and nursing research was conducted and published.

- 13. A staff nurse asks a student, "Why in the world are you studying nursing theory?" How would the student best respond?
- A) "Our school requires we take it before we can graduate."
- B) "We do it so we know more than your generation did."
- C) "I think it explains how we should collaborate with others."
- D) "It helps explain how nursing is different from medicine."

Ans: D

#### Feedback:

Nursing theory differentiates nursing from other disciplines and activities in that it serves the purpose of describing, explaining, predicting, and controlling desired outcomes of nursing care practices.

- 14. Why are the developmental theories important to nursing practice?
- A) They describe how parts work together as a system.
- B) They outline the process of human growth and development.
- C) They define human adaptation to others and to the environment.
- D) They explain the importance of legal and ethical care.

Ans: B

## Feedback:

Developmental theories outline the process of growth and development of humans as orderly and predictable, beginning with conception and ending with death. Nurses apply this knowledge to develop interventions for people across the life span. Systems theory, adaptation theories, and legal/ethical care are also important to nursing, but these do not explain the importance of human growth and development in nursing care.

- 15. There are four concepts common in all nursing theories. Which one of the four concepts is the focus of nursing?
- A) Person
- B) Environment
- C) Health
- D) Nursing

Ans: A

## Feedback:

The four concepts listed are all common in nursing theory, but the most important—and the focus of nursing—is the person (client).

- 16. What is the ultimate goal of expanding nursing knowledge through nursing research?
- A) Learn improved ways to promote and maintain health.
- B) Develop technology to provide hands-on nursing care.
- C) Apply knowledge to become independent practitioners.
- D) Become full-fledged partners with other care providers.

Ans: A

# Feedback:

The ultimate goal of expanding nursing's body of knowledge through nursing research is to learn improved ways to promote and maintain health. Ongoing practice-based research reflects the nursing profession's commitment to meet the ever-changing demands of health care consumers. While doing research also facilitates the development of technology, helps produce independent practitioners, and provides partnerships with other providers of care, those are not the ultimate goals of nursing research.

What was significant about the promotion of the National Center for Nursing Research to the current National Institute 17. of Nursing Research (NINR)? Increased numbers of articles are published in research journals. A) NINR gained equal status with all other National Institutes of Health. B) C) NINR became the major research body of the International Council of Nurses. D) It decreased emphasis on clinical research as an important area for nursing. Ans: B Feedback: The National Center for Nursing Research was promoted to the National Institute of Nursing Research (NINR) in 1993, gaining equal status with all other National Institutes of Health. 18. Which of the following is a responsibility of an institutional review board (IRB)? A) Secure informed consent for researchers Review written accuracy of research proposals B) C) Determine risk status of all studies D) Secure funding for institutional research Ans: C Feedback: Federal regulations require that institutions receiving federal funding, or conducting studies of drugs or medical devices regulated by the Food and Drug Administration establish IRBs. The IRB reviews all studies conducted in the institution to determine risk status and to ensure that ethical principles are followed. The IRB does not secure informed consent, review the accuracy of proposals, or secure funding. Before developing a procedure, a nurse reviews all current research-based literature on insertion of a nasogastric tube. 19. What type of nursing will be practiced based on this review? A) Institutional practice B) Authoritative nursing C) Evidence-based nursing D) Factual-based nursing Ans: C Feedback: Evidence-based nursing practice (EBNP) is the conscientious, explicit, and judicious use of research-based information in making decisions about the delivery of care. EBNP does not include institutional practice, authoritative nursing, or factual-based nursing. One step in implementing evidence-based practice is to ask a question about a clinical area of interest or an intervention. The most common method is the PICO format. Which of the following accurately defines the letters in the PICO 20. acronym? A) P = population

I = institution

B)

- C) C = compromise
- D) O = output

Ans: A

## Feedback:

P = patient, population, or problem of interest, I = intervention of interest, C = comparison of interest, and O = outcome of interest

- The nurse understands that general systems theory has important implications in nursing. Which of the following is an 21. assumption of the general systems theory?
- A) Human systems are open and dynamic.
- B) All humans are born with instinctive needs.
- C) Human needs are motivational forces.
- D) People grow and change throughout their lives.

Ans: A

## Feedback:

General systems theory assumes that human systems are open and dynamic with implicit boundaries. Human needs theory assumes that all humans are born with instinctive needs and human needs are motivational forces. Change theory assumes that people grow and change throughout their lives.

A nursing student is conducting a literature review via the Internet to identify a problem area that may be applicable in scope for nursing. When conducting the search, which of the following would be most important for the student to keep in mind?

- A) The Internet should be the last resort for scientific literature review.
- B) Very few nursing sites are available through the Internet.
- C) Most websites that provide nursing information are reliable.
- D) MedLine is a reputable online database of nursing information.

Ans: D

22.

## Feedback:

MedLine is a highly reputable online database of nursing information. The Internet is continuously growing as a resource for nursing research and has developed into a sophisticated tool for information retrieval, as well as research for the general public and for nursing and health professionals. Hundreds of sites are available through the World Wide Web. However, not all websites that provide nursing information are reliable.

A group of students is reviewing information about evidence-based practice in preparation for an exam. The students demonstrate understanding of the information when they identify which of the following as associated with evidence-

- 23. based practice?
- A) It emphasizes personal experience over science.
- B) Clinical expertise is integrated with external evidence.
- C) It involves gaining solutions to problems.
- D) The purpose is to learn about a specific problem.

۸.		D
Ή	18.	D

## Feedback:

Evidence-based practice (EBP) is an approach to health care that realizes that pathophysiologic reasoning and personal experience are necessary, but not sufficient for making decisions. Advocates argue that medical decisions should be based, as much as possible, on a firm foundation of high-grade scientific evidence, rather than on experience or opinion. Its practice involves integrating individual clinical expertise with the best available external evidence from systematic research. Nursing research aims to gain solutions to problems, learn about a specific problem, or to understand a situation.

- A nurse researcher decides to conduct a qualitative research study. With which of the following would the researcher be 24. involved?
- A) Collection of numerical data
- B) Determination of cause and effect
- C) Controlling personal biases
- D) Real world data collection

Ans: D

## Feedback:

Qualitative research strives for an understanding of the whole and requires the researcher to become the instrument as data is collected in the real-world, naturalistic setting. Numerical data, cause and effect and control of personal bias are key aspects of quantitative research.

- 25. In what way can a nurse differentiate strong research from poor research?
- A) By conducting the research
- B) Through author dialogue
- C) By critiquing the study
- D) Through the nurse's own informal investigation

Ans: C

# Feedback:

Nurses must have a working knowledge of research methods, and a beginning ability to read for application and to critique research.

- 26. Nursing research is linked most closely to what?
- A) Propositions
- B) Outcome measures
- C) Treatments
- D) Nursing process

Ans: D

#### Feedback:

Many similarities are found between the formalized research process and the nursing process format that is an integral part of nursing education.

27.	Which of the following research studies would be of most interest to a nurse manager?				
A)	Sister Callista Roy's theory on adaptation				
B)	Patricia Benner's From Novice to Expert				
C)	Kleinpell and Ferrans' older intensive-care clients				
D)	Madeleine Leininger's transcultural nursing theory				
Ans:	В				
	Feedback:				
	Research affects the clinical practice of nurses in all areas, particularly in relation to the goals of nursing. Benner's research will assist a nurse manager to support all levels of his or her staff.				
28.	How are the first stages of the nursing process and nursing research linked?				
A)	They will answer a posed question.				
B)	Each begins with goal development.				
C)	The nurse assesses problems initially.				
D)	There is a period of evaluation.				
Ans:	С				
Feedback:					
	The first step for the practicing nurse is to assess a problem; for the researcher, the first step is to recognize the general problem area.				
29.	A nursing instructor would like to study the effect peer tutoring has on student success. What is the independent variable?				
A)	Nursing student				
B)	Nursing education				
C)	Peer tutoring				
D)	Student success				
Ans:	С				
	Feedback:				
	The independent variable is the presumed cause or influence on the dependent variable.				
30.	A nursing student has been asked to correlate her clinical experiences with two different theories of nursing. The student will recognize that which of the following concepts are common to all theories of nursing? Select all that apply.				
A)	The client				
B)	The environment				
C)	Illness				
D)	Needs				
E)	Nursing				

## Ans: A, B, E

#### Feedback:

While nursing theories vary significantly in their conceptualizations, the elements that are common to all include the client (person), the environment, health, and nursing. The concepts of needs and illness are addressed by some theories but these are not explicitly defined by other theories.

- 31. Which of the following are examples of characteristics of evidence-based practice? Select all that apply.
- A) It is a problem-solving approach.
- B) It uses the best evidence available.
- C) It is generally accepted in clinical practice.
- D) It is based on current institutional protocols.
- E) It blends the science and art of nursing.

#### Ans: A, B, E

#### Feedback:

Evidence-based nursing is a problem-solving approach to making clinical decisions, using the best evidence available. EBP may meet resistance in clinical practice as a result of the nursing shortage, the acuity level of clients, nurse's skill in reading and evaluating published research, and an organizational culture that does not support change. EBP blends both the science and the art of nursing so that the best client outcomes are achieved. EBP takes into consideration client preferences and values as well as the clinical experiences of the nurse.

- 32. Which of the following are characteristics of nursing theories? Select all that apply.
- A) They provide rational reasons for nursing interventions.
- B) They are based on descriptions of what nursing should be.
- C) They provide a knowledge base for appropriate nursing responses.
- D) They provide a base for discussion of nursing issues.
- E) They help resolve current nursing issues and establish trends.

# Ans: A, C, D, E

## Feedback:

Nursing theory provides rational and knowledgeable reasons for nursing interventions, based on descriptions of what nursing is and what nurses do. Additionally, nursing theory gives nurses the knowledge base necessary for acting and responding appropriately in various situations. It also provides a base for discussion, and, ideally, helps resolve current nursing issues. Nursing theories should be simple and general; simple terminology and broadly applicable concepts ensure their usefulness in a wide variety of nursing practice situations.

- 33. Which of the following examples represents the type of knowledge known as process? Select all that apply.
- A) A nurse dispenses medications to clients.
- B) A nurse changes the linens on a client's bed.
- C) A nurse studies a nursing journal article on infection control.
- D) A nurse consults an ethics committee regarding an ethical dilemma.
- E) A nurse believes in providing culturally competent nursing care.

Ans: A, B

#### Feedback:

A process is a series of actions, changes, or functions intended to bring about a desired result. During a process, one takes systematic and continuous steps to meet a goal and uses both assessments and feedback to direct actions that meet the goal. Reading a nursing journal is considered science. Consulting an ethics committee and providing culturally competent nursing care is considered philosophy.

- Which qualitative research method is described as follows: to describe experiences as they are lived by the subjects 34. being studied?
- A) Historical
- B) Ethnography
- C) Grounded theory
- D) Phenomenology

Ans: D

#### Feedback:

The purpose of phenomenology, which is both a philosophy and a research method, is to describe experiences as they are lived by the subjects being studied. Historical research examines events of the past to increase understanding of the nursing profession today. Ethnography is used to examine issues of a culture that are of interest to nursing. The basis of grounded theory methodology is the discovery of how people describe their own reality, and how their beliefs are related to their actions in a social scene.

- The nurse working in research correctly identifies which of the following to be mandatory for the ethical conduction of 35. research in a hospital setting?
- A) Clients must grant informed consent if they are to participate.
- B) All interventions must benefit all clients.
- C) The client must directly and personally benefit from the research.
- D) Descriptive studies are more ethical than experimental studies.

Ans: A

## Feedback:

Informed consent is an absolute prerequisite for clients who are asked to participate as subjects in a research study. Not all interventions will benefit all (or even any) clients. The risks and benefits of research are considered carefully in light of ethical principles, but this does not necessarily mean that every participant in a study stands to benefit from it. Ethical standards are applicable and achievable in every type of research, and descriptive studies are not necessarily more ethical than experiments.