

## Chapter 2: Understanding the Research Process and Ethical Issues in Nursing Research

### Multiple Choice

Identify the choice that best completes the statement or answers the question.

- \_\_\_\_\_ 1. A research design that examines relationships between and among variables is referred to as:
1. longitudinal.
  2. correlational.
  3. prospective.
  4. retrospective.
- \_\_\_\_\_ 2. Nonexperimental research is often said to be weaker than experimental research in terms of:
1. establishing whether a problem exists.
  2. establishing for whom a problem exists.
  3. documenting a causal relationship.
  4. all of the above.
- \_\_\_\_\_ 3. A situation where the identity of subjects remains unknown to protect subjects participating in a study is referred to as:
1. confidentiality.
  2. human rights.
  3. risk-benefit ratio.
  4. anonymity.
- \_\_\_\_\_ 4. All of the following groups deserve special protection as subjects in research, except:
1. men and women over 65 years of age.
  2. children.
  3. prisoners.
  4. mentally ill.
- \_\_\_\_\_ 5. A researcher wants to determine if nurses' levels of empathy for patients change after graduation from nursing school. The following groups are measured: new graduates, nurses who have worked for 2 years, and nurses who have worked for 5 years, on empathy toward patients with a comparison of scores. This study is:
1. prospective.
  2. retrospective.
  3. cross-sectional.
  4. experimental.
- \_\_\_\_\_ 6. A researcher designs an experiment to test how variables interact to influence how well children learn. The main purpose of this study is:
1. description.
  2. explanation.
  3. influence.
  4. prediction.
- \_\_\_\_\_ 7. A study that follows a cohort of subjects and collects data over time is referred to as:
1. observational.
  2. retrospective.
  3. longitudinal.
  4. experimental.

- \_\_\_\_\_ 8. Individuals who provide data in a research study are often referred to as the:
1. population.
  2. data points.
  3. coding plan.
  4. sample.
- \_\_\_\_\_ 9. Which of the following statements is not true of an Institutional Review Board (IRB)?
1. An IRB assures that researchers do not engage in unethical behavior.
  2. All IRB members must have an affiliation with the institution.
  3. An IRB can use an expedited review process where there are minimal risks.
  4. Certain types of research are exempt from the IRB process.
- \_\_\_\_\_ 10. Providing subjects with an estimate of the potential risks in relation to the potential benefits is called the:
1. right to privacy and dignity.
  2. right to anonymity and confidentiality.
  3. risk-benefit ratio.
  4. right to self-determination.
- \_\_\_\_\_ 11. As a patient advocate, what is the nurse's role in carrying out research activities?
1. Determine if the study has been reviewed by the IRB.
  2. Report human rights violations to the patient's physician.
  3. Assume the subject's rights have been adequately addressed.
  4. Presume informed consent has been handled adequately.
- \_\_\_\_\_ 12. Which study may qualify for an expedited IRB review?
1. A study to determine if low dose aspirin prevents thrombophlebitis
  2. The effect of a dark room on the quality of sleep in hospitalized patients
  3. The effects of niacin on coronary artery disease
  4. A study on the link between birth control and depression in women of childbearing age
- \_\_\_\_\_ 13. Which statement by a research study participant might indicate informed consent has not occurred?
1. "The doctor explained to me what the research study is all about."
  2. "I volunteered to participate in the research study."
  3. "I already signed the consent form."
  4. "If I change my mind I will be billed for the research medicine I've already taken."
- \_\_\_\_\_ 14. Pure or fundamental research is often referred to as:
1. basic.
  2. applied.
  3. experimental.
  4. nonexperimental.
- \_\_\_\_\_ 15. A study performed on hospitalized patients with the intention to change nursing practice is considered what type of research?
1. Basic
  2. Applied
  3. Nonexperimental
  4. Descriptive

**Chapter 2: Understanding the Research Process and Ethical Issues in Nursing Research**  
**Answer Section**

**MULTIPLE CHOICE**

1. ANS: 2

Chapter: Understanding the Research Process and Ethical Issues in Nursing Research  
 Chapter Learning Objective: 2. Distinguish between basic and applied research and between experimental and nonexperimental research.

Page: 26

Heading: Experimental Versus Nonexperimental

Integrated Processes: Nursing Process

Client Need: Safe and Effective Care Environment

Cognitive Level: Comprehension

Concept: Evidence-based practice

Difficulty: Easy

	Feedback
1	This is incorrect. Longitudinal research follows a cohort of subjects and collects data over time.
2	This is correct. Correlational research is a research design that examines relationships between and among variables.
3	This is incorrect. Prospective research examines data collected in the present.
4	This is incorrect. Retrospective research examines data collected in the past.

PTS: 1

CON: Evidence-based practice

2. ANS: 3

Chapter: Understanding the Research Process and Ethical Issues in Nursing Research  
 Chapter Learning Objective: 2. Distinguish between basic and applied research and between experimental and nonexperimental research.

Page: 25

Heading: Experimental Versus Nonexperimental

Integrated Processes: Nursing Process

Client Need: Safe and Effective Care Environment

Cognitive Level: Analysis

Concept: Evidence-based practice

Difficulty: Hard

	Feedback
1	This is incorrect. Nonexperimental and experimental research may establish whether a problem exists.
2	This is incorrect. Both nonexperimental and experimental research may establish for whom a problem exists.
3	This is correct. Nonexperimental research is descriptive or exploratory in nature. Causal relationships may not be studied.
4	This is incorrect. Instead of causal relationships, nonexperimental research refers to studies that are descriptive or exploratory.

PTS: 1

CON: Evidence-based practice

3. ANS: 4

Chapter: Understanding the Research Process and Ethical Issues in Nursing Research  
 Chapter Learning Objective: 3. Understand human rights as they apply to undertaking research involving human participants.

Page: 37

Heading: Right to Anonymity and Confidentiality

Integrated Processes: Nursing Process

Client Need: Psychosocial Integrity

Cognitive Level: Comprehension

Concept: Ethics

Difficulty: Easy

	Feedback
1	This is incorrect. Confidentiality refers to protecting data by not divulging information that is gathered or learned about that patient without permission to do so.
2	This is incorrect. Human rights refers to the protection of humans in a research study. These rights include the right to freedom from injury, the right to privacy and dignity, and the right anonymity and confidentiality.
3	This is incorrect. Risk-benefit ratio is the relationship between potential harm to subjects and potential positive outcomes of participating in a research study.
4	This is correct. Anonymity is a condition in which the identity of subjects remains unknown, even to the researcher, to protect subjects participating in a study and to promote objective results.

PTS: 1                      CON: Ethics

4. ANS: 1

Chapter: Understanding the Research Process and Ethical Issues in Nursing Research  
 Chapter Learning Objective: 3. Understand human rights as they apply to undertaking research involving human participants.

Page: 36

Heading: Vulnerable Research Participants Needing Protection

Integrated Processes: Nursing Process

Client Need: Psychosocial Integrity

Cognitive Level: Comprehension

Concept: Ethics

Difficulty: Moderate

	Feedback
1	This is correct. Vulnerable research participants are those persons who are relatively or absolutely incapable of protecting their own interests and unable to provide meaningful informed consent.
2	This is incorrect. Because they are incapable of protecting their own interests and they cannot provide meaningful informed consent, children deserve special protection as subjects of research.
3	This is incorrect. Prisoners may not be able to protect their own interests and, therefore, deserve special protection as subjects of research.
4	This is incorrect. Because they may be incapable of protecting their own interests and they may not be able to provide meaningful informed consent, the mentally ill deserve special protection as subjects of research.

PTS: 1                      CON: Ethics

5. ANS: 3

Chapter: Understanding the Research Process and Ethical Issues in Nursing Research  
Chapter Learning Objective: 2. Distinguish between basic and applied research and between experimental and nonexperimental research.

Page: 26

Heading: Cross-sectional Versus Longitudinal Research

Integrated Processes: Nursing Process

Client Need: Safe and Effective Care Environment

Cognitive Level: Application

Concept: Evidence-based practice

Difficulty: Moderate

	Feedback
1	This is incorrect. Prospective research is a study that examines data collected only in the present.
2	This is incorrect. Retrospective research examines data collected only in the past.
3	This is correct. A cross-sectional study collects data from a single point in time with no follow-up.
4	This is incorrect. Experimental research is a study in which the researcher manipulates and controls one or more variables and observes the effect on another variable.

PTS: 1                      CON: Evidence-based practice

6. ANS: 2

Chapter: Understanding the Research Process and Ethical Issues in Nursing Research  
Chapter Learning Objective: 2. Distinguish between basic and applied research and between experimental and nonexperimental research.

Page: 25

Heading: Experimental Versus Nonexperimental

Integrated Processes: Nursing Process

Client Need: Safe and Effective Care Environment

Cognitive Level: Application

Concept: Evidence-based practice

Difficulty: Moderate

	Feedback
1	This is incorrect. The purpose of an experiment designed to test how variables interact to influence how well children learn is explanation.
2	This is correct. The researcher who designs an experiment to test how variables interact to influence how well children learn is looking for an explanation.
3	This is incorrect. An experiment designed to test how variables interact to influence how well children learn is looking for an explanation.
4	This is incorrect. Explanation is the purpose of an experiment designed to test how variables interact to influence how well children learn.

PTS: 1                      CON: Evidence-based practice

7. ANS: 3

Chapter: Understanding the Research Process and Ethical Issues in Nursing Research  
Chapter Learning Objective: 2. Distinguish between basic and applied research and between experimental and nonexperimental research.

Page: 28

Heading: Cross-sectional Versus Longitudinal Research

Integrated Processes: Nursing Process

Client Need: Safe and Effective Care Environment  
 Cognitive Level: Comprehension  
 Concept: Evidence-based practice  
 Difficulty: Easy

	Feedback
1	This is incorrect. Studies that follow research subjects over a period of time are referred to as longitudinal.
2	This is incorrect. Retrospective research examines data collected in the past.
3	This is correct. A study that follows a cohort of subjects and collects over time is referred to as longitudinal.
4	This is incorrect. Experimental research is where the researcher manipulates and controls one or more variables and observes the effect on another variable.

PTS: 1                      CON: Evidence-based practice

8. ANS: 4

Chapter: Understanding the Research Process and Ethical Issues in Nursing Research  
 Chapter Learning Objective: 1. Identify the basic components of the research process.  
 Page: 25  
 Heading: Experimental Versus Nonexperimental  
 Integrated Processes: Nursing Process  
 Client Need: Safe and Effective Care Environment  
 Cognitive Level: Application  
 Concept: Evidence-based practice  
 Difficulty: Moderate

	Feedback
1	Incorrect. The sample refers to the individuals in a population who provide data in a research study.
2	Incorrect. Data points are the measurements documented in a study.
3	Incorrect. The sample is the population of individuals providing data in a research study.
4	Correct. Individuals who provide data in a research study are often referred to as the sample.

PTS: 1                      CON: Evidence-based practice

9. ANS: 2

Chapter: Understanding the Research Process and Ethical Issues in Nursing Research  
 Chapter Learning Objective: 5. Explain the role of institutional review boards in safeguarding the rights of subjects participating in a study.  
 Page: 41  
 Heading: Institutional Review Boards  
 Integrated Processes: Nursing Process  
 Client Need: Safe and Effective Care Environment  
 Cognitive Level: Application  
 Concept: Ethics  
 Difficulty: Moderate

	Feedback
1	Incorrect. The IRB assures that researchers do not engage in unethical behavior
2	Correct. IRB members may be lawyers, clergy, or lay persons unaffiliated with the institution.

3	Incorrect. An IRB can use an expedited review process where there are minimal risks.
4	Incorrect. Certain types of research are exempt from the IRB process.

PTS: 1                      CON: Ethics

10. ANS: 3

Chapter: Understanding the Research Process and Ethical Issues in Nursing Research

Chapter Learning Objective: 6. Explain how to evaluate the ethical implications of a research report.

Page: 36

Heading: Vulnerable Research Participants Needing Protection

Integrated Processes: Nursing Process

Client Need: Safe and Effective Care Environment

Cognitive Level: Comprehension

Concept: Ethics

Difficulty: Easy

	Feedback
1	This is incorrect. The right to privacy and dignity is a basic human right for research participants.
2	This is incorrect. The right to anonymity and confidentiality is a basic human right for research participants.
3	This is correct. Providing subjects with an estimate of the potential risks in relation to the potential benefits is called the risk-benefit ratio.
4	This is incorrect. The right to self-determination is a basic human right for research participants.

PTS: 1                      CON: Ethics

11. ANS: 1

Chapter: Understanding the Research Process and Ethical Issues in Nursing Research

Chapter Learning Objective: 6. Explain how to evaluate the ethical implications of a research report.

Page: 43

Heading: Evaluating Evidence for the Protection of Human Rights

Integrated Processes: Nursing Process

Client Need: Safe and Effective Care Environment

Cognitive Level: Comprehension

Concept: Ethics

Difficulty: Easy

	Feedback
1	This is correct. As patient advocate, the nurse's role is to determine that the study has been reviewed by the IRB.
2	This is incorrect. Human rights violations are to be reported to the researcher and the IRB.
3	This is incorrect. The nurse should never assume the subject's rights have been adequately addressed.
4	This is incorrect. The nurse must verify that adequate informed consent has occurred.

PTS: 1                      CON: Ethics

12. ANS: 2

Chapter: Understanding the Research Process and Ethical Issues in Nursing Research

Chapter Learning Objective: 5. Describe the role of institutional review boards in safeguarding the rights of subjects participating in a study.

Page: 41

Heading: Institutional Review Boards

Integrated Processes: Nursing Process

Client Need: Safe and Effective Care Environment

Cognitive Level: Application

Concept: Ethics

Difficulty: Moderate

	Feedback
1	This is incorrect. Expedited review may be granted for studies that consist of routine noninvasive procedures or when the study can be conducted with interviews or review of existing records. A study to determine if low dose aspirin prevents thrombophlebitis would not likely meet these requirements.
2	This is correct. Studies that consist of routine noninvasive procedures or when the study can be conducted with interviews or review of existing records may be granted expedited review. The effect of a dark room on the quality of sleep in hospitalized patients would likely meet these criteria.
3	This is incorrect. Studies that consist of routine noninvasive procedures or when the study can be conducted with interviews or review of existing records may be granted an expedited review. The effects of niacin on coronary artery disease would not meet these requirements.
4	This is incorrect. Research studies consisting of routine noninvasive procedures or that can be conducted with interviews or review of existing records may be granted an expedited review. A study on the link between birth control and depression in women of childbearing age would not likely meet these requirements.

PTS: 1

CON: Ethics

13. ANS: 4

Chapter: Understanding the Research Process and Ethical Issues in Nursing Research

Chapter Learning Objective: 4. Define “informed consent” and its key elements.

Page: 38

Heading: Key Elements of Informed Consent

Integrated Processes: Nursing Process

Client Need: Safe and Effective Care Environment

Cognitive Level: Application

Concept: Ethics

Difficulty: Easy

	Feedback
1	This is incorrect. During the informed consent process the subject is provided information about the research study.
2	This is incorrect. During the informed consent process subjects are assured that participation is voluntary.
3	This is incorrect. During the informed consent process the subject signs a written consent form.
4	This is correct. During the informed consent process the subject is assured that consent can be withdrawn at any time without negative consequences.

PTS: 1                    CON: Ethics

14. ANS: 1

Chapter: Understanding the Research Process and Ethical Issues in Nursing Research

Chapter Learning Objective: 2. Distinguish between basic and applied research and between experimental and nonexperimental research.

Page: 23

Heading: Basic Versus Applied Research

Integrated Processes: Nursing Process

Client Need: Safe and Effective Care Environment

Cognitive Level: Comprehension

Concept: Evidence-based practice

Difficulty: Easy

	Feedback
1	This is correct. Basic research is often referred to as pure or fundamental research.
2	This is incorrect. Applied research is a type of study designed to gather knowledge that has direct clinical application.
3	This is incorrect. Experimental research is a study in which the researcher manipulates and controls one or more variables and observes the effect on other variables.
4	This is incorrect. Nonexperimental research is a descriptive study that does not exhibit a great amount of control over variables.

PTS: 1                    CON: Evidence-based practice

15. ANS: 2

Chapter: Understanding the Research Process and Ethical Issues in Nursing Research

Chapter Learning Objective: 2. Distinguish between basic and applied research and between experimental and nonexperimental research.

Page: 23

Heading: Basic Versus Applied Research

Integrated Processes: Nursing Process

Client Need: Safe and Effective Care Environment

Cognitive Level: Application

Concept: Evidence-based practice

Difficulty: Easy

	Feedback
1	This is incorrect. Basic research is often referred to as pure or fundamental research.
2	This is correct. Research conducted to gain knowledge that can be used in a practical setting is referred to as applied research.
3	This is incorrect. Nonexperimental research is a descriptive study that does not exhibit a great amount of control over variables.
4	This is incorrect. Nonexperimental research, also called descriptive research, is a descriptive study that does not exhibit a great amount of control over variables.

PTS: 1                    CON: Evidence-based practice