

BRIDGE Patient to Investigator Training Module 3 Types of Research Review Questions and Answer Key

Questions:

- 1. Choose the answer below that best answers the question: "We do research to...."
 - a. Answer a question
 - b. Help make decisions
 - c. Know more about a topic
 - d. Get the best possible information about a topic, problem, disease or question
 - e. All of the above
- 2. This COPD Foundation Training is focused on which type of research (choose one answer below):
 - a. Animal—studying how treatments work in animals
 - b. Molecular—studying disease at the cellular level
 - c. Human Participants—research that deals with patients, patient information or care given to patients
 - d. All of the above

Observational research studies vs. Experimental research studies:

- 3. Which of the following statements is NOT TRUE for Observational studies? (choose one)
 - a. Researchers gather information about something that has already happened.
 - b. Nothing is changed—there is no intervention.
 - c. Researchers make a change with one group of patients and observe how the change affected the patients.
 - d. The research team observes, gathers, measures, records and analyzes information and makes a conclusion.
- 4. Which of the following statements is NOT TRUE for Experimental studies (choose one):
 - a. The research team makes a change with one group of patients and then observes how this change affected the patient.
 - b. The "changed" or intervention group is often compared to a group that is not changed—a group that did not receive the intervention-- called the usual care or control group.
 - c. Researchers gather information about something that has already happened.



5. Which of these "types of studies" are Observational and which are Experimental?

- a. *Cohort study*-a group of people are studied over an extended period of time.
- b. <u>Cross-sectional study</u>—a selected group of people are interviewed/surveyed on a topic during a specific time frame
- c. <u>Randomized Controlled (Clinical) Trial</u>—people are assigned to either the group that gets the treatment or the group that gets the "fake" treatment. Grps are compared.
- d. **Epidemiology Study**—Uses new observations or existing information to better define a condition and who will get it.
- e. <u>Comparative-effectiveness study</u>—2 or more groups compare newer medications to other medications
- f. <u>Case-control study</u>—looks backwards to determine what reasons, behaviors, situations caused a certain result
- g. <u>Pragmatic clinical trial</u>—a change or "intervention" is delivered in a real-world setting

Match the type of research with the correct description below:

Type of Research:

- 6. Qualitative Study
- 7. Quantitative Study
- 8. Mixed Results Study

Research Description:

- a. Uses tests, questionnaires or surveys to collect information which is recorded using numbers. Numbers are also used to report the results. This is the most common type of medical research.
- b. Often uses ideas and opinions collected first to determine what tests to then do for collecting results expressed in numbers.
- c. Information collected is often ideas, opinion, beliefs, attitudes, and concerns and can be gathered via focus groups or interviews or oral histories. Results are reported in words and summarized into areas of thoughts called domains.
- 9. True or false: All of the types of studies discussed in this module and listed in the previous question can become Patient-Centered Outcomes Research?
 - a. True
 - b. False



10. Which of the following statements is NOT TRUE about Patient-Centered Outcomes Research?

- a. It is research that asks questions and studies topics that are of most interest to patients and their caregivers
- b. It is focused on patients' unique perspectives
- c. Can easily be done with mice in a laboratory setting as well.
- d. Done with the belief that considering the patient perspective will improve how research questions are developed and how research is done

Answers:

1. e

Explanation: All of the answers listed—to answer a question, to help make a decision, to know about a topic and to gather the best information—are ALL good reasons to do research.

2. c

Explanation: We will only be focused on research studies that involve people, specifically: patients and patient caregivers like YOU.

3. c

Explanation: Observational studies have no change or "intervention" that occurs. Observational studies use existing information or new information obtained from observing, interviewing, surveying, etc.

4. c

Explanation: Experimental studies involve a new intervention or change to a group of people, often in comparison to others. So the answer "Researchers gather information about something that has already happened" is NOT TRUE for experimental studies—since this is not a new change or intervention.

5. "O" for Observational=answers a, b, d, and f (See slides 12-14 for more explanation) "E" for Experimental=answers c, e and g (See slides 18-21 for more explanation)

6. c

7. a

8. b

Explanation: See slides 22-26 for more explanation



9. a-True

Explanation: All of the types of studies discussed in this training can be used with patients and can strive to include the unique patient perspective in their study planning, design and outcomes.

10. c

Explanation: Research done in a laboratory using mice would NOT be Patient-Centered Outcomes Research as it is not involving humans, the unique patient perspective or input from patients.