Types of Observational Studies

Observational Studies use existing information or new information by watching without interfering.

Cohort Study

**Studies** and compares a “cohort” of people (a group of people who share a defining characteristic)—over an extended period of time.

For example, observes and may compare those who have one behavior (or exposure) like smoking to those who don’t have the behavior/exposure. Or those who have quit smoking to those who have not.

*Can answer questions like:* How does that “blank” change a person’s risk of getting a disease or living longer if they have the disease? For example, does smoking affect health? Does quitting smoking affect outcomes or diseases?

Cross-Sectional Study

Uses a survey/interview to gather facts (and sometimes opinions) from a selected group of people for a specific topic and usually for a limited time period.

*Can answer questions like:* Do people with COPD think that quitting smoking will help improve their COPD symptoms—early in disease, later in disease?

Case-Control Study

Looks backwards to determine what might be associated with a certain result. Compares individuals with the result (or disease) to those without—looking for reasons, behaviors, situations that caused the one group to have the result or disease. May use interviews or a review of medical records to identify cases and controls.

*Can answer questions like:* Do women have more rapid decline in lung function than men who smoked the same amount?

Epidemiology Studies

An epidemiology study uses new observations or existing information like what is in medical records to better define a condition and who is likely to have that condition in a population of people.

*Can answers questions like:* What is the frequency of COPD in men and women, in Asian, Black, White or Native American populations, in those younger or older than 60 years of age.

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