



Analytical Epidemiology

A study designed to investigate hypothesized causal relationships.

Tries to determine why disease is occurring.

Tests hypotheses.

Association

Things that are linked in some way that makes them turn up together.

Beneficence

An effort to secure people's well-being.

A decision about when it is justifiable to seek certain benefits despite the risks involved.

Case-Control Study

An analytical epidemiological study design in which the investigator selects a group of individuals with a disease (cases) and a group of similar individuals without the disease (controls) and compares the frequency with which an exposure occurred in the cases versus the controls.

Cohort Study

An analytical epidemiological study design in which the investigator selects a group of exposed individuals and a group of unexposed individuals and follows both groups to compare the frequency with which the disease occurs in each group.

Control Group

People who participate in a trial, but do not get the treatment.

People whose results are compared to the group that was treated.

Controlled Trial

An epidemiologic experiment in which subjects are assigned into groups to receive or not receive a hypothesized beneficial intervention.

Cross-Sectional Study

An analytical epidemiological study design in which the investigator selects a group of individuals and determines the presence or absence of a disease and the presence or absence of an exposure at the same time.

Ethical

In accordance with the accepted principles of right and wrong governing the conduct of a group.

Experimental Group

People who participate in a trial and get the treatment.

People whose results are compared to the group that was not treated.

Exposures

Factors with which individuals come in contact.

IMRAD

Format usually followed when epidemiological studies are published in medical journals.

Introduction: Why the authors decided to do the study,
Methods: How authors did the study,
Results: What the authors found, and
And
Discussion: What the results mean.

Inference

Process of predicting from what is observed in a sample to what is not observed in a population.

To generalize back to the source population.

Informed Consent

Voluntary consent given by a person for participation in a study.

Participants must know and understand the study, give consent without coercion, and know that they can withdraw at any time.

Justice

Fair distribution of the benefits of research and the burdens of being a research subject.

Natural Experiment

Naturally occurring circumstances in which groups of people within a population have been exposed to different levels of the hypothesized cause of an outcome.

Observational Studies

Epidemiologic studies of natural experiments in which the investigator is not involved in the intervention other than to record, classify, count, and statistically analyze results.

Outcomes

All the possible results that occur because of exposure to a causal factor.

Relative Risk

A way of showing the relationship between two risks.

Tells us the number of times one risk is larger or smaller than another.

Calculated by dividing the risk of an outcome in one group by the risk of the outcome in another group .

Respect for Persons

Respect individual autonomy (independence, freedom, capacity for self direction).

Provides extra protection for those with less autonomy.

Risk

A measure of how often an event occurs in a defined group of people in a defined period of time.

The likelihood of developing a disease.

Study Design

Procedures and methods, established beforehand, that are followed by the investigator conducting the study.

Trial

An epidemiologic experiment in which subjects are assigned into groups to receive or not receive a hypothesized beneficial intervention.