

GLOSSARY

Adjusted analysis¹: when groups differ on baseline characteristics (eg, age), analyses of outcome data are statistically modified to account for these differences.

Blinding (masking): in an experimental study, refers to whether patients, clinicians providing an intervention, and people assessing outcomes are aware of the group to which patients have been assigned. If the patients, clinicians, and outcome assessors are all unaware of patient group assignment, a study is called "triple blind"; if 2 of the parties are blinded, a study is called "double blind"; and if only 1 of the parties is blinded, the study is called "single blind". If all parties are aware of group assignment, the study is considered to be "unblinded."

Concealed randomisation: in a randomised controlled trial, the process whereby patients and researchers have no foreknowledge of, and therefore no control over, the group to which a patient may be allocated. When randomisation is concealed (eg, patient allocation by an off site or central registry), it is not possible for the patient or researcher to change the group assignment. However, if randomisation is not concealed (eg, patient assignments are in unsealed, transparent envelopes), either the patient or researcher could, potentially, decide to select another envelope if the desired allocation is not obtained.

Consensus dialogue²: multiple concepts are analysed simultaneously, drawing on the scientific and clinical expertise of more than one individual through extensive discourse.

Confidence interval (CI): quantifies the uncertainty in measurement; usually reported as 95% CI, which is the range of values within which we can be 95% sure that the true value for the whole population lies.

Covariate¹: a potentially confounding variable that is controlled for in an analysis of covariance.

Diagnostic (gold or criterion) standard: the current best available measure of an outcome; used for assessing properties of a new diagnostic or screening test. The results from a new test are compared with the results from the diagnostic standard to assess the usefulness of the new test (ie, its sensitivity, specificity, and likelihood ratios).

Discourse analysis³: a qualitative method of investigation focused on the representation and creation of meaning through language and visual imagery. A discourse is defined as a patterned way of representing phenomena in social and material worlds.

Ethnography (ethnographic study)⁴: an approach to inquiry that focuses on the culture or subculture of a group of people, with an effort to understand the world view of those under study.

Heterogeneity⁵: the degree to which the effect estimates of individual studies in a meta-analysis differ significantly.

Intention to treat analysis (ITT): all patients are analysed in the groups to which they were randomised, even if they failed to complete the intervention or received the wrong intervention.

Interpretative anthropology⁶: a qualitative method that yields "thick description" and allows discovery and interpretation of shared meaning as they evolve through social interaction.

Likelihood ratio (for positive and negative results)⁷: a way of summarising the findings of a study of diagnostic test for use in clinical situations where there may be differences in the prevalence of the disease. The likelihood ratio for a positive test is the likelihood that a positive test result comes from a person that really does have the disorder rather than one that does not have the disorder (sensitivity/1-specificity). The likelihood ratio for a negative test is the likelihood that a negative test result comes from a person with the disorder rather than one without the disorder (1-sensitivity/specificity).

Logistic regression¹: a statistical technique that predicts the probability of a dichotomous dependent variable (eg, dead or alive) using typically, a combination of continuous and categorical independent variables. It is similar to multiple regression except that the dependent variable is categorical.

Median: the values of the middle observation in a sample. That is, if the data from 99 people were ordered from high to low, the median would be the value of the 50th observation.

Meta-analysis¹: a method for combining the results of several independent studies that measure the same outcomes so that an overall summary statistic can be calculated.

Naturalistic inquiry⁴: the goal of this research is to understand how individuals construct reality within their own natural setting and context.

Number needed to treat (NNT): number of patients who need to be treated to prevent 1 additional negative event (or to promote 1 additional positive event); this is calculated as 1/absolute risk reduction (rounded to the next whole number), accompanied by the 95% confidence interval.

Odds ratio (OR): describes the odds of a patient in the experimental group having an event divided by the odds of a patient in the control group having the event or the odds that a patient was exposed to a given risk factor divided by the odds that a control patient was exposed to the risk factor.

Phenomenology⁴: an approach to inquiry that emphasises the complexity of human experience and the need to understand that experience holistically as it is actually lived.

Purposeful (purposive) sampling⁴: a type of non-probability sampling in which the researcher selects study participants on the basis of personal judgment about which ones will be most representative of a specific population.

Receiver operating characteristic (ROC) curve⁸: an analysis used to assess the clinical usefulness of a diagnostic or screening test. It yields a score that has the highest rates of both sensitivity and specificity with respect to a diagnosis—that is, a score that will give the maximum rate of accurate classifications.

Relative risk (RR): risk of adverse effects with a treatment relative to risk for those who do not receive treatment.

Relative risk reduction (RRR): the proportional reduction in the rates of bad events between experimental and control participants; it is reported as a percentage (%).

Sensitivity⁹: a measure of a diagnostic test's ability to detect correctly a disorder when it is present in a sample of people.

Specificity⁹: a measure of a diagnostic test's ability to identify correctly the absence of a disorder in a sample of people who do not have the disorder.

Standard error: standard deviation of the mean values computed from repeated samples drawn from the same population; ie, it is the error associated with the calculated mean.

Stratified randomisation²: used in trials to ensure that equal numbers of participants with a particular characteristic (eg, age) are allocated to each comparison group.

Weighted: statistical analysis accounts for differences in certain important variables.

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