

# Glossary

**Blinding (masking):** in an experimental study, refers to whether patients, clinicians providing an intervention, people assessing outcomes, and/or data analysts were aware or unaware of the group to which patients were assigned. In the design section of *Evidence-Based Nursing* abstracts of treatment studies, the study is identified as *blinded*, with specification of who was blinded; *unblinded*, if all parties were aware of patients' group assignments; or *blinded (unclear)* if the authors did not report or provide us with an indication of who was aware or unaware of patients' group assignments.

**Concealment of randomisation:** concealment of randomisation is specified in the design section of *Evidence-Based Nursing* abstracts of treatment studies as follows: *allocation concealed* (deemed to have taken adequate measures to conceal allocation to study group assignments from those responsible for assessing patients for entry in the trial [ie, central randomisation; sequentially numbered, opaque, sealed envelopes; sealed envelopes from a closed bag; numbered or coded bottles or containers; drugs prepared by the pharmacy; or other descriptions that contain elements convincing of concealment]); *allocation not concealed* (deemed to have not taken adequate measures to conceal allocation to study group assignments from those responsible for assessing patients for entry in the trial [ie, no concealment procedure was undertaken, sealed envelopes that were not opaque or were not sequentially numbered, or other descriptions that contained elements not convincing of concealment]); *unclear allocation concealment* (the authors did not report or provide a description of an allocation concealment approach that allowed for the classification as concealed or not concealed).

**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.

**Data saturation (saturation, redundancy)<sup>1</sup>:** process of collecting data in a qualitative research study to the point where no new themes are generated.

**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).

**Ethnography (ethnographic study)<sup>1</sup>:** 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.

**Grounded theory<sup>1</sup>:** an approach to collecting and analysing qualitative data with the aim of developing theories grounded in real world observations.

**Heterogeneity<sup>2</sup>:** the degree to which the effect estimates of individual studies in a meta-analysis differ significantly.

**Inductive analysis:** often used in qualitative research, this type of analysis begins with specific observations from which generalisations are developed; opposite to deductive analysis, often used in quantitative research, which begins with the abstract (eg, general laws or hypotheses) from which logical deductions about specific things are made.

**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.

**Kappa:** a statistic that indicates the extent of agreement between 2 or more observers beyond that expected by chance. A kappa of 1.0 indicates perfect agreement.

**Likelihood ratio (for positive and negative results)<sup>3</sup>:** A way of summarising the findings of a study of a 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 who really does have the disorder rather than one who 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).

**Meta-analysis<sup>4</sup>:** a method for combining the results of several independent studies that measure the same outcomes so that an overall summary statistic can be calculated.

**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 with a certain outcome (eg, MI) was exposed to a given risk factor divided by the odds that a patient without the outcome was exposed to the risk factor.

**Open coding<sup>1</sup>:** first level of coding in a grounded theory study, consisting of basic descriptive coding of narrative content.

**Positive predictive value:** a measure of the performance of a diagnostic test; it is the proportion of participants with positive test results who actually have the disease or condition being evaluated.

**Purposeful (purposive) sampling<sup>1</sup>:** a type of non-probability sampling in which the researcher selects subjects on the basis of personal judgment about which ones will be most representative of a specific population.

**Relative benefit increase (RBI):** the proportional increase in the rates of good events between experimental and control participants; it is reported as a percentage (%).

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

**Sensitivity<sup>5</sup>:** a measure of a diagnostic test's ability to correctly detect a disorder when it is present in a sample of people.

**Specificity<sup>5</sup>:** a measure of a diagnostic test's ability to correctly identify the absence of a disorder in a sample of people who do not have the disorder.

1 Polit DF, Hungler BP. *Essentials of nursing research: methods, appraisal, and utilization*. Fourth edition. Philadelphia: Lippincott, 1997.

2 Clarke M, Oxman AD, editors. *Cochrane reviewers' handbook 4.0* (updated July 1999). In: *Cochrane Library*, Oxford: Update Software.

3 Streiner D, Geddes J. Some useful concepts and terms used in articles about diagnosis [editorial]. *Evidence-Based Mental Health* 1998;1:6–7.

4 Dawson-Saunders B, Trapp RG. *Basic and clinical biostatistics*. Norwalk: Appleton and Lange, 1994.

5 Sackett DL, Haynes RB, Guyatt GH, et al. *Clinical epidemiology: basic science for clinical medicine*. Second edition. Boston: Little, Brown and Company, 1991.