# Glossary

**Adjusted analysis**[1]: 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 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 will be 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.

**Case control**[1]: an observational study that begins with patients who have the health problem (cases), and control participants who do not have the health problem and then looks backward to identify possible causal factors (eg, comparing patients with and without lung cancer for past exposure to tobacco).

**Cluster randomisation**[2]: randomisation of groups of people rather than individuals; this approach is often used to avoid "contamination" when the way in which people in one group are treated or assessed is likely to modify the treatment or assessment of people in other groups.

**Cohort study**: a group of people with a common characteristic or set of characteristics are followed up for a specified period of time to determine the incidence of some outcome; there is no comparison group.

**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; 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 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)**[3]: process of collecting data in a qualitative research study to the point where no new themes are generated.

**Fixed effects model**[4]: gives a summary estimate of the magnitude of effect in meta-analysis. It takes into account within-study variation but not between-study variation and hence is usually not used if there is significant heterogeneity.

**Hermeneutic phenomenology**[3]: a qualitative research approach that uses the lived experiences of people as a tool to better understand the social, cultural, political, or historical contexts in which the experiences occur.

**Heterogeneity**[4]: the degree to which the effect estimates of individual studies in a meta-analysis differ significantly.

**Immersion/crystallisation analysis method**[3]: in qualitative research, an interpretive style of analysis that involves the analyst's total "immersion" and reflection of the textual material and results in an intuitive "crystallisation" of the data.

**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.

**Median**: the value 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 50$^{th}$ observation.

**Meta-analysis**[1]: 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 harm (NNH)**[5]: number of patients who, if they received the experimental treatment, would lead to 1 additional person being harmed compared with patients who receive the control treatment; this is calculated as 1/absolute risk increase (rounded to the next whole number), accompanied by the 95% confidence interval.

**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.

**Purposeful (purposive) sampling**[3]: 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.

**p Value**: a statistical value which relates the probability that the obtained results are due to chance alone (type I error); a p value $<0.05$ means that there is less than a 1 in 20 probability of that result occurring by chance alone under the null hypothesis that there is no difference in the populations.

**Randomised controlled trial (randomised clinical trial, randomised trial) (RCT)**: study in which individuals are randomly allocated to receive alternative preventive, therapeutic, or diagnostic interventions and then followed up to determine the effect of the interventions (one of the alternatives might be no intervention).

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

**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 outcome rates of bad events between experimental and control participants; it is reported as a percentage (%).

**Stratified randomisation**[4]: used in trials to ensure that equal numbers of participants with a particular characteristic (eg, age) are allocated to each comparison group.

**Trend**: approaches a predefined level of significance.

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


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

2 Jadad AR. *Randomised controlled trials*. London: BMJ Books, 1998.

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

4 Mulrow CD, Oxman AD, editors. Cochrane Collaboration handbook (updated September 1997). In: *Cochrane Library*, 4, 1997. Oxford: Update Software.

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