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, people assessing outcomes, and/or statisticians 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.

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 contain 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.

Crossover trial: a method of comparing 2 interventions in which patients are switched to the alternative intervention after a specified period of time.

Dose response[2]: indicates that a relation exists, such that increasing doses or duration of treatment results in increased frequency or intensity of outcomes (eg, as the dosage of a medication increases, so does the magnitude of pain reduction).

Fixed effects model[3]: 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.

Grounded theory[4]: an approach to collecting and analysing qualitative data with the aim of developing theories grounded in real world observations.

Hermeneutic phenomenology[5]: the study of the methodological principles of interpretation by using narrative texts to explain a phenomenon.

Heterogeneity[3]: 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.

Logistic regression[1]: 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.

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 50th observation.

Meta-analysis[1]: a method for combining the results of several independent studies so that an overall summary statistic can be calculated.

Multiple case study approach[2]: a non-experimental study design involving a series of cases; the cases may be individuals, groups, or organisations; data are collected and analysed from these multiple sources (cases).

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.

Phenomenology[4]: an approach to inquiry that emphasises the complexity of human experience and the need to understand that experience holistically as it is actually lived.

Power[1]: the ability of a study to detect an actual effect or difference of a given size (eg, a 10% difference) between groups; it has to do with the adequacy of sample size. Before a study begins, researchers often calculate the number of participants required to detect a postulated difference between 2 groups. If a study has insufficient power (ie, sample size is too small), actual differences between groups may not be detected.

Relative risk (RR): proportion of patients experiencing an outcome in the treated (or exposed) group divided by the proportion experiencing the outcome in the control (or unexposed) group.

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

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.
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3 Mulrow CD, Oxman AD, editors. Cochrane Collaboration handbook (updated September 1997). In: *Cochrane Library*, 4, 1997. Oxford: Update Software.
4 Polit DE, Hungler BP. *Nursing research: principles and methods*. Philadelphia: Lippincott, 1995.
5 Talbot LA. *Principles and practice of nursing research*. St Louis: Mosby, 1995.