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 *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.

Equivalence trial[1]: a trial designed to determine if a new intervention that is less costly, less toxic, or easier to administer than the current standard of care is equally effective.

Factorial design[2]: a design where 2 independent variables are simultaneously manipulated; permits analysis of the main effects of the independent variables separately plus the interaction of these variables.

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.

Hazard ratio[1]: the weighted relative risk over the entire study period; often reported in the context of survival analysis.

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.

Number needed to harm (NNH)[4]: 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.

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.

Random effects model[3]: gives a summary estimate of the magnitude of effect in meta-analysis. It takes into account both within-study and between-study variance and gives a wider confidence interval to the estimate than a fixed effects model if there is significant between-study variation.

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 benefit reduction (RBR): the proportional decrease in rates of good events between experimental and control participants; it is reported as a percentage (%).

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 increase (RRI): the proportional increase in bad outcomes 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 (%).

Standardised mean difference[3]: in a systematic review, a way of combining the results of studies that may have measured the outcome (eg, pain) in different ways, using different scales; effects are expressed as a standard value, with no units (difference between 2 means / estimate of within-group standard deviation).

Weighted mean difference[3]: in a meta-analysis, used to combine outcomes measured on continuous scales (eg, height), assuming that all trials measured the outcome on the same scale; the mean, standard deviation and sample size of each group are known, and weight given to each trial is determined by the precision of its estimate of effect.

1 Guyatt G, Rennie D, editors. *Users' guides to the medical literature. A manual for evidence-based clinical practice.* Chicago: American Medical Association, 2002.
2 Polit DF, Beck CT, Hungler BP. *Essentials of nursing research: methods, appraisal, and utilization.* Fifth edition. Philadelphia: Lippincott, 2001.
3 Higgins JPT, Green S, editors. Cochrane handbook for systematic reviews of interventions. Version 4.2.6 (updated September 2006). In: *Cochrane Library*. Chichester, UK: John Wiley & Sons Ltd.
4 Sackett DL, Haynes RB, Guyatt GH, *et al. Clinical epidemiology: basic science for clinical medicine.* Second edition. Boston: Little, Brown and Company, 1991.