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.

Effect size[1]: a measure of effect that is typically used for continuous data when different scales are used to measure an outcome and is usually defined as the difference in means between the intervention and control groups divided by the standard deviation of the control or both groups; it can be used for combining results across studies in a meta-analysis.

Fixed-effects model[1]: 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.

Hermeneutics[2]: a qualitative research tradition related to phenomenology that uses the lived experiences of people as a tool for understanding the social, cultural, political, and historical context in which those experiences occur.

Heterogeneity[1]: 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.

Number needed to harm (NNH)[3]: 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.

Power[4]: the ability of a study to detect an actual effect or 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 difference between 2 groups. If a study has insufficient power (ie, sample size is too small), actual differences between groups may not be detected.

Random-effects model[1]: 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 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[1]: 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[1]: 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.

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2. **Polit DF,** Beck CT, Hungler BP. *Essentials of nursing research: methods, appraisal, and utilization*. Fifth edition. Philadelphia: Lippincott, 2001.
3. **Sackett DL,** Haynes RB, Guyatt GH, *et al*. *Clinical epidemiology: basic science for clinical medicine*. Second edition. Boston: Little, Brown and Company, 1991.
4. **Dawson-Saunders B,** Trapp RG. *Basic and clinical biostatistics*. Norwalk: Appleton and Lange, 1994.