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.

Fixed effects model: 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.

Intention to treat analysis (ITT): all patients are analysed in the groups to which they were randomised, even if they were not treated as assigned.

Likelihood ratio (for positive and negative results): 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 that really does have the disorder rather than one that 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].

Number needed to harm (NNH): 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.

Participatory action research: action oriented research in which the researchers and participants are partners in developing the question, intervention, and evaluation.

Random effects model: 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 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: 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: 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.