Glossary

Absolute benefit increase (ABI): the absolute arithmetic difference in events rates.

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 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; 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.

Constant comparison¹: a procedure used in qualitative research wherein newly collected data are compared in an ongoing fashion with data obtained earlier, to refine theoretically relevant categories.

Data saturation (saturation, redundancy)¹**:** process of collecting data in a qualitative research study to the point where no new themes are generated.

Ethnography (ethnographic study)¹: an approach to inquiry that focuses on the culture or subculture of a group of people, with an effort to understand the world view of those under study.

Fixed effects model²: 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 phenomenology¹**:** the study of the methodological principles of interpretation by using narrative texts to explain a phenomenon.

Heterogeneity²**:** 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.

Likelihood ratio (for positive and negative results)³: 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 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.

Power⁴: 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.

Quasi-randomised study: participants are not randomly allocated to groups, but some other form of allocation is used (eg, day of the week, month of birth).

Random effects model²: 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 reduction (RRR): the proportional reduction in bad outcomes between experimental and control participants; it is reported as a percentage (%).

Standardised mean difference²: 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).

Triangulation': use of multiple methods or perspectives to collect and interpret data about some phenomenon, to converge on an accurate representation of reality.

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

Weighted mean difference²: 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 Polit DF, Hungler BP. Essentials of nursing research: methods, appraisal, and utilization. Fourth edition. Philadelphia: Lippincott, 1997.
- 2 Clarke M, Oxman AD, editors. Glossary. Cochrane reviewers' handbook 4.1.2 (updated March 2001). In: *Cochrane Library*, Oxford: Update Software. Updated quarterly.
- 3 Streiner D, Geddes J. Some useful concepts and terms used in articles about diagnosis [editorial]. *Evidence-Based Mental Health* 1998;1:6–7.
- 4 Dawson-Saunders B, Trapp RG. Basic and clinical biostatistics. Norwalk: Appleton and Lange, 1994.