Glossary

Absolute risk reduction (ARR): the arithmetic difference in outcome rates between control and experimental patients; it is usually reported as a percentage (%).

Ascertainment bias[1]: occurs when the results of a trial are systematically distorted by knowledge of which intervention participants receive.

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.

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

Diagnostic (gold or criterion) standard: the current best available measure of an outcome; used for assessing properties of a new diagnostic or screening test. The results from a new test are compared with the results from the diagnostic standard to assess the usefulness of the new test (ie, its sensitivity, specificity, and likelihood ratios).

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).

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 who really does have the disorder rather than one who 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).

Naturalistic inquiry[4]: The goal of this research is to understand how individuals construct reality within their own natural setting and context.

Number needed to harm (NNH)[5]: 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 with a certain outcome (eg, MI) was exposed to a given risk factor divided by the odds that a patient without the outcome was exposed to the risk factor.

Performance (confounding) bias[6]: occurs when the results of a trial are distorted by systematic differences in the care provided to participants, other than the intervention being evaluated.

Receiver operating characteristic (ROC) curve[7]: an analysis used to assess the clinical usefulness of a diagnostic or screening test. It yields a score that has the highest rates of both sensitivity and specificity with respect to a diagnosis—that is, a score that will give the maximum rate of accurate classifications.

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 (%).

Selection bias[1]: occurs when the results of a trial are distorted by systematic differences in the way in which participants are assigned to one group or another.

Sensitivity[5]: a measure of a diagnostic test's ability to correctly detect a disorder when it is present in a sample of people.

Specificity[5]: a measure of a diagnostic test's ability to correctly identify the absence of a disorder in a sample of people who do not have the disorder.

1 Jadad AR. *Randomised controlled trials*. London: BMJ Books, 1998.
2 Adler AS, Clark R. *How it's done: an invitation to social research*. Scarborough: Wadsworth, 1999.
3 Streiner D, Geddes J. Some useful concepts and terms used in articles about diagnosis [editorial]. *Evidence-Based Mental Health* 1998 Feb;**1**:6–7.
4 Polit DF, Hungler BP. *Essentials of nursing research: methods, appraisal, and utilization*. Fourth edition. Philadelphia: Lippincott, 1997.
5 Sackett DL, Haynes RB, Guyatt GH, *et al*. *Clinical epidemiology: basic science for clinical medicine*. Second edition. Boston: Little, Brown and Company, 1991.
6 Clarke M, Oxman AD, editors. Cochrane reviewers' handbook 4.0 (updated July 1999). In: *Cochrane Library*. Oxford: Update Software.
7 Steer RA, Cavalieri TA, Leonard DM, *et al*. Use of the Beck Depression Inventory for Primary Care to screen for major depression disorders. *Gen Hosp Psychiatry* 1999;**21**:106–11.