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 *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.

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.

Hazard ratio[2]: the weighted relative risk over the entire study period; often reported in the context of survival analysis

Heterogeneity[1]: the degree to which the effect estimates of individual studies in a meta-analysis differ significantly.

Inception cohort: a defined, representative sample of patients is assembled for a study at a common (ideally early) point in their disease or condition and followed up over time.

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.

Kaplan Meier curve (survival curve)[2–3]: a curve that starts at 100% of a study sample and shows the percentage of the sample still surviving or in a particular health state (eg, with an unhealed leg ulcer) over time. It allows for people having different lengths of follow up and allows comparison between different groups.

Kappa: a statistic that indicates the extent of agreement between 2 or more observers beyond that expected by chance. A kappa of 1.0 indicates perfect agreement.

Likelihood ratio (for positive and negative results)[4]: 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.

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.

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[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 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 (%).

Receiver operating characteristic (ROC) curve[6]: 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.

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.

Standardised mortality ratio[7]: ratio of the rate of actual deaths in a study sample to the rate of expected deaths in a reference population; sometimes used to show excess mortality in a specific sample of patients compared with the general population.

1 Clarke M, Oxman AD, editors. Glossary. Cochrane reviewers' handbook 4.1.2 (updated March 2001). In: *Cochrane Library*, Oxford: Update Software. Updated quarterly.
2 Guyatt G, Rennie D, editors. *Users' guides to the medical literature. A manual for evidence-based clinical practice.* Chicago: American Medical Association, 2002.
3 Norman GR, Streiner DL. *Biostatistics: the bare essentials.* Second edition. Hamilton: BC Decker Inc, 2000.
4 Streiner D, Geddes J. *Evidence-Based Mental Health* 1998;**1**:6–7.
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 Steer RA, Cavalieri TA, Leonard DM, *et al. Gen Hosp Psychiatry* 1999;**21**: 106–11.
7 Rothman KJ, Greenland S. *Modern epidemiology.* Second edition. Philadelphia: Lippincott-Raven Publishers, 1998.