## **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 methods 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 methods 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.

**Ethnography (ethnographic study)**<sup>1</sup>: 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-effect model**<sup>2</sup>: 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.

**Grounded theory**<sup>1</sup>: an approach to collecting and analysing qualitative data with the aim of developing theories grounded in real world observations.

**Hazard ratio**<sup>3</sup>: the weighted relative risk over the entire study period; often reported in the context of survival analysis

**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)**<sup>4</sup>: 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)**<sup>5</sup>: 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**<sup>6</sup>: 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**<sup>2</sup>: 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-effect 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 (%).

**Sensitivity**<sup>5</sup>: a measure of a diagnostic test's ability to correctly detect a disorder when it is present in a sample of people.

**Specificity**<sup>5</sup>: 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.

- Polit DF, Beck CT, Hungler BP. Essentials of nursing research: methods, appraisal, and utilization. Fifth edition. Philadelphia: Lippincott, 2001.
- Higgins JPT, Green S, editors. Cochrane handbook for systematic reviews of interventions. Version 4.2.6 (updated September 2006). In: Cochrane Library. Chichester, UK: John Wiley & Sons Ltd.
- 3. **Guyatt G,** Rennie D, editors. *Users' guides to the medical literature. A manual for evidence-based clinical practice*. Chicago: American Medical Association, 2002.
- Streiner D, Geddes J. Some useful concepts and terms used in articles about diagnosis [editorial]. Evidence-Based Mental Health 1998;1:6–7.
- Sackett DL, Haynes RB, Guyatt GH, et al. Clinical epidemiology: basic science for clinical medicine. Second edition. Boston: Little, Brown and Company, 1991.
- Dawson-Saunders B, Trapp RG. Basic and clinical biostatistics. Norwalk: Appleton and Lange, 1994.