GLOSSARY

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

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

Case control[1]: an observational study that begins with patients (cases) who have the health problem and control subjects who do not have the health problem and then looks backward to identify possible causal factors, for example comparing patients with and without lung cancer for past exposure to tobacco.

Cohort: a group of people with a common characteristic or set of characteristics followed up for a specified period of time to determine the incidence of some outcome; there is no comparison group.

Cohort analytic study: at least 2 groups of people (cohorts) are assembled who do not have the condition of interest; one group is exposed to a particular factor or set of factors (a potential causative agent for a particular disease or an intervention), then all groups are followed up for a specified period of time to compare the incidence of the outcome of interest.

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 comparison: 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.

Control event rate (CER): rate (%) of outcome of interest observed in the control group.

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

Data saturation (saturation, redundancy)[2]: process of collecting data in a qualitative research study to the point where no new themes are generated.

Dichotomised data: data are combined from multiple values or categories to form 2 categories.

Double blind: occurs in an experimental study in which neither the patient nor the study staff (responsible for patient care and data collection) is aware of the group to which the patient has been assigned.

Ethnography (ethnographic study)[2]: an approach to inquiry that focuses on culture or subculture of a group of people, with an effort to understand the world view of those under study.

Experimental event rate (EER): rate (%) of outcome of interest observed in the experimental group.

Factorial design[2]: a design where 2 independent variables are simultaneously manipulated; permits analysis of the main effects of the independent variables separately plus the interaction of these variables.

Grounded theory[2]: an approach to collecting and analysing qualitative data with the aim of developing theories grounded in real world observations.

Inception cohort: a defined, representative sample of patients 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, regardless of failure to complete the intervention or receiving the wrong intervention.

Multivariate analysis[1]: analysis involving multiple independent or dependent variables.

Number needed to treat (NNT): number of patients who need to be treated in order to prevent 1 additional negative event; calculated as 1 per absolute risk reduction (rounded to the next whole number), accompanied by 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 was exposed to the risk factor.

p value: a statistical value which relates the probability that the obtained results are due to chance alone (Type I error); a p value of less than 0.05 means that there is less than a 1 in 20 probability of that result occurring by chance.

Phenomenology[2]: an approach to inquiry that emphasises the complexity of human experience and the need to understand that experience holistically as it is actually lived.

Purposeful (or purposive) sampling[2]: a type of non-probabilility sampling in which the researcher selects subjects on the basis of personal judgement about which ones will be most representative or productive.

Randomised controlled trial (randomised clinical trial, randomised trial) (RCT): study in which individuals are randomly allocated to receive alternative preventive, therapeutic, or diagnostic interventions and then followed up to determine the effect of the interventions (one of the alternatives might be no intervention).

Relative benefit increase (RBI): the increase in the rates of good events, comparing experimental and control patients in a study.

Relative risk (RR): risk of adverse effects with a treatment relative to risks for those who do not receive treatment.

Relative risk reduction (RRR): the proportional reduction in outcome rates between control and experimental patients; reported as a percentage (%).

Sensitivity analysis: tests the robustness of the observed results relative to sensible modifications in important variables.

Triangulation[2]: use of multiple methods or perspectives to collect and interpret data about some phenomenon, to converge on an accurate representation of reality.

1 Dawson-Saunders B, Trapp RG. *Basic and clinical biostatistics.* Norwalk: Appleton and Lange, 1994.
2 Polit DE, Hungler BP. *Nursing research: principles and methods.* Philadelphia: Lippincott, 1995.