# GLOSSARY

**Analysis of covariance**[1]: a statistical procedure to test the mean difference between groups on a dependent variable while controlling for ≥1 extraneous variable (covariate).

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

**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**[1]: 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.

**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.

**Effectiveness**: extent to which an intervention does more good than harm for participants who receive the intervention *under usual conditions*. It answers the question *does it work?*

**Efficacy**: extent to which an intervention does more good than harm for participants who receive the intervention *under optimal conditions* (eg, complete compliance with treatment). It answers the question *can it work?*

**Ethnography (ethnographic study)**[1]: 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.

**Fisher exact test (2-tailed)**[2]: a test for 2 × 2 contingency tables, used to test the null hypothesis that proportions are equal or that characteristics are independent or not associated. It is used if the sample size is too small to use the chi squared ($\chi^2$) test.

**Fixed effects model**[3]: 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**[1]: an approach to collecting and analysing qualitative data with the aim of developing theories grounded in real world observations.

**Hazards model**[4]: a model applied in multivariate analyses in which independent variables are used to predict the risk (hazard) of experiencing an event at a given point of time.

**Hermeneutic phenomenology**[5]: the study of the methodological principles of interpretation by using narrative texts to explain a phenomenon.

**Heterogeneity**[3]: 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 fail to complete the intervention or receive the wrong intervention.

**Linear analysis (regression)**: a statistical technique for determining the relation (prediction equation) between 2 continuous variables.

**Meta-analysis**[2]: a method for combining the results of several independent studies that measure the same outcomes so that an overall summary statistic can be calculated.

**Multiple regression**: a statistical technique to determine the probability of a dependent variable (outcome) occurring when the independent (explanatory) variables are present or absent. It determines whether a model that includes the variables explains more about the outcome variable than a model that does not include the variables.

**Number needed to treat (NNT)**: number of patients who need to be treated to prevent 1 additional negative event; calculated as 1/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 patient was exposed to the risk factor.

**Phenomenology**[1]: an approach to inquiry that emphasises the complexity of human experience and the need to understand that experience holistically as it is actually lived.

**Prevalence**[2]: the proportion of people who have a given disease or condition at a specified point in time.

**Purposeful (purposive) sampling**[1]: a type of non-probabilility sampling in which the researcher selects subjects on the basis of personal judgment about which ones will be most representative of a specific population.

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

**Random effects model**[3]: 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.

**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 proportional increase in the rates of good events between experimental and control participants; reported as a percentage (%).

**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 experimental and control participants; reported as a percentage (%).

**Sensitivity**[6]: a measure of a diagnostic test's ability to correctly detect a disorder when it is present in a sample of people.

**Specificity**[6]: 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.

**U shaped curve**: describes the shape of the data when it is plotted on a graph; denotes a relation that is not linear, but increases at both ends of the graph (eg, mortality is high when body mass index is low or high).


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