# GLOSSARY

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

**Adjusted analysis**[1]: when groups differ on baseline characteristics (eg, age), analyses of outcome data are statistically modified to account for these differences.

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

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

**Cohort analytic study**: ⩾2 groups of people are assembled who do not have the outcome of interest; 1 group is exposed to a particular factor or set of factors (a potential causative agent for a particular disease or an intervention) and 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**[2]: 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.

**Contamination**: study participants in the control group accidentally receive the experimental intervention, thereby minimising potential differences in outcomes between groups.

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

**Effect size**[3]: a measure of effect that is typically used for continuous data when different scales are used to measure an outcome and is usually defined as the difference in means between the intervention and control groups divided by the standard deviation of the control or both groups; it can be used for combining results across studies in a meta-analysis.

**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?*

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

**Heterogeneity**[3]: the degree to which the effect estimates of individual studies in a meta-analysis differ significantly.

**Incidence**[1]: the proportion of people who develop a certain disease or condition within a specified time frame (new cases).

**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.

**Interpretive interactionalism**[4]: a qualitative method that aims to bring out subjective and personal experience through the development of thick description, which illuminates context, meanings, and interpretation instead of just reporting facts; it was developed to examine the relation of personal troubles to the resources available to address those troubles.

**Logistic regression**[1]: a statistical technique that determines the probability of a dependent variable (outcome) occurring when the independent (explanatory) variables are present or absent when the outcome is a dichotomous (binary) variable. It determines whether a model that includes the variable(s) explains more about the outcome variable than a model which does not include the variable(s).

**Median**[1]: the middle observation in a series—that is, the one that divides the distribution of values into halves.

**Meta-ethnography**[5]: a procedure for synthesis of qualitative research in which researchers compare and analyse the texts of individual qualitative studies and then develop new interpretations.

**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 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.

**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.

**Power**[1]: 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.

**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 risk (RR)**: risk of adverse effects with a treatment relative to risk 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 (%).


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3 Mulrow CD, Oxman AD, editors. Cochrane Collaboration handbook (updated September 1997). In: *Cochrane Library*. Oxford: Update Software.
4 Hall B. Patterns of spirituality in persons with advanced HIV disease. *Res Nurs Health* 1998;**21**:143–53.
5 Noblit GW, Hare RD. *Meta-ethnography: synthesizing qualitative studies*. Newbury Park: Sage, 1998.