

Research Methods for Medical Journalists

Abstract refers to a brief summary of a research paper, it provides an overview of the study, including its main objectives, methods, results, and conclusions, and is usually used to help readers determine the relevance of the study to their interests.

Accuracy is the degree to which a measurement or result is free from error, and is an important consideration in medical research, as inaccurate results can lead to incorrect conclusions and potentially harm patients.

Action research is a type of research that involves actively participating in the research process, and is often used in medical research to identify and address specific problems or issues.

Adverse event refers to any unfavorable or unintended sign, symptom, or disease that occurs during a medical study or treatment, and is an important consideration in medical research, as it can impact the safety and efficacy of a treatment.

Alternative hypothesis is a statistical hypothesis that suggests there is a significant difference or relationship between variables, and is often used in medical research to test the effectiveness of a new treatment or intervention.

Analytical study is a type of research study that involves the analysis of existing data to identify patterns, relationships, or trends, and is often used in medical research to investigate the causes of a particular disease or condition.

Anonymity refers to the process of keeping a participant's identity confidential, and is an important consideration in medical research, as it helps to protect the privacy and confidentiality of participants.

Applied research is a type of research that is focused on practical applications, and is often used in medical research to develop new treatments, interventions, or products.

Audit is a systematic process of evaluating and improving the quality of a healthcare service or organization, and is an important consideration in medical research, as it helps to ensure that healthcare services are safe and effective.

Autonomy refers to the right of individuals to make their own decisions, and is an important consideration in medical research, as it helps to ensure that participants are fully informed and able to make their own decisions about whether to participate in a study.

Baseline data refers to the data collected at the beginning of a study, and is often used in medical research to establish a reference point for comparison with later data.

Bias refers to any systematic error or distortion in the way that data is collected or analyzed, and is an important consideration in medical research, as it can impact the validity and reliability of the results.

Blinded study is a type of research study in which the participants or researchers are unaware of the treatment or intervention being used, and is often used in medical research to reduce bias and ensure that the results are objective.

Case-control study is a type of research study that involves comparing individuals with a particular disease or condition with those without the disease or condition, and is often used in medical research to identify risk factors or causes of a disease.

Case series is a type of research study that involves reporting on a series of cases with a particular disease or condition, and is often used in medical research to describe the characteristics and outcomes of a particular disease or condition.

Causal relationship refers to a relationship between two variables in which one variable causes the other, and is an important consideration in medical research, as it helps to establish the underlying mechanisms of a disease or condition.

Clinical trial is a type of research study that involves testing the safety and efficacy of a new treatment or intervention, and is often used in medical research to develop new treatments or interventions for a particular disease or condition.

Cohort study is a type of research study that involves following a group of individuals over time to examine the development of a particular disease or condition, and is often used in medical research to identify risk factors or causes of a disease.

Confidentiality refers to the process of keeping personal information private and secure, and is an important consideration in medical research, as it helps to protect the privacy and confidentiality of participants.

Confounding variable is a variable that can influence the outcome of a study, and is an important consideration in medical research, as it can impact the validity and reliability of the results.

Consent form is a document that outlines the risks and benefits of a research study, and is an important consideration in medical research, as it helps to ensure that participants are fully informed and able to make their own decisions about whether to participate in a study.

Control group is a group of individuals who do not receive the treatment or intervention being tested, and is often used in medical research to provide a comparison group for the treatment or intervention being tested.

Correlation refers to a relationship between two variables that move together, and is an important consideration in medical research, as it helps to establish the underlying mechanisms of a disease or condition.

Data analysis is the process of examining and interpreting data to identify patterns, relationships, or trends, and is an important consideration in medical research, as it helps to draw conclusions and make recommendations based on the results.

Data collection is the process of gathering information or data for a research study, and is an important consideration in medical research, as it helps to ensure that the data is accurate and reliable.

Descriptive study is a type of research study that involves describing the characteristics of a particular disease or condition, and is often used in medical research to provide a detailed description of a disease or condition.

Descriptive statistics is a branch of statistics that involves summarizing and describing the basic features of a dataset, and is an important consideration in medical research, as it helps to provide a summary of the data and identify patterns or trends.

Double-blinded study is a type of research study in which both the participants and researchers are unaware of the treatment or intervention being used, and is often used in medical research to reduce bias and ensure that the results are objective.

Effect size is a measure of the magnitude of the difference or relationship between variables, and is an important consideration in medical research, as it helps to establish the clinical significance of the results.

Efficacy refers to the ability of a treatment or intervention to produce a desired outcome, and is an

important consideration in medical research, as it helps to establish the effectiveness of a treatment or intervention.

Empirical research is a type of research that involves collecting and analyzing data to test a hypothesis or answer a research question, and is an important consideration in medical research, as it helps to provide evidence-based answers to research questions.

Epidemiology is the study of the distribution and determinants of health-related events, and is an important consideration in medical research, as it helps to identify the causes and risk factors of diseases.

Error refers to any deviation from the true value of a measurement or result, and is an important consideration in medical research, as it can impact the validity and reliability of the results.

Ethics refers to the moral principles that guide the conduct of research, and is an important consideration in medical research, as it helps to ensure that research is conducted in a way that is respectful and safe for participants.

Experimental study is a type of research study that involves testing the effect of a treatment or intervention, and is often used in medical research to develop new treatments or interventions for a particular disease or condition.

Explanatory study is a type of research study that involves explaining the underlying mechanisms or causes of a particular disease or condition, and is often used in medical research to provide a detailed understanding of a disease or condition.

Exploratory study is a type of research study that involves exploring a new or unknown area of research, and is often used in medical research to identify new research questions or hypotheses.

External validity refers to the generalizability of the results of a study to other populations or settings, and is an important consideration in medical research, as it helps to establish the relevance and applicability of the results.

Factorial design is a type of research design that involves manipulating multiple independent variables to examine their effects on a dependent variable, and is often used in medical research to examine the interactions between different variables.

Feasibility study is a type of research study that involves assessing the practicality or potential of a particular research question or hypothesis, and is often used in medical research to determine whether a study is feasible and worthwhile.

Focus group is a type of research method that involves gathering a group of individuals to discuss a particular topic or issue, and is often used in medical research to gather qualitative data and gain insights into the perspectives and experiences of participants.

Generalizability refers to the extent to which the results of a study can be applied to other populations or settings, and is an important consideration in medical research, as it helps to establish the relevance and applicability of the results.

Hypothesis is a statement that proposes a relationship or difference between variables, and is an important consideration in medical research, as it helps to guide the research question and methodology.

Informed consent is the process of providing participants with information about the risks and benefits of a research study, and is an important consideration in medical research, as it helps to ensure that participants are fully informed and able to make their own decisions about whether to participate in a study.

Institutional review board is a committee that reviews and approves research studies to ensure that they meet ethical and regulatory standards, and is an important consideration in medical research, as it helps to

ensure that research is conducted in a way that is respectful and safe for participants.

Internal validity refers to the accuracy of the results of a study, and is an important consideration in medical research, as it helps to establish the validity and reliability of the results.

Intervention is a treatment or program that is being tested or evaluated, and is an important consideration in medical research, as it helps to establish the effectiveness of a treatment or intervention.

Interview is a type of research method that involves asking participants questions to gather information or data, and is often used in medical research to gather qualitative data and gain insights into the perspectives and experiences of participants.

Longitudinal study is a type of research study that involves following a group of individuals over time to examine the development of a particular disease or condition, and is often used in medical research to identify risk factors or causes of a disease.

Meta-analysis is a type of research study that involves combining the results of multiple studies to examine the overall effect of a treatment or intervention, and is often used in medical research to provide a comprehensive overview of the evidence.

Methodology refers to the procedures and techniques used to conduct a research study, and is an important consideration in medical research, as it helps to establish the validity and reliability of the results.

Mixed-methods study is a type of research study that involves combining both qualitative and quantitative methods, and is often used in medical research to provide a comprehensive understanding of a particular disease or condition.

Narrative review is a type of research study that involves summarizing and interpreting the existing literature on a particular topic, and is often used in medical research to provide a comprehensive overview of the evidence.

Non-probability sampling is a type of sampling method that involves selecting participants based on non-random criteria, and is often used in medical research to gather data from a specific population or group.

Null hypothesis is a statement that proposes no relationship or difference between variables, and is an important consideration in medical research, as it helps to guide the research question and methodology.

Observational study is a type of research study that involves observing or measuring the outcomes of a particular disease or condition without intervening, and is often used in medical research to identify risk factors or causes of a disease.

Participant is an individual who is involved in a research study, and is an important consideration in medical research, as it helps to ensure that participants are fully informed and able to make their own decisions about whether to participate in a study.

Pilot study is a type of research study that involves testing a new research question or methodology, and is often used in medical research to determine whether a study is feasible and worthwhile.

Placebo is a treatment or intervention that has no therapeutic effect, and is often used in medical research to provide a comparison group for the treatment or intervention being tested.

Population is the group of individuals that a research study is intended to represent, and is an important consideration in medical research, as it helps to establish the generalizability of the results.

Precision refers to the consistency or reproducibility of a measurement or result, and is an important consideration in medical research, as it helps to establish the validity and reliability of the results.

Probability sampling is a type of sampling method that involves selecting participants based on random criteria, and is often used in medical research to gather data from a representative sample of the

population.

Prospective study is a type of research study that involves following a group of individuals over time to examine the development of a particular disease or condition, and is often used in medical research to identify risk factors or causes of a disease.

Protocol is a detailed plan or procedure for conducting a research study, and is an important consideration in medical research, as it helps to ensure that the study is conducted in a systematic and rigorous manner.

Qualitative research is a type of research that involves gathering and analyzing non-numerical data, and is often used in medical research to gather insights into the perspectives and experiences of participants.

Quantitative research is a type of research that involves gathering and analyzing numerical data, and is often used in medical research to examine the relationships between variables and test hypotheses.

Questionnaire is a type of research method that involves asking participants questions to gather information or data, and is often used in medical research to gather quantitative data and examine the relationships between variables.

Randomization is the process of assigning participants to a treatment or intervention group by chance, and is often used in medical research to reduce bias and ensure that the results are objective.

Randomized controlled trial is a type of research study that involves testing a new treatment or intervention using a randomized and controlled design, and is often used in medical research to develop new treatments or interventions for a particular disease or condition.

Reliability refers to the consistency or reproducibility of a measurement or result, and is an important consideration in medical research, as it helps to establish the validity and reliability of the results.

Retrospective study is a type of research study that involves examining the outcomes of a particular disease or condition after they have occurred, and is often used in medical research to identify risk factors or causes of a disease.

Risk factor is a characteristic or variable that increases the likelihood of a particular disease or condition, and is an important consideration in medical research, as it helps to establish the underlying mechanisms of a disease or condition.

Sample is a subset of the population that is selected for a research study, and is an important consideration in medical research, as it helps to establish the generalizability of the results.

Sampling frame is the group of individuals from which a sample is selected, and is an important consideration in medical research, as it helps to establish the generalizability of the results.

Screening is the process of identifying individuals who are at risk of a particular disease or condition, and is often used in medical research to identify individuals who may benefit from early intervention or treatment.

Secondary data is existing data that has been collected for a purpose other than the current research study, and is often used in medical research to gather data and examine the relationships between variables.

Selection bias is a type of bias that occurs when the sample is selected in a way that is not representative of the population, and is an important consideration in medical research, as it can impact the validity and reliability of the results.

Sensitive topic is a topic that is potentially sensitive or distressing for participants, and is an important consideration in medical research, as it helps to ensure that participants are treated with respect and dignity.

Survey is a type of research method that involves asking participants questions to gather information or data, and is often used in medical research to gather quantitative data and examine the relationships

between variables.

Systematic review is a type of research study that involves combining the results of multiple studies to examine the overall effect of a treatment or intervention, and is often used in medical research to provide a comprehensive overview of the evidence.

Target population is the group of individuals that a research study is intended to represent, and is an important consideration in medical research, as it helps to establish the generalizability of the results.

Treatment is a intervention or program that is being tested or evaluated, and is an important consideration in medical research, as it helps to establish the effectiveness of a treatment or intervention.

Type I error is a type of error that occurs when a true null hypothesis is rejected, and is an important consideration in medical research, as it can impact the validity and reliability of the results.

Type II error is a type of error that occurs when a false null hypothesis is not rejected, and is an important consideration in medical research, as it can impact the validity and reliability of the results.

Validity refers to the accuracy or truth of a measurement or result, and is an important consideration in medical research, as it helps to establish the validity and reliability of the results.

Variable is a characteristic or attribute that is being measured or examined in a research study, and is an important consideration in medical research, as it helps to establish the underlying mechanisms of a disease or condition.

Vulnerability refers to the potential for participants to be harmed or exploited in a research study, and is an important consideration in medical research, as it helps to ensure that participants are treated with respect and dignity.