JOURNAL OF CHILD HEALTH CARE

STATISTICAL GUIDELINES & REQUIREMENTS

These guidelines provide a set of requirements and recommendations to help authors prepare their manuscripts conforming to the journal's policy on statistical reporting. Authors are encouraged to follow directions as indicated by STROBE and CONSORT guidelines.

A condition of acceptance is that, on request, authors will make data available.

Where it is not possible to sufficiently describe within the journal's word limit, include descriptions in supplementary material.

Presentation and terminology

- Always define measurement units.
- Use italics for variables and parameters.
- Reporting of ALL statistics, including in abstract, should be consistent
- Tables must be self-explanatory. Spell out **all** acronyms, provide informative titles/captions.
- Where possible 95% Confidence intervals are preferred over probability (p) values
- Probability (p) values should be rounded to third significant decimal. A probability (p) value less than 0.001 should be denoted as "< 0.001" or, for example, 3.567×10^{-8} if more significant figures are needed for the analysis (e.g., as in a genome-wide association study). In tables, report numbers for all p-values, do not write "non significant" or "n.s." in place of the actual number.
- Probability (p) values of 'p= .000' should be reported as 'p<.001'
- Probability (p) are not to be reported with correlation coefficients
- Tests or models that derive probability values should be noted at the bottom of any tables.
- It must be clear what the baseline/reference group is. All estimated parameters should be reported regardless of statistical significance.
- Adhere to preconditions for hypothesis testing. Use parametric or non- parametric tests appropriately
- Assessment of individual variable data distribution should be conducted prior to using a mean (standard devotion) OR median (inter quartile range).
- Maximum / minimum or range values are rarely useful. Please use an appropriate measure of central tendency
- Use conventional terminology for regression models: Univariate regression, one outcome; multivariate regression, two or more outcomes; univariable (or simple) regression, one covariate; multivariable (or multiple) regression, two or more covariates.
- Present prevalence (percentage and number) of the outcome according to the main exposures of interest.
- When presenting results please report both n(%) consistently not only n or %
- Odds and risk ratios as appropriate. Risk ratios are to be reported with cohort studies and odds ratios with case-control. Odds ratios may be not interpreted as a measure of risk unless the event of interest is rare.
- Make use of informative visualization tools. For example, consider using a barplot instead of a radar chart or a pie chart. Do not use 3D pie charts or 3D bar plots. Graphs must be readable when printed in greyscale.
- 'N' is used for total sample 'n' for a subset of a sample
- Values should be rounded to no more than three decimal spaces.

Methods

- Study designs must be transparently described, including, but not limited to: the specification of *a priori* hypotheses, sampling design, rationale for sample size including power calculation (where relevant), representativeness of the sample, eligibility criteria (e.g., geographical locations and coverage, age, health status), and data collection modalities (e.g., procedures, recruitment, instruments, settings).
- All statistical methods must be transparently described and appropriate for the design and goals of the study. More specifically, statistical tests should be clearly explained and interpreted in the context of the research hypotheses or questions. Any assumptions should be duly verified. When employing unusually complex methods, provide the most relevant references and possibly intelligible equations.
- State software (name, version and manufacturer) that were used for as part of study design in description of statistical analysis
- Define level at which results are considered statistically significant.
- If a complex design study was employed and is described in detail elsewhere, reference relevant documentation. Lack of transparency may be considered grounds for rejection.
- Always report number, proportion and type (item or unit nonresponse) of missing data in the study. Consider presenting a flowchart. Be transparent about assumptions on missing data (missing completely at random, missing at random, missing not at random) and adopt appropriate statistical methods (e.g., multiple imputation, propensity score weighting, expectation–maximization algorithm).
- If missing data occurred in the groups in a table, a note should be added at the bottom to say how many were missing in the sub-group. If the related hypothesis testing was calculated without missing values, then this should be clarified.
- All statistical methods for every piece of the results and its related data coding (like Likert scale) should be described clearly in the statistical method section.
- Probability (p) value is not equivalent to importance. Always report effect sizes, along with confidence intervals, and their health care, clinical or public health importance.
- Always discuss limitations of the study and of the statistical methods, and the possible implications these may have on the interpretation of the study findings. Consider conducting sensitivity analyses whenever appropriate.
- There is no requirement to include hypothesis tests as part of a demographics table.
- If using regression analysis, specify clearly all terms in the model, provide information about goodness of fit and model's diagnostics, and provide an *a priori* hypothesis for interactions and/or effect modification. Clarify if the analysis is exploratory or confirmatory. Be cautious about using automatic variable selection methods (e.g., stepwise regression) and other similar statistical methods in place of hypothesis-driven approaches. If automatic variable selection used, be sure to clarify the significant level for the variable selection process.
- Clearly outline (and justify) the role that each variable plays in the model from the outset. Consider using a Direct Acyclic Graph (DAG) to illustrate the model.