Equator Network

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STROBE Guidelines

STROBE Statement—Checklist of items that should be included in reports of ***cohort studies***

	Item No	Recommendation
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found
Introduction		
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported
Objectives	3	State specific objectives, including any prespecified hypotheses

Methods		
Study design	4	Present key elements of study design early in the paper
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection
Participants	6	(*a*) Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up
		(*b*) For matched studies, give matching criteria and number of exposed and unexposed
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group
Bias	9	Describe any efforts to address potential sources of bias
Study size	10	Explain how the study size was arrived at
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding
		(*b*) Describe any methods used to examine subgroups and interactions
		(*c*) Explain how missing data were addressed
		(*d*) If applicable, explain how loss to follow-up was addressed
		(*e*) Describe any sensitivity analyses

Results		
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed
		(b) Give reasons for non-participation at each stage
		(c) Consider use of a flow diagram
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders
		(b) Indicate number of participants with missing data for each variable of interest
		(c) Summarise follow-up time (eg, average and total amount)
Outcome data	15*	Report numbers of outcome events or summary measures over time
Main results	16	(*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included
		(*b*) Report category boundaries when continuous variables were categorized
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses

Discussion		
Key results	18	Summarise key results with reference to study objectives
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence
Generalisability	21	Discuss the generalisability (external validity) of the study results

In General….

- When evaluating the literature, always read the entire paper to make sure the science is sound.
- Follow the guidelines that are used for each study design when evaluating papers (see Equator Network). With time, these guidelines will become second nature.
- Critically read the papers and ask yourself “do I believe in these results?”.
- Be careful with predatory journals – they are fraudulent and of poor science. They can be found at: https://predatoryjournals.com/journals/#D

Take-home message for your own paper…

- Appraise the literature before writing your paper. Assess whether someone has done what you are proposing to do. Also, it helps to write your Introduction and Discussion.
- Make sure your research question is clear.
- Minimize ambiguity throughout the text.
- Each section of the paper, including the title, should keep in mind what your research question is.
- Ensure replicability – your methods need to be clear.
- Make sure to double check your figures and tables: (i) avoid typing numbers as you can make a mistake; (2) make sure your figures/tables are self-contained and clear.

- Minimize the use of many acronyms, and always define them before its first use. I have a rule-of-thumb – if you use it more than 3 times, then it is ok.
- Address potential sources of bias.
- Assess the generalizability of your results. You should be transparent who can use what you have produced. That is why Table 1 is so important. You need to clearly describe your study population.
- Do not hide anything. Every study has limitations and you should be clear about it.
- If your study crosses disciplines, it is important to have experts of these disciplines involved in your study. You produce better science this way.
- Always ask yourself “so what?” when writing your discussion.
- Remember that your first draft does not need to be perfect. You will review it again to tidy it up. It is helpful that you read your manuscript out loud to yourself – it can uncover unclarities and grammatical issues.