Article Information: DOI, to be added by journal’s editor.

| Section/Topic | Item No | Recommendation | Reported onPage/Section/Paragraph(s) |
| --- | --- | --- | --- |
| **Title and Abstract** | 1 | (*a*) Indicate the study’s design with a commonly used term in the title or the abstract | Click or tap here to enter text. |
| (*b*) Provide in the abstract an informative and balanced summary of what was done and what was found | Click or tap here to enter text. |
| Introduction |
| Background/rationale | 2 | Explain the scientific background and rationale for the investigation being reported | Click or tap here to enter text. |
| Objectives | 3 | State specific objectives, including any prespecified hypotheses | Click or tap here to enter text. |
| Methods |
| Study design | 4 | Present key elements of study design early in the paper | Click or tap here to enter text. |
| Setting | 5 | Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection | Click or tap here to enter text. |
| Participants | 6 | (*a*) *Cohort study*—Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up*Case-control study*—Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls*Cross-sectional study*—Give the eligibility criteria, and the sources and methods of selection of participants | Click or tap here to enter text. |
| (*b*)*Cohort study*—For matched studies, give matching criteria and number of exposed and unexposed*Case-control study*—For matched studies, give matching criteria and the number of controls per case | Click or tap here to enter text. |
| Variables | 7 | Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable | Click or tap here to enter text. |
| 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 | Click or tap here to enter text. |
| Bias | 9 | Describe any efforts to address potential sources of bias | Click or tap here to enter text. |
| Study size | 10 | Explain how the study size was arrived at | Click or tap here to enter text. |
| Quantitative variables | 11 | Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why | Click or tap here to enter text. |
| Statistical methods | 12 | (*a*) Describe all statistical methods, including those used to control for confounding | Click or tap here to enter text. |
| (*b*) Describe any methods used to examine subgroups and interactions | Click or tap here to enter text. |
| (*c*) Explain how missing data were addressed | Click or tap here to enter text. |
| (*d*) *Cohort study*—If applicable, explain how loss to follow-up was addressed*Case-control study*—If applicable, explain how matching of cases and controls was addressed*Cross-sectional study*—If applicable, describe analytical methods taking account of sampling strategy | Click or tap here to enter text. |
| (*e*) Describe any sensitivity analyses | Click or tap here to enter text. |
| Results |
| Participants | 13\* | (a) Report numbers of individuals at each stage of study—*e.g.*, numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed | Click or tap here to enter text. |
| (b) Give reasons for non-participation at each stage | Click or tap here to enter text. |
| (c) Consider use of a flow diagram | Click or tap here to enter text. |
| Descriptive data | 14\* | (a) Give characteristics of study participants (*e.g.*, demographic, clinical, social) and information on exposures and potential confounders | Click or tap here to enter text. |
| (b) Indicate number of participants with missing data for each variable of interest | Click or tap here to enter text. |
| (c) *Cohort study*—Summarise follow-up time (*e.g.*, average and total amount) | Click or tap here to enter text. |
| Outcome data | 15\* | *Cohort study*—Report numbers of outcome events or summary measures over time | Click or tap here to enter text. |
| *Case-control study—*Report numbers in each exposure category, or summary measures of exposure | Click or tap here to enter text. |
| *Cross-sectional study—*Report numbers of outcome events or summary measures | Click or tap here to enter text. |
| Main results | 16 | (*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (*e.g.*, 95% confidence interval). Make clear which confounders were adjusted for and why they were included | Click or tap here to enter text. |
| (*b*) Report category boundaries when continuous variables were categorized | Click or tap here to enter text. |
| (*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period | Click or tap here to enter text. |
| Other analyses | 17 | Report other analyses done—*e.g.*, analyses of subgroups and interactions, and sensitivity analyses | Click or tap here to enter text. |
| Discussion |
| Key results | 18 | Summarise key results with reference to study objectives | Click or tap here to enter text. |
| 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 | Click or tap here to enter text. |
| Interpretation | 20 | Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence | Click or tap here to enter text. |
| Generalisability | 21 | Discuss the generalisability (external validity) of the study results | Click or tap here to enter text. |
| Other Information |
| Funding | 22 | Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based | Click or tap here to enter text. |

\*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.