STROBE Statement—Checklist of items that should be included in reports of ***cross-sectional studies***

| | Item No | Recommendation | Page No. |
|---|---|---|---|
| **Title and abstract** | 1 | (*a*) Indicate the study's design with a commonly used term in the title or the abstract | Title; Abstract |
| | | (*b*) Provide in the abstract an informative and balanced summary of what was done and what was found | Abstract |
| **Introduction** | | | |
| Background/rationale | 2 | Explain the scientific background and rationale for the investigation being reported | Introduction, para 1–3 |
| Objectives | 3 | State specific objectives, including any prespecified hypotheses | Introduction, last para; Hypotheses |
| **Methods** | | | |
| Study design | 4 | Present key elements of study design early in the paper | Methods, Study design and participants |
| Setting | 5 | Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection | Methods, Study design and participants |
| Participants | 6 | (*a*) Give the eligibility criteria, and the sources and methods of selection of participants | Methods, Study design and participants |
| Variables | 7 | Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable | Methods, Measures; Covariates |
| 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 | *Methods, Measures; Covariates (with measurement details)* |
| Bias | 9 | Describe any efforts to address potential sources of bias | Methods, Procedure; Discussion, Limitations |
| Study size | 10 | Explain how the study size was arrived at | Methods, Study design and participants |
| Quantitative variables | 11 | Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why | Methods, Statistical Analysis |
| Statistical methods | 12 | (*a*) Describe all statistical methods, including those used to control for confounding | Methods, Statistical Analysis |
| | | (*b*) Describe any methods used to examine subgroups and interactions | Methods, Statistical Analysis (interactions; no subgroup analyses) |
| | | (*c*) Explain how missing data were addressed | Methods, Statistical Analysis (no missing data in the final analytic sample) |
| | | (*d*) If applicable, describe analytical methods taking account of sampling strategy | Methods, Statistical Analysis (sampling weights not applied) |
| | | (*e*) Describe any sensitivity analyses | Methods, Statistical Analysis (no sensitivity analyses) |
| **Results** | | | |
| Participants | 13* | (a) Report numbers of individuals at each stage of study—eg numbers potentially | Results, first para; |

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| | | eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed | Methods, Study design and participants |
| | | (b) Give reasons for non-participation at each stage | Results, first para; Methods, Study design and participants |
| | | (c) Consider use of a flow diagram | Not applicable; participant flow described in text |
| Descriptive data | 14* | (a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders | Methods, Study design and participants; Table 1 |
| | | (b) Indicate number of participants with missing data for each variable of interest | Methods, Statistical Analysis (no missing data) |
| Outcome data | 15* | Report numbers of outcome events or summary measures | Results, first para; Table 1 |
| 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 | Results, 2.2; Table 2 |
| | | (*b*) Report category boundaries when continuous variables were categorized | Not applicable; continuous variables not categorized; continuous outcome |
| | | (*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period | Not applicable; continuous variables not categorized; continuous outcome |
| Other analyses | 17 | Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses | Results, 2.2; Fig. 2 (simple slopes); no subgroup or sensitivity analyses |
| **Discussion** | | | |
| Key results | 18 | Summarise key results with reference to study objectives | Discussion, para 1 |
| 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 | Discussion, last para |
| Interpretation | 20 | Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence | Discussion, para 2–3 |
| Generalisability | 21 | Discuss the generalisability (external validity) of the study results | Discussion, last para |
| **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 | Title Page, Funding |

*Give information separately for exposed and unexposed groups.

**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.