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

| | Item No | Recommendation | Page No. | Relevant text from manuscript |
|---|---|---|---|---|
| **Title and abstract** | 1 | (*a*) Indicate the study's design with a commonly used term in the title or the abstract | 2 | Abstract: Methods section |
| | | (*b*) Provide in the abstract an informative and balanced summary of what was done and what was found | 2 | Abstract |
| **Introduction** | | | | |
| Background/rationale | 2 | Explain the scientific background and rationale for the investigation being reported | 3,4 | Introduction: paragraph 2 |
| Objectives | 3 | State specific objectives, including any prespecified hypotheses | 3,4 | Introduction: lines 13 to 15, and lines 24-31 |
| **Methods** | | | | |
| Study design | 4 | Present key elements of study design early in the paper | 4 | Methods: section 1, lines 34 to 42 |
| Setting | 5 | Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection | 4 | Methods: lines 37 to 42 |
| Participants | 6 | (*a*) Give the eligibility criteria, and the sources and methods of selection of participants | 4 | Methods: lines 37 to 39 |
| Variables | 7 | Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable | 4,5 | Methods: section 2, lines 44-49 |
| 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 | 4 | Methods: section 1 |
| Bias | 9 | Describe any efforts to address potential sources of bias | | Methods: lines 104-108 |
| Study size | 10 | Explain how the study size was arrived at | 4,5 | Methods: lines 37-39 and 48-49 |
| Quantitative variables | 11 | Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why | 4,5,6 | Methods: section 2 |
| Statistical methods | 12 | (*a*) Describe all statistical methods, including those used to control for confounding | 6,7 | Methods: section 3 |
| | | (*b*) Describe any methods used to examine subgroups and interactions | 6,7 | Methods: section 3 |
| | | (*c*) Explain how missing data were addressed | | Methods: lines 61-62 |
| | | (*d*) If applicable, describe analytical methods taking account of sampling strategy | 7 | Methods: lines 112 to 114 |
| | | (*e*) Describe any sensitivity analyses | NA | |
| **Results** | | | | |
| Participants | 13* | (a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for | | Table 1 |

| | | | | |
|---|---|---|---|---|
| | | eligibility, confirmed eligible, included in the study, completing follow-up, and analysed | | |
| | | (b) Give reasons for non-participation at each stage | 7 | Methods: line 97 |
| | | (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 | | Table 1 |
| | | (b) Indicate number of participants with missing data for each variable of interest | | Table 1 |
| Outcome data | 15* | Report numbers of outcome events or summary measures | 18 | Table 3 |
| 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 | NA | |
| **Discussion** | | | | |
| Key results | 18 | Summarise key results with reference to study objectives | 9,10 | Discussion: paragraphs 1-3 |
| 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 | 11 | Discussion: lines 193-200 |
| Interpretation | 20 | Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence | 10,11 | Discussion: lines 172-176, 185-190, 193-200 |
| Generalisability | 21 | Discuss the generalisability (external validity) of the study results | 11 | Discussion: Lines 191-195 |
| **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 | 1 | Cover Page: Funding/Support section |

*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.