STROBE Statement—checklist of items that should be included in reports of observational 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
(Reference Page 1-2)		(b) Provide in the abstract an informative and balanced summary of what was done
		and what was found
Introduction (Reference Pages 3, 4 (lines1-2)		
Background/rationale (reference page 3, 4 (lines 1-2).	2	Explain the scientific background and rationale for the investigation being reported
Objectives (reference page 4 (lines 5-18)	3	State specific objectives, including any prespecified hypotheses
Methods		
Study design (reference pages 4 (lines 20-24), 5(lines1- 5)	4	Present key elements of study design early in the paper
Setting(reference page 5(lines 6-24)	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection
Participants	6	(a) Cohort study—Give the eligibility criteria, and the sources and methods of
(reference page 6, 7(1)		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
		(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 "Not applicable"
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect
"N/A"		modifiers. Give diagnostic criteria, if applicable
Data sources/	8*	For each variable of interest, give sources of data and details of methods of
measurement		assessment (measurement). Describe comparability of assessment methods if there
(reference		is more than one group
page 8(lines 20-25),		
9(lines 1-7)		
Bias (reference page s 9(lines 8-17), 10(lines 1-18, Page 11). Tables 1 and 2 respectively)	9	Describe any efforts to address potential sources of bias
Study size (reference page 7 (lines 15-18)	10	Explain how the study size was arrived at
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable,
"N/A"		describe which groupings were chosen and why
Statistical	12	(a) Describe all statistical methods, including those used to control for confounding

methods(reference page 11 (lines 1-7, Table 3)

- (b) Describe any methods used to examine subgroups and interactions
- (c) Explain how missing data were addressed
- (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

(e) Describe any sensitivity analyses

Continued on next page

Results
"N/A"

Participants 'N/A"	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	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information
Data "N/A"		on exposures and potential confounders
		(b) Indicate number of participants with missing data for each variable of interest
		(c) Cohort study—Summarise follow-up time (eg, average and total amount)
Outcome data 15*	15*	Cohort study—Report numbers of outcome events or summary measures over time
		Case-control study—Report numbers in each exposure category, or summary measures of
		exposure
		Cross-sectional study—Report numbers of outcome events or summary measures
Main results "N/A"	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 "Not applicable"	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses
D: :		anaryses
Discussion (reference page 12-14, 15(lines 1-18)		
Key results(Not applicable)	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.
(reference page 15 (lines 20-22)		Discuss both direction and magnitude of any potential bias
	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity
		of analyses, results from similar studies, and other relevant evidence
Generalisability (reference page 15 (line 24), 16(1-5)	21	Discuss the generalisability (external validity) of the study results

Other information

Funding

(Page 16(lines 19-20) 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

*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. "Not applicable"

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.