STROBE Statement—checklist of items that should be included in reports of observational 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	Study des	ign in title
		(b) Provide in the abstract an informative and balanced summary of what was done and what was	Study design and overview	
		found	of work p	rovided in abstract
Introduction				
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	Lines 18-22	
Objectives	3	State specific objectives, including any prespecified hypotheses	Lines 22-	-26
Methods				
Study design	4	Present key elements of study design early in the paper		starting line 91
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure,	Provided	starting line 29
		follow-up, and data collection		
Participants	6	(a) Cohort study—Give the eligibility criteria, and the sources and methods of selection of	Provided	starting line 35
		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	Provided	starting line 98
		unexposed		
		Case-control study—For matched studies, give matching criteria and the number of controls per		
		case		
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers.	Provided	starting line 63
		Give diagnostic criteria, if applicable		
Data sources/	8*	For each variable of interest, give sources of data and details of methods of assessment	Provided	starting line 63
measurement		(measurement). Describe comparability of assessment methods if there is more than one group		
Bias	9	Describe any efforts to address potential sources of bias	Matching	described on line 9
Study size	10	Explain how the study size was arrived at		

Continued on next page

Quantitative	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which	Provided starting line 122
variables		groupings were chosen and why	
Statistical	12	(a) Describe all statistical methods, including those used to control for confounding	Provided starting line 94
methods		(b) Describe any methods used to examine subgroups and interactions	Not applicable
		(c) Explain how missing data were addressed	Not applicable
		(d) Cohort study—If applicable, explain how loss to follow-up was addressed	Provided starting line 94
		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	Not applicable
Results			
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined	Provided starting line 122
		for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	
		(b) Give reasons for non-participation at each stage	Provided starting line 122
		(c) Consider use of a flow diagram	Not applicable
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on	Provided in Tables 1 and 2
		exposures and potential confounders	
		(b) Indicate number of participants with missing data for each variable of interest	Not applicable
		(c) Cohort study—Summarise follow-up time (eg, average and total amount)	Not applicable
Outcome data	15*	Cohort study—Report numbers of outcome events or summary measures over time	Provided starting line 142
		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	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision	Provided in Table 3
		(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	Provided in tables
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time	Not applicable
		period	

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Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	Not applicable
Discussion			
Key results	18	Summarise key results with reference to study objectives	Provided starting line 157
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss	Provided starting line 182
		both direction and magnitude of any potential bias	
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of	Provided starting line 157
		analyses, results from similar studies, and other relevant evidence	
Generalisability	21	Discuss the generalisability (external validity) of the study results	Provided starting line 182
Other informati	on		
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the	Not applicable
		original study on which the present article is based	

<sup>\*</sup>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.