STROBE Statement - checklist of items that should be included in reports of observational studies

Section/item	Item No	Recommendation	Reported on Page Number/Line Number	Reported on Section/Paragraph
Title and abstract	1	(a) Indicate the study's design with a commonly used term in the title or the abstract	Page 1/Line 32	Abstract/Paragraph 1
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	Page 2/Line 45-46	Abstract/Paragraph 1
Introduction				
Background/ rationale	2	Explain the scientific background and rationale for the investigation being reported	Page 2/Line 54-62	Introduction/Paragrah 1
Objectives	3	State specific objectives, including any prespecified hypotheses	Page 2-3/Line 63-70	Introduction/Paragrah 2
Methods				
Study design	4	Present key elements of study design early in the paper	Page 3/Line 74	Methods/Paragrah 1
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Page 3/Line 76-79	Methods/Paragrah 2
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	Page 3/Line 80-87, 104-108	Methods/Paragrah 3-4, 6
		(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	NA	NA
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	Page 3-4/Line 108-112	Methods/Paragrah 6
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	Page 3-4/Line 88-102, 108-111	Methods/Paragrah 5-6
Bias	9	Describe any efforts to address potential sources of bias	Page 4/Line 111-112	Methods/Paragrah 6
Study size	10	Explain how the study size was arrived at	Page 3/Line 76	Methods/Paragrah 2
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	Page 4/Line 114-118	Methods/Paragrah 7

12	(a) Describe all statistical methods, including those used to control for confounding	Page 4/Line 115-118	Methods/Paragrah 7
	(b) Describe any methods used to examine subgroups and interactions	NA	NA
	(c) Explain how missing data were addressed	NA	NA
	(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	NA	NA
	(e) Describe any sensitivity analyses	NA	NA
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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	Page 4/Line 125	Results/Paragrah 2
	(b) Give reasons for non-participation at each stage	NA	NA
	(c) Consider use of a flow diagram	NA	NA
14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	Page 4/Line 122-135	Results/Paragrah 1-2
	(b) Indicate number of participants with missing data for each variable of interest	NA	NA
	(c) Cohort study - Summarise follow-up time (eg, average and total amount)	Page 4/Line 137	Results/Paragrah 3
15*	Cohort study — Report numbers of outcome events or summary measures over time	Page 4/Line 136-149	Results/Paragrah 3-4
	Case-control study — Report numbers in each exposure category, or summary measures of exposure	NA	NA
	Cross-sectional study — Report numbers of outcome events or summary measures	NA	NA
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	NA	NA
	(b) Report category boundaries when continuous variables were categorized	NA	NA
	(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	NA	NA
17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	NA	NA
18	Summarise key results with reference to study objectives	Page 5-6/Line 181-212	Discussion/Paragrah 4-6
19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	Page 6/Line 213-217	Discussion/Paragrah 7
	13* 14* 15* 16	(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 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 14* (a) Give characteristics of study participants (eg demographic, clinical, social) and information 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) 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 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 17 Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses 18 Summarise key results with reference to study objectives Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction	(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, explain how matching of cases and controls was addressed Cross-sectional study—If applicable, explain how matching of cases and controls was addressed (e) Describe any sensitivity analyses NA 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 NA 14* (a) Give characteristics of study participants (eg demographic, clinical, social) and information 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) 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 NA Cross-sectional study—Report numbers of outcome events or summary measures (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 NA Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses Page 5-6/Line 181-212 Page 6-6/Line 181-212 Page 6-6/Line 181-217

Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Page 6/Line 206-212	Discussion/Paragrah 6			
Generalisability	21	Discuss the generalisability (external validity) of the study results	Page 6/Line 220-221	Conclusion/Paragrah 1			
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	Page 6/Line 236-240	Acknowledgments/Paragra h 4			

^{*}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.

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*As the checklist was provided upon initial submission, the page number/line number reported may be changed due to copy editing and may not be referable in the published version. In this case, the section/paragraph may be used as an alternative reference.