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 3-4	titile
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	Page 1-2 Line 31-36	abstract
Introduction				
Background/ rationale	2	Explain the scientific background and rationale for the investigation being reported	Page 3 Line 61-89	section introduction paragraph 1-3
Objectives	3	State specific objectives, including any prespecified hypotheses	Page 3 Line 90-94	section introduction
Methods				
Study design	4	Present key elements of study design early in the paper	Page 4 Line 103	section methods paragraph
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Page 4 Line 118-121	section setting paragraph 1
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 4 Line 123-Page 5 Line 136	section participants paragraph 1
		(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	this is not a matched sutdy	this is not a matched study
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	Page 5 Line 139-162	Section Variables Paragraph 1
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 5 Line 164-166	Section Data sources Paragraph 1
Bias	9	Describe any efforts to address potential sources of bias	Page 5 Line 168-Page 6	Section Bias Paragraph 1
Study size	10	Explain how the study size was arrived at	Page 6 Line 176-177	Section Study size
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	Page 6 Line 181-182	Section Outliers Paragraph 1

Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	Page 6 Line 186-188	Section statistical methods
		(b) Describe any methods used to examine subgroups and interactions	Page 6 Line 188-194	Section Statistical methods
		(c) Explain how missing data were addressed	no missing data exists	no missing data exists
		(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	no sampling strategy existed in this study	no sampling strategy existed in this study
		(e) Describe any sensitivity analyses	Page 6 Line 194-199	Section statistical methods
Results				
Participants	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 7 Line 203	Section Results Paragraph 1
		(b) Give reasons for non-participation at each stage	Page 16 Line 511-512	Section Figure 1
		(c) Consider use of a flow diagram	Page 16 Line 511-513	Section Figure 1
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	Page 7 Line 203-205	Section Results Paragraph 1
		(b) Indicate number of participants with missing data for each variable of interest	no missing data were	no missing data were
		(c) ***Cohort study***—Summarise follow-up time (eg, average and total amount)	this is not a cohort study	this is not a cohort study
Outcome data	15*	***Cohort study***—Report numbers of outcome events or summary measures over time	this is not a cohort study	this is not a cohort study
		Case-control study—Report numbers in each exposure category, or summary measures of exposure	this is not a case-control	this is not a case-control
		Cross-sectional study—Report numbers of outcome events or summary measures	Page 7 Line 205-214	Section Results Paragraph
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	Page 7 Line 205-214	Section Results Paragraph 1
		(b) Report category boundaries when continuous variables were categorized	no continuous variables	no continuous variables
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	this is not relevant	this is not relevant
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	Page 7 Line 216- Page 8	Section Results Paragraph
Discussion				
Key results	18	Summarise key results with reference to study objectives	Page 8 Line 258-Page 9	Section Discussion
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	Page 10 Line 328-Page11 Line 338	Section Discussion Paragraph8

Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Page 9 Line 274- Page 10 Line 327	Section Discussion Paragraph 2-7
Generalisability	21	Discuss the generalisability (external validity) of the study results	Page 11 Line 339-341	Section Discussion
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 11 Line 354-356	Section Funding Paragraph 1

*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.