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

Section/item	Recommendation	**Reported on Page Number/Line Number**	**Reported on Section/ Paragraph**
1. Title and abstract	1a) Indicate the study's design with a commonly used term in the title or the abstract	Line 2-3	Title/ Para. 1
	1b) Provide in the abstract an informative and balanced summary of what was done and what was found	Line 27-57	Abstract/ Para. 1-4
Introduction			
2. Background/ rationale	2) Explain the scientific background and rationale for the investigation being reported	Line 59-74	Introduction/ Para.1
3.Objectives	3) State specific objectives, including any prespecified hypotheses	Line 74-78	Introduction/ Para. 1
Methods			
4. Study design	4) Present key elements of study design early in the paper	Line 81-87	Methods/ Para. 1
5.Setting	5) Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Line 81-146	Methods/ Para. 1-7
6. Participants	6a)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	Line 81-105	Methods/ Para. 1-3
	6b)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	N/A	N/A
7.Variables,	7)Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	Line 81-146	Methods/ Para. 1-7
8*.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	N/A	N/A
9.Bias	9)Explain how the study size was arrived at	N/A	N/A
10.Study size	10)Explain how the study size was arrived at	Line 81-87	Methods/ Para. 1
11.Quantitative variables	11)Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	Line 81-146	Methods/ Para. 1-7

12.Statistical methods	12a) Describe all statistical methods, including those used to control for confounding	Line 148-151	Methods/ Para. 8
	12b) Describe any methods used to examine subgroups and interactions	N/A	N/A
	12c) Explain how missing data were addressed	N/A	N/A
	12d) 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	Line 81-105	Methods/ Para. 1-3
	12e) Describe any sensitivity analyses	N/A	N/A
Results			
13*.Participants	13a) 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	Line 154-162	Results/ Para. 1
	13b) Give reasons for non-participation at each stage	N/A	N/A
	13c) Consider use of a flow diagram	N/A	N/A
14*.Descriptive data	14a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	Line 154-163	Results/ Para. 1
	14b) Indicate number of participants with missing data for each variable of interest	N/A	N/A
	14c) Cohort study—Summarise follow-up time (eg, average and total amount)	N/A	N/A
15*.Outcome data	15a）Cohort study—Report numbers of outcome events or summary measures over time	N/A	N/A
	15b) Case-control study—Report numbers in each exposure category, or summary measures of exposure	N/A	N/A
	15c) Cross-sectional study—Report numbers of outcome events or summary measures	Line 163-181	Results/ Para. 1
16.Main results	16a) 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	Line 155-179	Results/ Para. 1
	16b) Report category boundaries when continuous variables were categorized	N/A	N/A
	16c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	N/A	N/A

17.Other analyses	17)Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	N/A	N/A
Discussion			
18.Key results	18)Summarise key results with reference to study objectives	Line 283-289	Discussion/ Para. 7
19.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	Line 290-293	Discussion/ Para. 8
20.Interpretation	20）Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Line 182-293	Discussion/ Para. 1-8
21.Generalisability	21）Discuss the generalisability (external validity) of the study results	Line 295-299	Conclusions/ Para. 1
Other information			
22.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	Line 302	Funding/ Para. 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.

Article information: https://dx.doi.org/10.21037/jtd-22-584

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