

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	Page2/ Line 38-40	Abstract/paragraph2
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	Page2/Line 34-50	Abstract/paragraph1-4
Introduction				
Background/ rationale	2	Explain the scientific background and rationale for the investigation being reported	Page3/Line62-76	Introduction/paragraph1
Objectives	3	State specific objectives, including any prespecified hypotheses	Page3/ Line80-82	Introduction/paragraph1
Methods				
Study design	4	Present key elements of study design early in the paper	Page4/Line 95-99	Material and Methods/ Paragraph3
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and datacollection	Page4/ Line 90-92	Material and Methods/ Paragraph3
Participants	6	(a) —Give the eligibility criteria, and the sources and methods of selection of participants. Describemethods of follow-up Cy —Give the eligibility criteria, and the sources and methods of case ascertainment and controlselection. Give the rationale for the choice of cases and controls Cr —Give the eligibility criteria, and the sources and methods of selection of participants	Page4/ Line90-95	Material and Methods/ Paragraph3
		(b) —For matched studies, give matching criteria and number of exposed and unexposed Ca —For matched studies, give matching criteria and the number of controls per case	N/A, Non matched studies	
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnosticcriteria,	Page4/Line100-104	Material and Methods/

		if applicable		Paragraph4
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	Page5-6/ Line106-130	Material and Methods/ Paragraph5-8
Bias	9	Describe any efforts to address potential sources of bias.	Page6/ Line137-141	Material and Methods/ Paragraph9
Study size	10	Explain how the study size was arrived at	Page4/line90-93/Fig.1	Material and Methods/ Paragraph3
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	Page6/Line124-127	Material and Methods/ Paragraph7

Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	Page6-7/Line143-148	Material and Methods/ Paragraph10
		(b) Describe any methods used to examine subgroups and interactions	N/A, no subgroups	
		(c) Explain how missing data were addressed	N/A, No missing data	
		(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	N/A, no sampling strategies was involved.	
		(e) Describe any sensitivity analyses	N/A, No sensitivity analyses	

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	Page7/Line 151-155 Page10-11/Line232-236	Results/Paragraph11, paragraph23
		(b) Give reasons for non-participation at each stage	Page7/ Line154-155	Results/paragraph11

			Page11/line243	Paragraph24
		(c) Consider use of a flow diagram	Page19/line 434-435 Fig. 1	Results
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	Page7/line155-159 Page23-24/Table 1	Results/paragraph11
		(b) Indicate number of participants with missing data for each variable of interest	N/A, No missing data	
		(c) Cohort study —Summarise follow-up time (eg, average and total amount)	N/A, Non-cohort study	
Outcome data	15*	Cohort study —Report numbers of outcome events or summary measures over time	N/A, Non-cohort study	
		Case-control study —Report numbers in each exposure category, or summary measures of exposure	N/A, Non Case-control study	
		Cross-sectional study —Report numbers of outcome events or summary measures	Page10/line227-229 Page11/line236-242 Page26/line528--531, Table 3 and 4	Results/paragraph22,23
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	Page11/Line 236-239	Result/Paragraph23
		(b) Report category boundaries when continuous variables were categorized	N/A, not involve category boundaries	
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	N/A, No estimates of relative risk	
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	N/A, No subgroup and sensitivity analyses	
Discussion				
Key results	18	Summarise key results with reference to study objectives	Page11-12/ Line 259-262	Discussion/Paragraph25
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	Page15/ Line332-335	Discussion/Paragraph33

Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Page12-15/Line 263-327	Discussion/Paragraph26-31
Generalisability	21	Discuss the generalisability (external validity) of the study results	Page16/Line345-353	Discussion/Paragraph35
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	No funding	

*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/qims-21-823>

*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.