

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, lines 4-5	Title page
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	Page 2- 3, lines 38-61	Abstract
Introduction				
Background/ rationale	2	Explain the scientific background and rationale for the investigation being reported	Page 4-5, lines 66-91	Introduction, Paragraph 1, 2,3
Objectives	3	State specific objectives, including any prespecified hypotheses	Page 5, lines 93-98	Introduction, Paragraph 4
Methods				
Study design	4	Present key elements of study design early in the paper	Page 5, lines 93-96	Introduction, Paragraph 4
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Page 6, lines 102-111	Methods: Data Source and Collection, 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 6- 7, lines 114-126	Methods: Inclusion and exclusion criteria, 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	N/A	Cohort study was not matched

Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	Page 7, lines 129-142	Methods: Demographics/Comorbidities and Outcome 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 7, lines 136 and 143	Methods: Demographics/Comorbidities and Outcome Variables, Paragraph 1
Bias	9	Describe any efforts to address potential sources of bias	N/A	Unable to address potential biases of the database used
Study size	10	Explain how the study size was arrived at	Page 7, line 126-127	Methods: Demographics/Comorbidities and Outcome Variables, Paragraph 1
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	Page 7-8, lines 149-152	Methods: Univariate/Multivariable Analysis, Paragraph 1

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Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	Page 7-8, lines 147-155	Methods: Univariate/Multivariable Analysis, Paragraph 1
		(b) Describe any methods used to examine subgroups and interactions	Page 6, lines 114-120	Methods: Exclusion and Inclusion Criteria, Paragraph 1
		(c) Explain how missing data were addressed	N/A Database limitation - Page 14, lines 271-274	Discussion: Paragraph 7 We obtained all the data that the database

				offered. One limitation of using the database is the possibility that patients could have been mis-coded and were therefore not captured in our study population.
		(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 loss to follow up, used existing data in the database
		(e) Describe any sensitivity analyses	N/A	Sensitivity analyses were not performed
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 18, line 375 (or figure 1)	Figures: Figure 1
		(b) Give reasons for non-participation at each stage	N/A	Used existing data in the database following exclusion/inclusion criteria
		(c) Consider use of a flow diagram	Page 18, Figure 1	Figures: Figure 1
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	Page 9, lines 162-170	Results: Demographics, Paragraph 1
			Page 9, lines 173-185	Results: Comorbidities, Paragraph 1
			Page 19, line 380 (or table 1)	Tables: Table 1

		(b) Indicate number of participants with missing data for each variable of interest	N/A	Used existing data in the database
		(c) Cohort study—Summarise follow-up time (eg, average and total amount)	Page 6, lines 106-108	Methods: Data Source and Collection, Paragraph 1
Outcome data	15*	Cohort study—Report numbers of outcome events or summary measures over time	Page 7, lines 137-144	Methods: Demographics/Comorbidities and Outcome Variables, Paragraph 1
		Case-control study—Report numbers in each exposure category, or summary measures of exposure	N/A	Not a case-control study
		Cross-sectional study—Report numbers of outcome events or summary measures	N/A	Not a cross-sectional study
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 7-8, lines 148-155 Page 22, line 408 (or Table 4)	Methods: Univariate/Multivariable Analysis, Paragraph 1 Tables: Table 4
		(b) Report category boundaries when continuous variables were categorized	N/A	No continuous variables were examined
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	N/A	Not relevant
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	N/A	No additional analyses were done outside of univariate/multivariable described in the Methods and Results sections
Discussion				

Key results	18	Summarise key results with reference to study objectives	Page 12, lines 228-239	Discussion, Paragraph 2
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 14, lines 271-280	Discussion, Paragraph 7

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Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Pages 13-14, lines 241-267	Discussion, Paragraphs 3-6
Generalisability	21	Discuss the generalisability (external validity) of the study results	Page 14, lines 282-288	Discussion, Paragraph 8
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	N/A	No funding was used to conduct this study

*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 copyediting and may not be referable in the published version. In this case, the section/paragraph may be used as an alternative reference.

Updated on April 13, 2020