

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

	<b>Item No</b>	<b>Recommendation</b>	<b>Action</b>
<b>Title and abstract</b>	1	(a) Indicate the study’s design with a commonly used term in the title or the abstract	Indicated in Title as per STROBE.
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	Completed as per STROBE
<b>Introduction</b>			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	Completed as per STROBE, pages 3-5 of manuscript.
Objectives	3	State specific objectives, including any prespecified hypotheses	Completed as per STROBE, Page 5 of manuscript.
<b>Methods</b>			
Study design	4	Present key elements of study design early in the paper	Completed as per STROBE, Page 5-7 of manuscript.
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Completed as per STROBE, Page 5-7 of manuscript.
Participants	6	(a) <i>Cohort study</i> —Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up <i>Case-control study</i> —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 <i>Cross-sectional study</i> —Give the eligibility criteria, and the sources and methods of selection of participants	Completed as per STROBE, Page 5-6 of manuscript.
		(b) <i>Cohort study</i> —For matched studies, give matching criteria and number of exposed and unexposed <i>Case-control study</i> —For matched studies, give matching criteria and the number of controls per case	
Variables	7	Clearly define all outcomes,	Completed as per STROBE, Page 5-7 of

		exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	manuscript.
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	Diagnoses were by specific single assessments – otitis media as per tympanogram and hearing loss as per audiogram. Therefore, comparability of assessment not required. Method of assessment and classification detailed on Page 6 of manuscript.
Bias	9	Describe any efforts to address potential sources of bias	As a cross-sectional study within a prospective cohort this study avoided the selection biases that may have been present in a standalone cross-sectional study. Described on Page 5 of manuscript
Study size	10	Explain how the study size was arrived at	Described on Page 5-6 of manuscript.
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	Described on Pages 6 and 7 of manuscript.
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	Described on Pages 6 and 7 of manuscript.
		(b) Describe any methods used to examine subgroups and interactions	Described on Pages 6 and 7 of manuscript.
		(c) Explain how missing data were addressed	Described on Pages 6 and 7 of manuscript.
		(d) <i>Cohort study</i> —If applicable, explain how loss to follow-up was addressed <i>Case-control study</i> —If applicable, explain how matching of cases and controls was addressed <i>Cross-sectional study</i> —If applicable, describe analytical methods taking account of sampling strategy	Not applicable.
		(e) Describe any sensitivity analyses	No sensitivity analyses were undertaken.

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<b>Results</b>			
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	Described on Pages 6 and 7 of manuscript.
		(b) Give reasons for non-participation at each stage	Described on Pages 6 and 7 of manuscript.
		(c) Consider use of a flow diagram	Flow diagram not included as study is cross-sectional
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	See Table 1 and Table 2
		(b) Indicate number of participants with missing data for each variable of interest	See Table 1
		(c) <i>Cohort study</i> —Summarise follow-up time (eg, average and total amount)	N/A
Outcome data	15*	<i>Cohort study</i> —Report numbers of outcome events or summary measures over time	
		<i>Case-control study</i> —Report numbers in each exposure category, or summary measures of exposure	
		<i>Cross-sectional study</i> —Report numbers of outcome events or summary measures	See Table 1
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	See Tables 3-5
		(b) Report category boundaries when continuous variables were categorized	See Tables 3-5
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	N/A
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	See Tables 1 and 2
<b>Discussion</b>			
Key results	18	Summarise key results with reference to study objectives	See Page 9 of Manuscript
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	See Pages 9-13 of Manuscript
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other	See Pages 9-13 of Manuscript

relevant evidence

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Generalisability	21	Discuss the generalisability (external validity) of the study results	See Pages 9-13 of Manuscript
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**Other information**

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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	See Page 13 of Manuscript
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\*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](http://www.strobe-statement.org).

Article information: <http://dx.doi.org/10.21037/ajo.2020.02.02>.

\*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.