

deemed to be important to include in checklists for each type of study. A provisional list of items prepared in advance (available from our website) was used to facilitate discussions. The three draft checklists were then discussed by all participants and, where possible, items were revised to make them applicable to all three study

designs. In a final plenary session, the group decided on the strategy for finalising and disseminating the STROBE statement.

After the workshop we drafted a combined checklist including all three designs and made it available on our website. We invited participants and additional scientists

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

	Item No	Recommendation
Title and abstract	1	<ul style="list-style-type: none"> ✓ (a) Indicate the study's design with a commonly used term in the title or the abstract ✓ (b) Provide in the abstract an informative and balanced summary of what was done and what was found
Introduction		
Background/rationale	2	✓ Explain the scientific background and rationale for the investigation being reported
Objectives	3	✓ State specific objectives, including any prespecified hypotheses
Methods		
Study design	4	✓ Present key elements of study design early in the paper
Setting	5	✓ Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection
Participants	6	<ul style="list-style-type: none"> ✓ (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 (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, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable
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
Bias	9	✓ Describe any efforts to address potential sources of bias
Study size	10	✓ Explain how the study size was arrived at
Quantitative variables	11	✓ Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why
Statistical methods	12	<ul style="list-style-type: none"> ✓ (a) Describe all statistical methods, including those used to control for confounding ✓ (b) Describe any methods used to examine subgroups and interactions ✓ (c) Explain how missing data were addressed ✓ (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 ✓ (e) Describe any sensitivity analyses
Results		
Participants	13*	<ul style="list-style-type: none"> ✓ (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 ✓ (b) Give reasons for non-participation at each stage (c) Consider use of a flow diagram
Descriptive data	14*	<ul style="list-style-type: none"> ✓ (a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders (b) Indicate number of participants with missing data for each variable of interest ✓ (c) <i>Cohort study</i>—Summarise follow-up time (eg average and total amount)
Outcome data	15*	<ul style="list-style-type: none"> ✓ <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
Main results	16	<ul style="list-style-type: none"> ✓ (a) Report the numbers of individuals at each stage of the study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed ✓ (b) Give reasons for non-participation at each stage (c) Consider use of a flow diagram
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses
Discussion		
Key results	18	✓ Summarise key results with reference to study objectives
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
Interpretation	20	✓ Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence
Generalisability	21	✓ Discuss the generalisability (external validity) of the study results
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

*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.

The STROBE checklist is best used in conjunction with the explanation and elaboration article.¹⁸⁻²⁰ This article and separate versions of the checklist for cohort, case-control, and cross sectional studies are available at www.strobe-statement.org.