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

	Item No	Recommendation	Location in study
Title and abstract	1	(a) Indicate the study's design with a commonly used term	Title
		in the title or the abstract	
		(b) Provide in the abstract an informative and balanced	Abstract
		summary of what was done and what was found	
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	Introduction
Objectives	3	State specific objectives, including any pre-specified hypotheses	Page 4, last sentence
Methods		71	
Study design	4	Present key elements of study design early in the paper	Page 5, para 1
Setting Setting	5	Describe the setting, locations, and relevant dates, including	Methods
~g	5	periods of recruitment, exposure, follow-up, and data	1/10/11/04/5
		collection	
Participants	6	(a) Cohort study—Give the eligibility criteria, and the	
1 w. 1.2 ip w. 1.0	Ü	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	N/A
		sources and methods of selection of participants	
		(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	
Variables	7	Clearly define all outcomes, exposures, predictors, potential	Page 5
		confounders, and effect modifiers. Give diagnostic criteria,	
		if applicable	
Data sources/	8*	For each variable of interest, give sources of data and	N/A
measurement		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	N/A
Study size	10	Explain how the study size was arrived at	N/A
Quantitative	11	Explain how quantitative variables were handled in the	Page 5
variables		analyses. If applicable, describe which groupings were	
		chosen and why	
Statistical methods	12	(a) Describe all statistical methods, including those used to	Page 6
		control for confounding	
		(b) Describe any methods used to examine subgroups and	
		interactions	Page 6

		(c) Explain now missing data were addressed	
		(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	N/A
		methods taking account of sampling strategy	
		(e) Describe any sensitivity analyses	
		(<u>=</u>) =	
Results			
Participants	13*	(a) Report numbers of individuals at each stage of study—eg	N/A
		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	N/A
			NT/A
D : ::	1 44	(c) Consider use of a flow diagram	N/A
Descriptive	14*	(a) Give characteristics of study participants (eg	N/A
data		demographic, clinical, social) and information on exposures	
		and potential confounders	
		(b) Indicate number of participants with missing data for	Table 1
		each variable of interest	NT/A
		(c) Cohort study—Summarise follow-up time (eg, average	N/A
		and total amount)	
Outcome data	15*	Cohort study—Report numbers of outcome events or	
		summary measures over time	
		Case-control study—Report numbers in each exposure	
		category, or summary measures of exposure	
		Cross-sectional study—Report numbers of outcome events	Results
		or summary measures	
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-	Page 6, para 2 and table 1
		adjusted estimates and their precision (eg, 95% confidence	
		interval). Make clear which confounders were adjusted for	
		and why they were included	
		(b) Report category boundaries when continuous variables	N/A
		were categorized	
		(c) If relevant, consider translating estimates of relative risk	
		into absolute risk for a meaningful time period	
Other analyses	17	Report other analyses done—eg analyses of subgroups and	Figure 2 and Page 6
o ther unaryses	1,	interactions, and sensitivity analyses	rigare 2 una rage V
Discussion		interactions, and sensitivity unaryses	
Key results	18	Summarise key results with reference to study objectives	Page 7, para 3
Limitations	19	Discuss limitations of the study, taking into account sources of	Page 10, para 2
	17	potential bias or imprecision. Discuss both direction and	
		magnitude of any potential bias	
Interpretation	20	Give a cautious overall interpretation of results considering	Page 10, para 3
merpretation	20		rage 10, para 3
		objectives, limitations, multiplicity of analyses, results from	
		similar studies, and other relevant evidence	

(c) Explain how missing data were addressed

Generalisability	21	Discuss the generalisability (external validity) of the study results	Page 10, para 2
		resurts	
Other information	n		
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	Acknowledgements and page 5, para 2

^{*}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.