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

	Item No.	Recommendation	Page No.	Relevant text from manuscript
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract	1 & 2	Title: A population-based **longitudinal analysis** of long-term sedative use among community-dwelling adults Also see Methods in Abstract.
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found	2	See Methods & Results in Abstract
Introduction				
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	3	Introduction – paragraph 1
Objectives	3	State specific objectives, including any prespecified hypotheses	3	Introduction – paragraph 2
Methods				
Study design	4	Present key elements of study design early in the paper	4	See Methods
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	4	See Methods, 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	4-5	See Methods – Data and Derived Variables sections **Population-based analysis**
		(*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 confounders, and effect modifiers. Give diagnostic criteria, if applicable	6	See Definitions and Statistical Analysis sections in Methods
Data sources/	8*	For each variable of interest, give sources of data and details of methods of assessment	4-5	See Data, Derived Variables,

measurement		(measurement). Describe comparability of assessment methods if there is more than one group		and Definitions sections in Methods.
Bias	9	Describe any efforts to address potential sources of bias	4-6	See exclusion criteria throughout Data and Derived Variables section of Methods. See discussion of covariates included in Statistical Analysis section of Methods to account for observable confounding.
Study size	10	Explain how the study size was arrived at	4-5	See exclusion criteria throughout Data and Derived Variables section of Methods.

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Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	6	See Definitions is Methods.
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding	6	See Statistical Analysis section in Methods
		(*b*) Describe any methods used to examine subgroups and interactions	6	See Statistical Analysis section in Methods where we explain stratification by sex and age groups of young/middle-aged adults and older adults.
		(*c*) Explain how missing data were addressed	5	See description of exclusion of missing household and income data in Derived Variables section of Methods.
		(*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 – Population-based analysis	
		(*e*) Describe any sensitivity analyses	N/A	
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	7	See paragraph 1 of Results
		(b) Give reasons for non-participation at each stage	5-6	Described in text in Methods
		(c) Consider use of a flow diagram		
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	9	See Variation in sedative use among community dwelling adults in 2013 section of Results
		(b) Indicate number of participants with missing data for each variable of interest	N/A – as described in Methods, excluded these participants from analysis	

		(c) *Cohort study*—Summarise follow-up time (eg, average 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 or summary measures	7-9	*See Results. Also see Table 1 and Figures.*
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	9-10	Adjusted odds ratios with confidence intervals presented in Results and in Table 2.
		(*b*) Report category boundaries when continuous variables were categorized		N/A
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period		N/A

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Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	7-9	Age-standardized trends analysis is reported in Results.
Discussion				
Key results	18	Summarise key results with reference to study objectives	10-11	Paragraphs 1, 2, and 3 of Interpretation
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	11-12	See Study Limitations section of Results.
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	12	See Conclusions section of Results
Generalisability	21	Discuss the generalisability (external validity) of the study results	12	See Study Limitations section of 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	13	Funding information provided.

*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.