

Supplementary Materials

Table S1: Stratified logistic regression analysis of the association between e-cigarettes use and any respiratory symptoms by sex: A cross-sectional study, Al-Madinah, Saudi Arabia, 2024 (N= 499).

Variable		Male (n = 232)		Female (n = 267)	
		aOR ^a [95% C.I. B]	P-value	aOR ^a [95% C.I. B]	P-value
E-cigarettes use status	Never [Reference]				
	Ever	5.09 [2.06-12.57]	< 0.001 ^b	0.86[0.32-2.34]	0.768
	Current	3.98 [1.60-9.88]	0.003 ^b	1.14[0.34-3.77]	0.837

^a aOR; adjusted odds ratio, *CI*; confidence interval,

^a Odds ratios were adjusted for e-cigarettes use, age, marital status, secondhand exposure to tobacco, secondhand exposure to e-cigarettes, tobacco use, asthma, COVID-19, hay fever, exercise, BMI.

^b Bold figures indicating statistically significant *p*-value <0.05

STROBE Statement—Checklist of items that should be included in reports of *cross-sectional studies*

	Item No	Recommendation	Page	Comments
Title and abstract	1	(a) Indicate the study's design with a commonly used term in the title or the abstract	1	
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	1	
Introduction				
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	2	
Objectives	3	State specific objectives, including any prespecified hypotheses	2	
Methods				
Study design	4	Present key elements of study design early in the paper	2	
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	2-3	
Participants	6	(a) Give the eligibility criteria, and the sources and methods of selection of participants	2-3	
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	2-5	
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	2-5	
Bias	9	Describe any efforts to address potential sources of bias	2-5	
Study size	10	Explain how the study size was arrived at	2	
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	5	
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	5	

		(b) Describe any methods used to examine subgroups and interactions	5	
		(c) Explain how missing data were addressed	-	There were no missing data, All questionnaire items were required to avoid any missing data.
		(d) If applicable, describe analytical methods taking account of sampling strategy	-	Not applicable
		(e) Describe any sensitivity analyses	7	
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	4-6	
		(b) Give reasons for non-participation at each stage	-	Not applicable
		(c) Consider use of a flow diagram	-	Not applicable
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	4-5	Present in Table 1 as well as in the main text
		(b) Indicate number of participants with missing data for each variable of interest	-	There were no missing data, All questionnaire items were required to avoid any missing data.
Outcome data	15*	Report numbers of outcome events or summary measures	6-7	Table 3
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	5-8	Present in main text and table 3 & 4.
		(b) Report category boundaries when continuous variables were categorized	-	
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	-	Not applicable
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	5,7,8	Reported in table 5 , main manuscript and supplementary material

Discussion			
Key results	18	Summarise key results with reference to study objectives	8
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	10
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	8-10
Generalisability	21	Discuss the generalisability (external validity) of the study results	10
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	12

*Give information separately for exposed and unexposed groups.

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.