

Call of Abstracts - "International conference on the E-Cigarette: patterns of use and health impacts"



Call of abstracts

"International conference on the E-Cigarette: patterns of use and health impacts" - Paris, on 5-6th December 2022

Submission form

Poster & oral presentation

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Background information

Type of submission

Oral

Theme of conference

Health impact

Keywords

E-Cigarette and use related diseases

Epidemiology

Respiratory diseases

Abstract title

Electronic Nicotine Delivery Systems (ENDS) use during a five-year period is not associated with self-reported chronic obstructive pulmonary disease (COPD) after adjustment of cigarette smoking history: A longitudinal analysis of PATH data.

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Abstract details (poster & oral)

Background, method, results and conclusions

Background

Understanding the relationship between electronic nicotine delivery systems (ENDS) use and chronic obstructive pulmonary disease (COPD) and other respiratory conditions is critical. However, previous studies have not adequately controlled for history of cigarette smoking.

Methods

Research Question: To examine the prospective association between ENDS use and self-reported incident COPD after adjusting for cigarette smoking history.

Using waves 1-5 of the US Population Assessment of Tobacco and Health (PATH) study, we examined the association between ENDS use and self-reported incident COPD among adults aged 40+ using discrete time survival models. Current ENDS use was measured as a time-varying covariate, lagged by one wave, defined as established daily or some days use. We controlled for baseline demographics (age, sex, race/ethnicity, education), health characteristics (asthma, obesity, exposure to second-hand smoke), and smoking history (smoking status and cigarette pack-years).

Results

Incident COPD was self-reported by 925 respondents during the five-year follow-up period. Prior to adjusting for other covariates, time-varying ENDS use appeared to nearly double the risk of incident COPD (HR 1.98, 95% CI 1.44-2.74). However, ENDS use was no longer significantly associated with COPD (aHR 1.10, 95% CI 0.78-1.57) after adjusting for current cigarette smoking and cigarette pack-years. The risk of self-reported incident COPD increased with cigarette pack-years and was higher for respondents who were older, female, less educated, and had baseline asthma or obesity.

Conclusions

ENDS use did not significantly increase the risk of self-reported incident COPD over a five-year period once current smoking status and cigarette pack-years were taken into account. Cigarette pack-years, on the other hand, remained associated with a net increase in the risk of self-reported incident COPD.

Main messages

Short-term ENDS use was not associated with COPD incidence. To assess the independent health effects of ENDS, it is essential to use prospective longitudinal data and properly control for cigarette smoking history.

Type of study / research

Longitudinal

Geography of the study

Outside Europe

Funding of study

Federal source

Yes

State source

No

Nonprofit Grant Funding Entity Source

No

Nonprofit Grant Funding Entity Source

No

Academic Institution Source

No

Pharmaceutical Industry Source

No

Tobacco/E-Cigarette Industry Source

No

Declaration of interest

The submitter declares that during the past 5 years have a direct nor indirect link (professional*, personal or financial) with the tobacco and e-cigarette companies**

No