Short-term ENDS use is not associated with self-reported COPD after adjusting for cigarette smoking history: A longitudinal analysis of PATH data

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Results

Background

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

Methods

Population: Adults 40+ from Population Assessment of Tobacco & Health Study wave1 with no previous COPD diagnosis, followed waves 1-5 (2013-2019)

Outcome: Self-reported incident chronic obstructive Pulmonary Disease (COPD)

Exposure: Current ENDS use was measured as a time-varying covariate, lagged by one wave, defined as established every day or some days use

Covariates: Demographics (age, sex, race/ethnicity, education), health characteristics (asthma, obesity, exposure to second-hand smoke), and smoking history (smoking status, baseline cigarette-pack-years)

Analysis: Discrete time survival models

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 included
• Adequate control for cigarette smoking history is needed to assess any independent health effects of ENDS use on COPD

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