Characteristics and correlates of electronic cigarette product attributes and undesirable events during e-cigarette use in six countries of the EUREST-PLUS ITC Europe Surveys


Abstract

INTRODUCTION: This study assessed characteristics and correlates associated with e-cigarette product attributes and identified correlates of experiencing undesirable events during e-cigarette use among adult smokers across six European Union (EU) Members States (MS) prior to the implementation of the Tobacco Products Directive (TPD) in 2016.

METHODS: We conducted a cross-sectional survey with a nationally representative sample of adult cigarette smokers from six EU MS (Germany, Greece, Hungary, Poland, Romania, Spain) reporting e-cigarette use; randomly selected through a multistage cluster sampling design from June to September 2016. Stepwise logistic regressions were used to identify factors associated with use of flavors, noticing health warnings, mixing e-liquids, experiencing 'dry puff', e-liquid leaking during use and e-liquid spilling during refill.

RESULTS: Current daily or weekly prevalence of e-cigarette use among this sample of adult smokers was 7.5%. The most common attributes of e-cigarettes used included those that are flavored, contain nicotine, and are of tank style. Noticing health warnings on e-cigarette packaging and leaflets, respectively, was low (10.2% and 28%, respectively). Use of e-liquid refill nozzle caps, described as easy for a child to open, was associated with spilling during refill (OR=6.73; 95% CI: 2.02–22.37). Participants who adjusted occasionally or regularly the power (voltage) or temperature of their e-cigarette had greater odds of ever experiencing a 'dry puff' (OR=6.01; 95% CI: 2.68–13.46). Mixing different e-liquids was associated with leaking during use (OR=7.78; 95% CI: 2.45–24.73) and spilling during refill (OR=8.54; 95% CI: 2.29–31.88).

CONCLUSIONS: Ongoing evaluation of factors associated with e-cigarette attributes and of the correlates of experiencing e-cigarette undesirable events during use, related to product design, is crucial to monitoring the impact of the implementing Acts of the EU TPD.

Recommended Citation
