

Prevalence, trends and correlates of disposable e-cigarettes use among US youth .

Giang T. Vu^{1,2}, Tianze Sun^{1,2}, Jason Connor^{1,2,3}, Phong Thai⁴, Coral Gartner⁵, Janni Leung¹, Gary Chan¹

¹National Centre for Youth Substance Use Research (NSYCUR), The University of Queensland, Brisbane, Australia, ²School of Psychology, The University of Queensland, Brisbane, Australia, ³Discipline of Psychiatry, The University of Queensland, Brisbane, Australia, ⁴Queensland Alliance for Environmental Health Sciences (QAEHS), The University of Queensland, 20 Cornwall Street, Woolloongabba, Queensland 4102, Australia, ⁵NHMRC Centre of Research Excellence on Achieving the Tobacco Endgame, School of Public Health, Faculty of Medicine, The University of Queensland

Presenter's email: g.vu@uq.edu.au

Introduction: *The rapid rise in disposable e-cigarette use indicates a significant portion of otherwise never-smoke youth are now drawn to these products. Relevant data are needed to help inform intervention efforts. This study aims to estimate the prevalence, trends and correlates of disposable e-cigarettes use among US youth.*

Methods: *Data collected from 2019 to 2022 by the National Youth Tobacco Survey (NYTS) was analysed cross-sectionally. Participants reported their e-cigarette and cigarette use, intention to quit, harm perception, social norms towards use, exposure to e-cigarette marketing, and demographic information. Chi-squared analyses assessed the differences in various factors by products use. Logistic regression models identified significant factors associated with current disposable e-cigarette use in the NYTS 2022 participants.*

Results: *The prevalence of disposable e-cigarette use increased from 0.52% in 2019 to 5.13 % in 2022, surpassing the use of other types of e-cigarettes. Most disposable e-cigarette contained nicotine. Flavors of mint, fruit and candy, dessert or other sweet flavours were being used significantly more among disposable e-cigarette users. Disposable e-cigarette users were slightly older, thought e-cigarette had at least some health harm, perceived peers approval of e-cigarette use, had more peers using products and days in a week someone using products at home, seeing ads in shops and e-cigarette related posts on social media more often. Significant factors associated with disposable e-cigarette use included higher age, lower harm perception, having peers use and peer acceptance, having people using at home, seeing ads and related posts/ content on social media.*

Discussions and Conclusions: *Our study highlighted the potential impact of peer influence, regular exposure to e-cigarette use at home, and exposure to e-cigarette-related content on social media and retail advertisements on disposable e-cigarette use. Mitigating these influences requires comprehensive regulatory measures and collaborative efforts between governments, health authorities, and social media platforms.*

Disclosure of Interest Statement: *GV and TS are funded by Higher Degree by Research scholarships provided by The University of Queensland. GC and JL are funded by a NHMRC Investigator Grants. CG is funded by NHMRC Centre of Research Excellence Grant. NCYSUR is supported by Commonwealth funding from the Australian Government provided under the Drug and Alcohol Program. The funding bodies had no role in the study design, collection, analysis or interpretation of the data, writing the manuscript, or the decision to submit the paper for publication.*