

Characterizing heated tobacco product use among adult cigarette smokers and nicotine vaping product users in the 2018 ITC Four Country Smoking & Vaping Survey

Miller, C., Sutanto, E., Smith, D.M., Goniewicz, M., Cummings, K.M., Fong, G.T., Borland, R., & McNeill, A.

Abstract

Introduction: Heated tobacco products (HTP) have diversified global tobacco markets, and user characteristics remain understudied. This study evaluated sociodemographic characteristics, nicotine-related perceptions and behaviors of current HTP users within a sample of adult (18+ years) nicotine users across four countries.

Methods: Data were from current smokers or nicotine vaping product (NVP; known as e-cigarettes) users from Canada, England, the United States and Australia (n=11,421) who participated in the 2018 ITC Four Country Smoking and Vaping Survey. Current (at-least-monthly) HTP users were characterized (n=441), and weighted multivariable logistic regressions examined correlates of HTP use.

Results: Compared to non-users, current HTP users were younger (mean age: 44.4 vs 31.0 years; $p<0.001$) and had higher socioeconomic status ($p<0.001$). A majority of current HTP users used HTPs non-daily (daily: 40.3% vs non-daily: 59.7%). Most HTP users concurrently used both cigarettes and NVPs (90.5%). Among concurrent cigarette-HTP-NVP users, 36.2% used all three products daily. Use of other combusted tobacco products (cigars, cigarillos, pipe, waterpipe/hookah), cannabis, and binge drinking were each associated with current HTP use. HTP use was more common among smokers intending to quit within 6 months or reporting a quit attempt in the past 18 months, and vapers who had experienced negative side effects.

Conclusion: HTP users in this sample tended to be younger and more affluent. Most reported concurrent use of multiple nicotine products and other substances. Those cigarette smokers who used HTPs appeared more interested in smoking cessation, while some characteristics of concurrent HTP-NVP users were suggestive of dissatisfaction with NVPs.

Implications: Few studies have scrutinized characteristics of HTP early-adopters in emerging markets. Our results indicate that in 2018, characteristics of established nicotine users who adopted HTP use in four high-income Western countries mirror those of HTP users in East Asian markets (South Korea and Japan) where HTPs are popular. HTP users reported high levels of concurrent use of non-cigarette combusted tobacco products (e.g., cigars, pipe tobacco). These findings point to the need for future longitudinal studies of HTP use given the implications of those use patterns on the harm reduction potential of HTPs. HTP user characteristics may yield important information to consider in regulation of these products.

Recommended Citation

Miller, C., Sutanto, E., Smith, D.M., Goniewicz, M., Cummings, K.M., Fong, G.T., Borland, R., McNeill, A. (2021). Characterizing heated tobacco product use among adult cigarette smokers and nicotine vaping product users in the 2018 ITC Four Country Smoking & Vaping Survey. *Nicotine and Tobacco Research*, [Published online, doi:10.1093/ntr/ntab217].

Link To PDF: <https://academic.oup.com/ntr/advance-article/doi/10.1093/ntr/ntab217/6406616>