

A new classification system for describing the use of nicotine vaping products alongside cigarettes (so-called "dual use"): Findings from the ITC 4-Country Smoking and Vaping Wave 1 Survey

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Abstract

Aims: To determine whether a simple combination of level of smoking and level of vaping results in a useful typology for characterising smoking and vaping behaviours.

Methods: Cross-sectional data from adults (≥ 18 years) in the 2016 Wave 1 ITC Four Country Smoking and Vaping Survey in the United States ($n=2291$), England ($n=3591$), Australia ($n=1376$), and Canada ($n=2784$) were used. Participants who either smoked, vaped or concurrently used both at least monthly were included and divided into 8 groups based on use frequency of each product (daily, non-daily, no current use). This resulted in 4 concurrent use groups (predominant smokers, dual daily users, predominant vapers and concurrent non-daily users). These groups were compared with each other and with the 4 exclusive use groups, on socio-demographics, nicotine dependence, beliefs and attitudes about both products, and quit-related measures using data weighted to reference population surveys in each country.

Results: 10.8% of the sample were concurrent users, with daily smokers vaping non-daily (predominant smokers) constituting 51.6% of this group. All 8 categories differed from other categories on at least some measures. Concurrent daily nicotine users reported higher levels of indicators of nicotine dependence, and generally more positive attitudes toward both smoking and vaping than concurrent non-daily users. Among daily nicotine users, compared with exclusive daily smokers, reports of interest in quitting were higher in all concurrent use groups. Dual daily users had the most positive attitudes about smoking overall, and saw it as the least denormalised, and at the same time were equally interested in quitting as other concurrent users and were most likely to report intending to continue vaping.

Conclusions: In Australia, Canada, England and the United States in 2016, daily nicotine users differed considerably from non-daily nicotine users. Among daily nicotine users, dual daily users (those who smoke and vape concurrently) should be treated as a distinct grouping when studying relationships between smoking and vaping. The 8 level typology characterising concurrent and exclusive use of smoking and vaping should be considered when studying both products.

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