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Cannabis as a Nicotine Cessation Aid: Prevalence of Use and Potential Consequences in a Survey of US Adults

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We have no conflicts of interest to disclose.

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Introduction

Most people who use cigarettes or e-cigarettes (i.e., vape) want to quit.^{1,2} Providers can offer patients evidence-based pharmacologic and behavioral therapies. However, patients may also use non-evidence-based methods that may be less effective or even harmful. Tobacco and cannabis co-use is common, with one-third of tobacco users reporting past 30-day cannabis use,³ and some people using tobacco may see cannabis as a potential cessation aid.⁴ However, evidence regarding the impact of cannabis use on tobacco cessation is mixed, with some studies finding that co-use impedes tobacco cessation⁵ while others report promising effects of cannabinoids on nicotine withdrawal.⁶ The frequency with which people use cannabis as a tobacco cessation aid has not been examined at a national level. We used a large, national survey to examine the use of cannabis for cigarette and vaping cessation, factors associated with cannabis use, and the association with nicotine withdrawal symptoms .

Methods

We conducted secondary data analysis from an online survey collected via Ipsos KnowledgePanel in 2023, which included a national sample of 2,804 US adults who currently smoked cigarettes (n=1,834), vaped nicotine e-cigarettes (n=521) or used both (n=449). Participants indicated the products/methods they used during past 12-month quit attempts, including evidence-based pharmacological and behavioral interventions, CBD-containing cannabis, and THC-containing cannabis.

We used logistic regression to identify factors (e.g., age, gender, education, race, income, cannabis legality in state of residence, and co-use of cigarettes and e-cigarettes) associated with use of cannabis for cessation. Additionally, we used t-tests to conduct an exploratory analysis

comparing nicotine withdrawal scores⁷ between those who did versus did not use cannabis for cessation.

Results

Among those attempting to quit cigarettes (n=735), the use of cannabis for cessation (n=66; 9.0%) was nearly as popular as the use of prescription cessation aids (n=69; 9.4%), with products including THC (n=55; 7.5%) accounting for most of the cannabis use (See Figure 1). Among those attempting to quit vaping (n=326), using any cannabis product as a cessation aid (n=53; 16.3%), primarily products with THC (n=47; 14.4%), was the third most popular cessation strategy, following quitting cold turkey and using another recreational nicotine product. Cannabis was more popular than behavioral health interventions among both groups, and more popular than over-the-counter nicotine replacement therapy and prescription cessation aids for those attempting to quit vaping. Given most cannabis products used for cessation included THC, and its potential harms over CBD-only products, we focus on THC-containing products going forward.

Among those trying to quit cigarettes, identifying as multi-racial (OR 3.69, 95%CI 1.27–10.68, ref. White), living in a state with legal medicinal cannabis (OR 2.48, 95%CI 1.12–5.48, ref. medicinally and recreationally illegal), or co-use of cigarettes and e-cigarettes (OR 2.61, 95%CI 1.37–4.97, ref. cigarettes only) was associated with using THC for cessation. Among those trying to quit vaping, younger age (OR 0.97, 95%CI 0.95–1.00) was associated with using THC for cessation. Those who identified as Hispanic were over twice as likely as non-Hispanic participants to use THC to attempt to quit both smoking (OR 2.25, 95%CI 1.03–4.88) or vaping (OR 2.75, 95%CI 1.19–6.35).

Those who did versus did not use THC to quit cigarettes reported greater severity of nicotine withdrawal symptoms, including feeling upset, thinking about food, troubled sleep, feeling restless, and trouble concentrating. Those who used THC to try to quit vaping reported more trouble concentrating (See Table).

Discussion

THC is a popular tobacco cessation aid, with use surpassing that of evidence-based interventions. Those using THC for cigarette cessation, but not vaping cessation, reported more severe nicotine withdrawal symptoms, though the reason for this is unclear. Regardless, these results encourage exploring the relationship between THC and nicotine withdrawal as a potential mechanism underlying the lower rates of successful smoking cessation among those who use cannabis.⁵ Demographic factors, including race, ethnicity and cannabis legality, were associated with THC use for cessation, suggesting a need for targeted cessation support. The US Preventive Services Task Force recommends screening for patient cannabis use, and these findings emphasize the importance of doing so among those who are attempting to quit tobacco. Further surveillance of this phenomenon is warranted and future research should explore why individuals choose THC over evidence-based cessation methods and evaluate impact on cessation outcomes.

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Authorship Contributions

Deanna M Halliday was involved in the conceptualization, data curation, formal analysis, funding acquisition, methodology, and writing and editing the original draft; Stephanie Wu was involved in the formal analysis, and writing and editing the original draft; Nhung Nguyen was involved in the conceptualization, supervision, and reviewing/editing the writing; Katherine J Hoggatt was involved in the formal analysis, validation, and reviewing/editing the writing; Salomeh Keyhani was involved in the supervision and reviewing/editing the writing; Beth E Cohen was involved in the conceptualization, data curation, funding acquisition, investigation, methodology, project administration, resources, supervision, and reviewing/editing the writing.

Human Ethics and Consent to Participate Declarations

The Committee of Human Subject Research of the University of California, San Francisco, exempted Ipsos' conduct of the survey from review because it met criteria outlined in

45 CFR §46.104 (Exempt Research). As an exempt study, this research did not require signed informed consent, but participants were provided information about the study purpose and confidentiality of responses. Clinical trial number: not applicable.

References

1. Rosen RL, Steinberg ML. Interest in Quitting E-cigarettes Among Adults in the United States. *Nicotine Tob Res*. Published online 2019. doi:10.1093/ntr/ntz062
2. CDCTobaccoFree. Fast Facts. Centers for Disease Control and Prevention. October 6, 2021. Accessed April 28, 2022. https://www.cdc.gov/tobacco/data_statistics/fact_sheets/fast_facts/index.htm
3. Cohn AM, Chen S. Age groups differences in the prevalence and popularity of individual tobacco product use in young adult and adult marijuana and tobacco co-users and tobacco-only users: Findings from Wave 4 of the population assessment of tobacco and health study. *Drug and Alcohol Dependence*. 2022;233:109278. doi:10.1016/j.drugalcdep.2022.109278
4. Halliday DM, Song AV, Nguyen N. E-cigarette and cannabis use among current and recently quit smokers: Co-use and Co-cessation. *Addictive Behaviors Reports*. 2025;21:100611. doi:10.1016/j.abrep.2025.100611
5. Driezen P, Gravely S, Wadsworth E, et al. Increasing Cannabis Use Is Associated With Poorer Cigarette Smoking Cessation Outcomes: Findings From the ITC Four Country Smoking and Vaping Surveys, 2016–2018. *Nicotine & Tobacco Research*. 2021;(ntab122). doi:10.1093/ntr/ntab122
6. Balerio GN, Aso E, Berrendero F, Murtra P, Maldonado R. Δ^9 -tetrahydrocannabinol decreases somatic and motivational manifestations of nicotine withdrawal in mice. *European Journal of Neuroscience*. 2004;20(10):2737-2748. doi:10.1111/j.1460-9568.2004.03714.x

7. Smith SS, Piper ME, Bolt DM, Kaye JT, Fiore MC, Baker TB. Revision of the Wisconsin Smoking Withdrawal Scale: Development of brief and long forms. *Psychological Assessment*. 2021;33(3):255-266. doi:10.1037/pas0000978

Legend for Figure

Figure 1. Popularity of Cessation Aids

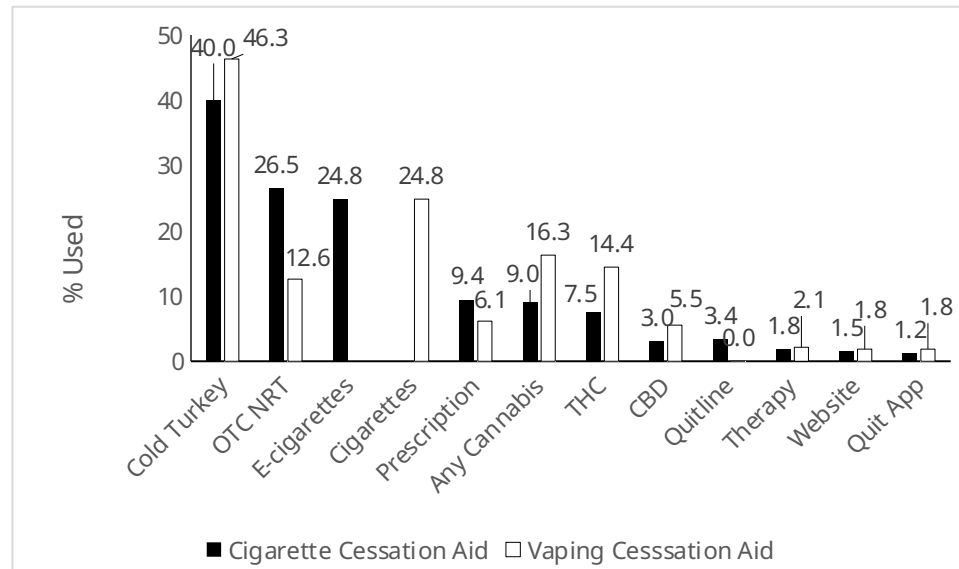
Note. Black bars represent the percent of individuals who had attempted to quit smoking cigarettes that used each cessation method. While bars represent the percent of individuals who had attempted to quit vaping that used each cessation method. Other nicotine includes smokeless tobacco, nicotine pouch products, e-cigarettes for those quitting cigarettes, and cigarettes for those quitting e-cigarettes; OTC NRT refers to over-the-counter nicotine replacement therapy (e.g., patch, gum, lozenge, inhaler, etc.). Prescription medication includes Bupropion, Wellbutrin, Zyban or Varenicline, Chantix, and Champix. THC products include any marijuana/cannabis products that include Tetrahydrocannabinol (THC). CBD products include any marijuana/cannabis products that include cannabidiol (CBD), but not THC. Behavioral interventions include telephone quit lines, stop smoking courses/classes pamphlets, or books on quitting smoking. Counseling includes individual and group counseling. Websites include any website or social media site about quitting smoking. Apps include any online apps or automated services on a mobile phone or tablet.

1. Withdrawal symptoms

	Among Those with Cigarette Quit Attempt			Among those with Vape Quit Attempt		
	Used THC	Did not Use THC		Used THC	Did not Use THC	
	M(SD)	M(SD)	<i>p</i>	M(SD)	M(SD)	<i>p</i>
Feeling Upset	4.12 (2.00)	3.26 (1.95)	0.003	3.51 (2.22)	3.25 (2.04)	0.480
Thinking about food a lot	4.02 (2.08)	3.03 (1.99)	0.001*	3.16 (1.99)	3.07 (1.97)	0.806
Wanting to smoke	4.96 (1.85)	4.77 (1.85)	0.477	4.03 (2.15)	4.05 (2.09)	0.956
Troubled Sleep	3.96 (2.31)	2.93 (2.04)	0.001*	3.01 (2.08)	3.62 (2.05)	0.100
Feeling Restless	4.35 (2.16)	3.58 (2.01)	0.009	3.92 (2.01)	3.49 (2.06)	0.243
Having Trouble Concentrating	3.76 (1.98)	2.98 (1.98)	0.008	3.89 (2.05)	3.13 (2.01)	0.036
Overall Withdrawal Scores	4.18 (1.68)	3.44 (1.54)	0.001*	3.69 (1.63)	3.69 (1.62)	0.218

Note. Results are bolded to indicate significance if p-values were below 0.05. Results with an asterisk meet a stricter requirement for significance ($p < 0.003$) as informed by a Bonferroni correction. Scores were calculated from responses to the Wisconsin Smoking Withdrawal Scale. The scale ranged from 1 to 7, with higher scores representing feeling more bothered by the specific withdrawal symptom.

Figure 1. Popularity of Cessation Aids



Note. Black bars represent the percent of individuals who had attempted to quit smoking cigarettes that used each cessation method. White bars represent the percent of individuals who had attempted to quit vaping that used each cessation method. Other nicotine includes smokeless tobacco, nicotine pouch products, e-cigarettes for those quitting cigarettes, and cigarettes for those quitting e-cigarettes; OTC NRT refers to over-the-counter nicotine replacement therapy (e.g., patch, gum, lozenge, inhaler, etc.). Prescription medication includes Bupropion, Wellbutrin, Zyban or Varenicline, Chantix, and Champix. THC products include any marijuana/cannabis products that include Tetrahydrocannabinol (THC). CBD products include any marijuana/cannabis products that include cannabidiol (CBD), but not THC. Behavioral interventions include telephone quit lines, stop smoking courses/classes pamphlets, or books on quitting smoking. Counseling includes individual and group counseling. Websites include any website or social media site about quitting smoking. Apps include any online apps or automated services on a mobile phone or tablet.