



Full length article

Prevalence and correlates of treatment utilization among adults with cannabis use disorder in the United States

Li-Tzy Wu^{a,b,c,d,*}, He Zhu^a, Paolo Mannelli^a, Marvin S. Swartz^a^a Department of Psychiatry and Behavioral Sciences, Duke University Medical Center, Durham, NC, USA^b Department of Medicine, Division of General Internal Medicine, Duke University Medical Center, Durham, NC, USA^c Duke Clinical Research Institute, Duke University Medical Center, Durham, NC, USA^d Center for Child and Family Policy, Sanford School of Public Policy, Duke University, Durham, NC, USA

ARTICLE INFO

Keywords:

Asian American
Black
Cannabis use disorder
Hispanic
Mixed race
Native American
Substance use treatment

ABSTRACT

Background: The increase in cannabis potency may have treatment implications for cannabis use disorder (CUD). Given the reported increase in prevalence of cannabis use among adults, there is a need to understand substance use treatment needs for CUD.

Methods: We examined demographics and behavioral health indicators of adults aged ≥ 18 years that met criteria for past-year CUD ($n = 10,943$) in the 2005–2013 National Surveys on Drug Use and Health. We determined prevalence and correlates of past-year treatment use for alcohol/drug, any drug, and cannabis use related problems, to inform treatment efforts for CUD.

Results: The majority of adults with past-year CUD were young adults aged 18–25 or men, had low income, and did not attend college. Two-thirds of adults with CUD met criteria for cannabis dependence, which was comparatively common among younger adults, women, low-income or publicly insured adults, and college-educated adults. Nicotine dependence (40.92%) and alcohol (44.07%) or other drug use disorder (19.70%) were prevalent among adults with CUD. Overall, less than 13% of adults with CUD had received alcohol/drug use treatment the past year; only 7.8% received cannabis-specific treatment. There was no significant yearly variation in treatment use prevalence over 9 years. In particular, Asian-Americans, women, and college-educated adults underutilized cannabis-specific treatment.

Conclusions: This large sample of adults with CUD reveals pervasive underutilization of cannabis-related treatment, especially in women, married adults, and those with college education, despite a high proportion of comorbid behavioral health problems.

1. Introduction

Various sources suggest that cannabis potency-levels have progressively increased (Office of National Drug Control Policy [ONDCP], 2015; Drug Enforcement Administration [DEA], 2016). The average THC potency of traditional leafy marijuana seizures was 12% in 2014, compared with 4% in 1995; and the average THC content of marijuana concentrate seizures (“hash-oil”) increased from 13% in 1995 to 55% in 2014 (DEA, 2016). The higher potency of cannabis preparation raises concerns of potential adverse effects associated with problem cannabis use (CU) (cannabis-related disorders, motor-vehicle accidents, medical complications) and supports the opportunity to monitor cannabis-related treatment needs (Copeland and Pokorski, 2016; Freeman and Swift, 2016; Volkow et al., 2014).

An estimated 32.9 million adults (13.6% of Americans aged ≥ 18

years) used cannabis in the past year in 2015 (Center for Behavioral Health Statistics and Quality [CBHSQ], 2016a). Cannabis use disorder (CUD) is the most prevalent illicit/nonmedical drug use disorder, affecting approximately 4.0 million Americans in 2015 or 52% of individuals with an illicit/nonmedical drug use disorder (CBHSQ, 2016a). Current CU prevalence among adults has increased: from 16 to 17.0% in the early 2000s to 19.8% in 2015 among those aged 18–25 years; and from 4.0% to 6.5% among adults 26 years old or older (CBHSQ, 2016b). While the overall CUD prevalence appeared to remain stable in recent years (CBHSQ, 2016b), an analysis of 340,456 adults suggested an increased trend in monthly and weekly CU, especially among minority groups (Wu et al., 2016). In the total adult sample, the odds of weekly CU and monthly CU were greater among blacks, native-Americans, and mixed-race adults than whites; and among cannabis users, the odds of CUD were greater among blacks, native-Americans, and Hispanics than

* Corresponding author at: Department of Psychiatry and Behavioral Sciences, Duke University Medical Center, Box 3903, Durham, NC 27710, USA.
E-mail address: litzzy.wu@duke.edu (L.-T. Wu).

<http://dx.doi.org/10.1016/j.drugalcdep.2017.03.037>

Received 14 February 2017; Received in revised form 23 March 2017; Accepted 23 March 2017

Available online 29 May 2017

0376-8716/© 2017 The Author(s). Published by Elsevier Ireland Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

whites (Wu et al., 2016). Young adults, men and less-educated adults also showed elevated odds of CUD, reinforcing the suggestion to monitor CUD treatment needs (Wu et al., 2014, 2016).

According to data from the Treatment Episode Data Set (TEDS), primary cannabis abuse accounted for 15% of all substance use treatment admissions in 2014 (SAMHSA, 2016 Substance Abuse and Mental Health Services Administration [SAMHSA], 2016). The average age of cannabis-related treatment admission was 26 years, and minority groups accounted for 56% of primary cannabis-involved admissions (SAMHSA, 2016). Given the large number of cannabis users, a significant increase in CU coupled with an elevated cannabis preparation potency may generate an impact on healthcare resource utilization (CBHSQ, 2016b; Freeman and Swift, 2016). For example, findings from Drug Abuse Warning Network data reveal an increased trend in cannabis-involved emergency department (ED) visits, and the prevalent ED visits were noted among blacks/African-Americans (Zhu and Wu, 2016). Moreover, cannabis-involved ED visits among adults (especially older adults) were associated with increased odds of inpatient hospitalizations relative to adolescents (Zhu and Wu, 2016).

Seven states recently have legalized recreational CU among adults; 28 states and Washington D.C. have approved medical cannabis use; and 16 states consider cannabidiol use legal, suggesting that over 80% of states approve some form of cannabis use in the United States (DEA, 2016). The generalized changes in cannabis laws (legalization, decriminalization) may have unintended effects on CU and cannabis-related problems (Volkow et al., 2014, 2016). An analysis of national survey data showed that adult respondents in states with medical marijuana laws had higher odds of CU and CUD than adult respondents in states without such laws (Cerdá et al., 2012). Although absolute medical harms associated with extensive shifts in cannabis policy are difficult to quantify due to inherent confounding factors and data limitations, recent reports suggest an increase in demand for cannabis-related treatment (Colorado Department of Public Safety [CDPS], 2016; Compton and Baler, 2016). Mair et al. (2015) found that the density of local cannabis dispensaries was positively associated with cannabis-related hospitalizations. Another study reported a 10–20% increase in cannabis-related treatment admissions among men after the passage of medical cannabis laws (Chu, 2014). Data from Colorado indicate significant increases in cannabis-related ED visits and hospitalizations (CDPS, 2016; Kim et al., 2016).

While causality remains unclear, studies have documented associations of chronic or frequent CU with substance use disorders (SUDs), medical conditions (chronic bronchitis symptoms, cardiovascular diseases, depression, psychotic symptoms), and driving injuries (Blanco et al., 2016; Jouanjus et al., 2014; Monte et al., 2015; Volkow et al., 2014). Further, a high proportion of recent/active cannabis users has CUD. Using the national survey data, it was estimated that as many as 19% of past-year cannabis users aged 18–25, and 9–13% of cannabis users aged 26–49 meet criteria for past-year CUD (Wu et al., 2014). The impact of cannabis-involved harms is associated with cannabis potency, number of cannabis users, and indicators of problem use (CUD, cannabis-related medical events) (Freeman and Winstock, 2015). The combined rise in prevalence of CU, cannabis potency, and cannabis-involved ED admissions suggest a potential impact of CU on the burden of the health system (Compton and Baler, 2016; Hasin et al., 2015; Volkow et al., 2014; Zhu and Wu, 2016).

Here, we utilize a large sample of adults from the 2005–2013 National Surveys on Drug Use and Health (NSDUH) to gauge prevalence and correlates of alcohol/drug treatment use among adults with CUD to inform intervention efforts. The use of the large sample is critical to understanding population-level treatment use prevalence and inform disparity for demographic groups. Some racial/ethnic groups (blacks, mixed-race individuals, native-Americans) appear to have a higher prevalence of past-year CUD than whites (Wu et al., 2014, 2016). Findings from the TEDS also revealed that cannabis was among the most commonly identified illicit/nonmedical drugs for treatment

admissions among blacks (27%), Hispanics (20%), and Asians/Pacific Islanders (19%), while cannabis accounted for just 11% of annual treatment admissions among whites (SAMHSA, 2016). TEDS data suggest that racial/ethnic minority groups may be over-represented among cannabis-using patients at substance use treatment facilities. However, TEDS data reflect treatment admissions that are confounded by the possibility of multiple admissions among frequent treatment users, which provide inadequate information about prevalence and correlates of treatment use for CUD.

We analyze the national sample of adults drawn from the NSDUH to gauge prevalence and correlates of treatment use among adults with CUD. We examine treatment use for alcohol, drug use, and CU, respectively, to understand the fuller extent of substance treatment use among adults with CUD (i.e., whether treatment is related to cannabis or other substances). Following Andersen's healthcare utilization model, we examine correlates of treatment use in three domains found to influence treatment-seeking: predisposing/demographic variables (race/ethnicity, age, sex, marital status); enabling variables (family income, education, health insurance, county type of residence); and need-related factors (CUD status, other SUD, mental health) (Andersen, 1995; Fleury et al., 2014; Wu et al., 2003, 2007, 2012). Given the reported concern with CU problems and treatment admissions among minority groups (SAMHSA, 2016; Wu et al., 2016), we evaluate racial/ethnic differences in prevalence of behavioral health indicators (cannabis dependence, major depressive episode, other SUD), treatment use (alcohol/drug, any drug, cannabis-specific), and location/setting.

2. Methods

2.1. Data source

The annual NSDUH is the primary national survey designed to provide ongoing estimates of substance use and SUDs among civilian, non-institutionalized individuals aged ≥ 12 years in the United States (SAMHSA, 2006, 2014). It uses cross-sectional designs to provide substance use related estimates. The target population consisted of residents of households (including shelters, rooming houses, and group homes) from the 50 states and civilians residing on military bases. The survey used stratified, multistage area probability sampling methods to select a representative sample of the U.S. population aged ≥ 12 years.

NSDUH data collection used a face-to-face household interview approach. Computer-assisted personal interviewing, in which interviewers read less-sensitive questions to respondents and enter the respondents' answers on the laptop, was employed to collect demographic information. Substance use and health-related questions were assessed by an audio computer-assisted self-interviewing method (in which respondents read or listen to the questions on headphones and then enter their answers directly on the NSDUH laptop computer) to increase honest reports of sensitive behaviors (Turner et al., 1998).

We analyzed adult samples (aged ≥ 18 years) of public-use datasets from nine survey years (2005–2013) ($n = 36,965$ – $39,133$ /year) to characterize substance use treatment among adults with CUD. The NSDUH implemented changes in the survey design in 2005 and in 2014. Data from prior (2004) and later (2014) years were not included for this analysis. The 2005–2013 years used similar designs to allow analysis of the same variables to study treatment use. Weighted response rates of household screening and interviewing for these years were 84–91% and 72–76%, respectively (SAMHSA, 2006, 2014). In the 2005–2013 adult sample (unweighted $n = 340,456$), 1.47% (unweighted $n = 10,943$) met criteria for past-year CUD, which formed the analysis sample.

2.2. Study variables

Demographics: The NSDUH defined seven mutually exclusive racial/ethnic groups based on respondents' self-reported race and ethnicity: non-Hispanic white, non-Hispanic black, non-Hispanic native-

Download English Version:

<https://daneshyari.com/en/article/5120036>

Download Persian Version:

<https://daneshyari.com/article/5120036>

[Daneshyari.com](https://daneshyari.com)