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Older adults who use or have used marijuana: Help-seeking for marijuana and other substance use problems

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ABSTRACT

Objective: Increasing numbers of older adults are using marijuana and may experience problems related to marijuana use. This study examined relationships (1) between help-seeking for marijuana use and the presence of other substance use and/or mental disorders and (2) between help-seeking for other substance use disorders and marijuana use among adults aged 50+.
Methods: The 2012–2013 National Epidemiologic Survey on Alcohol and Related Conditions provided data ($N = 14.715$). Bivariate analyses were used to compare never, past-year, and ex-marijuana users on lifetime substance use and mental disorders and help-seeking for associated problems. Binary logistic regression models were used to examine the correlates of help-seeking for marijuana and other substance use problems.
Results: 21.20% of past-year and 13.72% of ex-marijuana users with lifetime marijuana use disorder sought help for marijuana problems. The odds of help-seeking were higher for those with lifetime marijuana use disorders if they also had other drug (OR = 2.84, 95% CI = 1.39–5.80) and/or nicotine use disorder (OR = 2.96, 95% CI = 1.28–6.87). The odds of help-seeking for alcohol problems among those with alcohol use disorder were significantly higher if they were also ex- or past-year marijuana users. The odds of help-seeking for nicotine problems among those with nicotine use disorder were significantly higher only if they were ex-marijuana users.
Conclusions: Adults aged 50+ with marijuana use disorder often have other substance use and mental disorders. Healthcare providers should screen for marijuana and other substance use along with mental disorders and provide education about harms from polysubstance use and referrals for treatment.

1. Introduction

Data from the U.S. National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) show that the prevalence of marijuana use among adults (aged 18+ years) more than doubled between 2002-2003 and 2012–2013, from 4.1% to 9.5%, with the most notable increase among late middle-aged and older adults (Hasin et al., 2015). Past-year marijuana use rates rose from 1.6% to 5.9% in the 45–64 age group and from 0.0% to 1.3% in the 65+ age group, and marijuana use disorder rates rose from 0.4% to 1.3% in the 45–64 age group and from 0.0% to 0.3% in the 65+ age group (Hasin et al., 2015). Marijuana affects physical/mental health and its use often co-occurs with other substance use; in addition, marijuana use disorder often co-occurs with mental disorders (Conway, Compton, Stinson, & Grant, 2006; Volkow et al., 2016). Although marijuana remains a Schedule 1 drug with no recognized medical use under federal law, 28 states and the District of Columbia have passed laws making medical and/or recreational marijuana use legal. This may contribute to the perception that marijuana is a no/low risk substance (Okaneku, Vearrier, McKeever, LaSala, & Greenberg, 2015). As the baby boomers (Americans born from 1946 to 1964) continue to swell the ranks of older adults, the increasing trajectory of marijuana and other illicit drug use and related problems among older adults is likely to continue (Wu & Blazer, 2010). Since little research has been done on substance abuse treatment utilization among older adult marijuana users, this study examined their help-seeking behaviors for marijuana use problems and the role other substance use and/or mental disorders may play in it.

1.1. Marijuana use and physical/mental health

Marijuana is a complex substance. Though it may provide some potential medicinal benefits, it has been associated with or found to cause multiple physical and mental health problems. Short-term marijuana use has been linked to impaired short-term memory, judgment, motor coordination, and driving skills; increased injury risk; lowered motivation and increased anxiety; and paranoia and psychosis in a dose-response effect in all age groups (Brady & Li, 2014; Hall & Degenhardt, 2014; Mechoulam & Parker, 2013; Volkow, Baler, Compton, & Weiss, 2014; Volkow et al., 2016; Wilkinson, Stefanovics, & Rosenheck, 2015). Marijuana inhalation has also been linked to cardiovascular, cerebrovascular, and peripheral vascular events and to risks for multiple

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respiratory symptoms and diseases (chronic bronchitis and chronic obstructive pulmonary disease), especially when smoked in combination with tobacco (Lutchmansingh, Pawar, & Savici, 2014; Tan et al., 2009; Tashkin, 2013; Thomas, Kloner, & Rezkalla, 2014). Decreased resistance to various infectious agents has been linked to cannabinoids' role in suppressing inflammatory response and immunity (Hezode et al., 2008; Klein, Friedman, & Specter, 1998). While pain control is among the primary reasons for seeking/using medical marijuana (Reinarman, Nunberg, Lanthier, & Heddleston, 2011), current chronic pain was significantly associated with lifetime marijuana use in a large representative sample of U.S. adults (Zvolensky et al., 2011). With steadily increased tetrahydrocannabinol (THC) potency (Cascini, Aiello, & Di Tanna, 2012; Mehmedic et al., 2010), marijuana use may also be associated with a variety of other health risks (Gordon, Conley, & Gordon, 2013).

1.2. Comorbidity of marijuana use disorder, other substance use disorders, and mental disorders

In at least some respects, marijuana may be safer than alcohol, tobacco, and other illicit drugs (Nutt, King, & Phillips, 2010). The cumulative probability of transition to dependence after a decade of marijuana use has been estimated to be lower (5.9% of users) than the probabilities for nicotine (15.6%), alcohol (11.0%), and cocaine (14.8%) use (Lopez-Quintero et al., 2011). However, transition from first use to dependence occurs faster (5 years) among marijuana users (and cocaine users [4 years]) than among nicotine (27 years) and alcohol (13 years) users (Lopez-Quintero et al., 2011). Moreover, transition rates for these substances, including marijuana, tend to be higher among men, racial/ethnic minorities, and those with mental (e.g., mood, anxiety, or personality) disorders and/or other substance (e.g., nicotine or alcohol) use disorders (Lopez-Quintero et al., 2011). Of all drugs, disorder rates for alcohol are highest followed by marijuana (National Institute on Drug Abuse, 2015).

Multiple cross-sectional epidemiologic studies show that marijuana use disorder may co-occur with other substance use disorders and mental disorders, including major depression, dysthymia, mania, hypomania, anxiety disorders, and schizophrenia (Conway et al., 2006; Glantz et al., 2008; Kessler, 2004; Martins & Gorelick, 2011; Swendsen et al., 2010). A NESARC-based study also showed that marijuana use in 2001–2002 was significantly associated with substance use disorders in 2004–2005, including marijuana, other drug, alcohol, and nicotine use disorders (Blanco et al., 2016). A systematic review of 35 longitudinal, population-based studies also found that marijuana use, in a dose-response effect, significantly increased the risk for depression, anxiety, and psychosis (Moore et al., 2007).

1.3. Effects of marijuana use on older adults' health and their treatment utilization

A majority of older adult marijuana users perceive no or only slight risk from frequent (several times a week) marijuana use (Black & Joseph, 2014; Choi, DiNitto, Marti, & Choi, 2016). In a qualitative study, baby boomers described their motivations for marijuana use as relaxation/stress reduction, social/recreational, enhancement/expansion (e.g., heightened awareness, concentration, creativity), and symptom relief (e.g., from chronic pain and other physical health conditions) (Lau et al., 2015a). These boomers see marijuana as a safer alternative to other illicit drugs, alcohol, and pharmaceuticals, with less adverse side effects, low-risk for addiction, and greater effectiveness in relieving symptoms such as pain and anxiety (Lau et al., 2015b). However, since older marijuana users typically began using in their teen years (Choi, DiNitto, & Marti, 2016), their use may be long-term. Long-term heavy and/or frequent use may exacerbate existing physical and mental health problems and delay recovery from injuries. Older-adult trauma patients (aged 55+) seen at emergency departments who screened positive for marijuana had higher odds of ICU admission, operations, and longer hospital stays, though not in-hospital mortality, than those who screened negative, controlling for injury severity score and mechanisms of injury (Lank & Crandall, 2014). The greater levels of healthcare resource utilization among older marijuana users have significant implications for healthcare costs. A study based on the National Hospital Discharge Survey and the Florida Hospital Discharge Data from 1993 to 2000 of patients of all age groups found that those comorbid for alcohol and marijuana use and those comorbid for mood disorders and marijuana use had longer hospital stays and/or incurred higher charges than patients without marijuana comorbidity (Pacula, Ringel, Dobkin, & Truong, 2008).

According to the Substance Abuse and Mental Health Services' (SAMHSA) Treatment Episode Data Set (TEDS), marijuana was the primary substance of abuse for 16.8% of all admissions to publicly funded substance abuse treatment programs in 2013, and those aged 50+ were 3.4% of these admissions (SAMHSA, 2015). Research indicates that of those seeking formal treatment for marijuana use problems, older individuals and women are more inclined to do so than others for health reasons (Pacek & Vandrey, 2014). Quit attempts among nontreatment seeking, adult marijuana users tend to be prompted by marijuana's negative impacts on health (especially among older individuals), social and self-image (especially among women), interpersonal relationship concerns, and legal concerns (Chauchard, Levin, Copersino, Heishman, & Gorelick, 2013; Hughes, Peters, Callas, Budney, & Livingston, 2008). However, earlier epidemiologic and longitudinal studies found that most attempts to quit/reduce marijuana (as well as alcohol and nicotine) use and recover from associated problems/disorders occur without formal treatment (Cunningham, 1999; Cunningham, 2000; Dawson et al., 2005; Fiore et al., 1990; Price, Risk, & Spitznagel, 2001; Smart, 2007; Sobell, Cunningham, & Sobell, 1996).

1.4. Study hypotheses

Using 2012–2013 NESARC data for those aged 50+, we first compared lifetime substance use and mental disorders and related help-seeking among three groups: those who had never used marijuana (never users), those who used it prior to the past year (ex-users), and those who used it during the past 12 months (past-year users). Second, we examined associations of any help-seeking for marijuana use with other substance use and mental disorders. Third, we examined whether help-seeking by those with another substance use disorder was associated with marijuana use. Study hypotheses were: (H1) Help-seeking for marijuana use problems among those with lifetime marijuana use disorder will be significantly associated with having other substance use and mental disorders; and (H2) help-seeking for a lifetime substance use disorder other than marijuana will be significantly associated with both past-year and prior-to-past-year marijuana use.

2. Material and methods

2.1. Data and sample

The 2012–2013 NESARC (NESARC-III), sponsored by the National Institute on Alcohol Abuse and Alcoholism (NIAAA), is a nationally representative sample survey of the U.S. civilian noninstitutionalized population aged 18+ years ($N = 36.309$). NESARC-III employed multistage probability sampling. Primary sampling units were individual counties, though in some rural areas, contiguous counties were combined. Secondary sampling units were groups of Census-defined blocks. Tertiary sampling units were households within sampled secondary sampling units. An eligible adult respondent was randomly selected from each household. Hispanics, Blacks, and Asians were oversampled (Grant et al., 2015). NIAAA's Alcohol Use Disorder and Associated Disabilities Interview Schedule, a semi-structured diagnostic interview, was used to collect data about alcohol, nicotine, and other drug use and use

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