Abstract: Since 1996, 39 of the 50 US states have enacted medical cannabis laws (MCL) and since 2012, 21 states and Washington D.C. (DC) enacted recreational cannabis laws (RCL). Many individuals can use cannabis without harm, and legalization helps achieve social justice and financial aims. However, 20%-33% of cannabis users develop cannabis use disorder (CUD), which is associated with impaired functioning, psychosocial, physical and psychiatric problems. Despite these risks, Americans increasingly see cannabis use as harmless or even beneficial in treating or preventing health problems. The prevalence of frequent cannabis use and CUD has increased in US adults in recent years. Studying the role of MCL and RCL in these nationally increasing prevalences is challenging due to staggered-adoption dates of state legalizations, few years of data available to study RCL, and other potential influences on cannabis use and CUD. Using self-report data from US national surveys, MCL have been shown to have little influence on adolescent cannabis use, but increase adult illicit cannabis use and CUD. Fewer studies have examined RCL; in these, RCL increases adult use and CUD. However, studies are needed in national patient populations with multiple risk factors for CUD, including painful medical conditions and a high prevalence of psychiatric disorders. We used data from the electronic health records (EHR) database of the US Veterans Health Administration (VHA), the largest integrated healthcare system in the US, to examine trends in provider-diagnosed ICD-9-CM and ICD-10-CM CUD over time, differences in these trends by patient characteristics, and the role of MCL and RCL in the trends. CUD diagnoses more than doubled overall in the VHA, from 0.85% in 2005 to 1.92% in 2019. Increases were found across age, sex, and racial/ ethnic subgroups of patients, with greater rates and increases among patients with chronic pain and with psychiatric disorders. Among patients living in MCL and RCL states, increases in CUD were larger than among patients in other states, although the size of legalization effects suggested that other factors are important in driving up prevalence, e.g., online commercialized information and other forms of advertising. The tensions between public health aims, social justice and financial gain will be discussed.

Disclosure of Interest: None Declared

## **S0047**

## Patterns of Cannabis Use Among US Middle-Aged and Older Adult Cannabis Users

O. Livne<sup>1,2</sup>

<sup>1</sup>New York State Psychiatric Institute and <sup>2</sup>Department of Epidemiology, Mailman School of Public Health, Columbia University, New York, United States doi: 10.1192/j.eurpsy.2023.84

**Abstract:** Cannabis use is sharply increasing among middle-aged and older US adults, two populations that are particularly vulnerable to the detrimental effects of cannabis use. In recent decades patterns of cannabis use (e.g., method of consumption, product type, and potency) have become increasingly heterogeneous. However, little is known about the differences in such patterns between younger adult, middle-aged, and older adult users.

In this presentation, we will provide clinicians and researchers with important information on a wide array of patterns of cannabis use among adults ages  $\geq$ 50 years, and highlight potential risks and harm reduction strategies. Findings from a recent study will be

presented. Respondents were 4,151 US adult past 7-day cannabis users who participated in an online survey administered via social media platforms. Using logistic and linear regression models, we examined whether middle-aged (50-64 years; n=1,080), and older adult (>65 years; n=295) respondents differed from younger (18-49 years; n=2,776) respondents, and from each other across several patterns of cannabis use. Results show that in comparison with younger adults, middle-aged and older adults were more likely to consume cannabis products earlier during the day, by fewer methods of consumption, exclusively by smoking, and in smaller amounts, but were less likely to consume cannabis products that are highly potent, and by methods of consumption other than smoking. Significant differences were also observed in several patterns of cannabis use between older and middle-aged adults, including time of day of use, methods of consumption, potency and amounts of use. In a changing cannabis use landscape, our findings indicate that middle-aged and older adults may be less affected by the recently increasing heterogeneity in patterns of cannabis use, but also inform on the need for targeted harm reduction approaches. Findings also highlight existing gaps in the literature and future research directions.

Disclosure of Interest: None Declared

## **S0048**

## Measurement of Cannabis Consumption to Determine Risk and Promote Public Health

A. J. Budney

Psychiatry and Biomedical Data Sciences, Geisel School of Medicine at Dartmouth, Lebanon, United States doi: 10.1192/j.eurpsy.2023.85

Abstract: With the escalation of cannabis legalization and commercialization, the need to differentiate low- vs. high-risk patterns of cannabis use, especially among frequent consumers, becomes essential for development of prevention and intervention strategies and public health messaging. The diversity of cannabis products and methods of intake make this task complex. In particular, the lack of valid methods for quantifying use of the intoxicating component of cannabis, i.e., THC, poses a difficult challenge. This presentation will describe a series of internet-based, personalized survey studies of adults who consume cannabis frequently. The aims of the studies are to develop methods for quantifying THC from self-reports of use, identify patterns of use, and determine associations between use and risk. In the first study of adult daily cannabis consumers (n>4000), rates of CUD were 35% no disorder, 39% mild, 18% moderate, 8% severe disorder. Higher severity was significantly related to younger age, unemployment, and specific reasons for use. Latent class analyses identified four distinct subgroups and preliminary analyses showed that those more likely to report oral use were less likely to meet CUD criteria, and those more likely to report use of high potency products were more likely to meet moderate/severe criteria. Two studies (n's >2000) compared different quantitative formulas for estimating daily THC consumption from vaping or smoking cannabis products. Findings demonstrated how quantity (mgTHC) relates to socio-demographics, use patterns, and CUD severity. However, substantial variability in the estimates obtained across quantitation methods indicates the need for additional studies to determine optimal approaches. Overall, findings show that specific characteristics of use can discriminate