

Trends in Cannabis Use among US Adults amid the COVID-19 Pandemic

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Introduction

- The COVID-19 pandemic has resulted in numerous stressors, including social isolation and historically high unemployment rates.
 - One possible implication of the pandemic is changes in alcohol use in the general population.
- Cross-sectional studies of U.S. adults have found significant increases in the frequency of alcohol use, including binge drinking.
- Data on retail sales has also shown notable increases as many states closed non-essential establishments such as bars and restaurants.
- Limited research on whether these increases have sustained over time during the pandemic.

Methodology

- Design:** Probability-based online panel
- Participants:** 1,761 U.S. adults from the Understanding America Study (UAS) who reported using cannabis at least once between March and November 2020
- Measurement:** Changes in self-reported days in last week cannabis was used from March 10 through November 11, 2020, in the overall sample and stratified by sex, age, race/ethnicity, household structure, poverty status, and state cannabis policy.
- Analysis:** Three stages to examining trends.
 - Associations of each sociodemographic characteristic with the average number of days cannabis was used across the full survey period
 - Model with restricted cubic splines for days since March 10 as covariate to examine the trajectories of cannabis use over time.
 - Sequence of models with interactions between the splines for days since March 10 and each of the identified sociodemographic characteristics to determine whether trajectories of cannabis use days over time differed between sociodemographic subgroups

Results

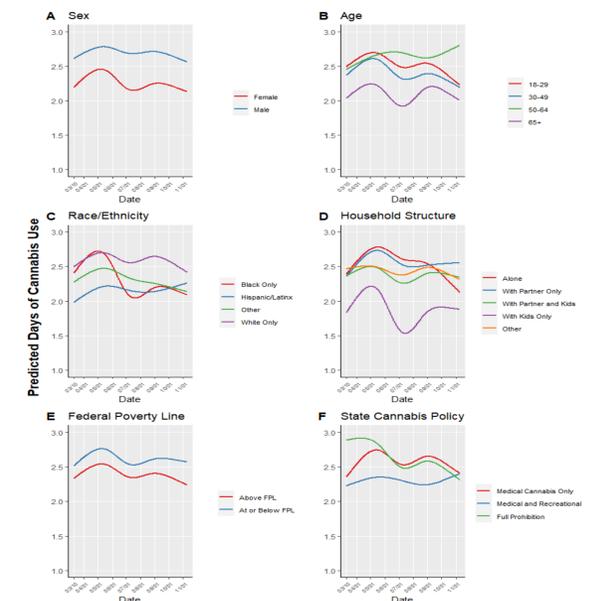
- Compared with March 11, the number of drinking days per week was significantly higher on :
 - April 1 by an average of 0.11 days (95% CI=0.03, 0.18)
 - May 1 by an average of 0.21 days (95% CI=0.05, 0.36)
- For adults living in states with medical cannabis only policies experienced significant increases in cannabis use in the first three months
 - April by an average of 0.18 days (95% CI= 0.07, 0.29)
 - May 1 by an average of 0.36 (95% CI= 0.13,0.59)
 - June 1 by an average of 0.33 (95% CI= 0.06, 0.61)
- Females, non-Hispanic whites, individuals living only with a partner and those with a household income above the FPL also experienced initial increases in reported cannabis use that were not sustained.

Between March and early-November 2020, reported cannabis use among US adults increased in the early months of the pandemic but these increases were not sustained. Among those with increased use were adults living in states with only medical cannabis policies, females, non-Hispanic whites, individuals living with a partner and those with an income above the FPL.



Icon via Flaticon credits, left to right: Pixelmeetchup, Those Icons, Freepik

Figure 1. Linear prediction of the number of days in the past week cannabis was used by date of survey completion, stratified by different sociodemographic characteristics



Discussion

- Overall, the reported number of days cannabis was used increased in April and May compared to March but were not sustained the remainder of the study period.
- Compared to use in March, females, non-Hispanic whites, individuals living with their partners and those living above the FPL has use that increased but was not sustained.
- Individuals living in states with policies allowing only medical cannabis use has a brief increase their use early on, while individuals in full prohibition states had decreased use in November compared to March.
- Public health restrictions and sudden changes to daily life early on may have contributed to the marginal changes seen in cannabis use.
- Cannabis use should continue to be monitored as the US enters a new phase of the pandemic, including the easing of restrictions.

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