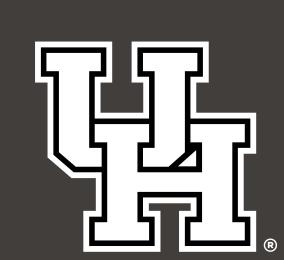


Medicine



Characterizing the Prevalence and Nature of Cannabis Use Disorder and Comorbidities in Older Veterans



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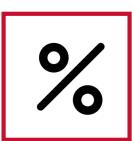
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BACKGROUND

Cannabis use disorder (CUD) is defined by the DSM-5 as the continued use of cannabis despite clinical problems like withdrawal and tolerance.



CUD negatively affects physical and mental health, resulting in chronic bronchitis, short-term memory loss, psychosis, and suicidality.⁵



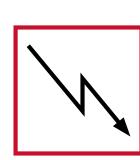
In 2019-2020, more than 10% of Veterans reported past six-month use, indicating that many Veterans may develop CUD.⁶



Veterans with CUD are more likely to have or develop lifetime PTSD, anxiety, mood disorders, nicotine addiction, alcohol dependence, and suicidal thoughts.⁷



Veterans may rely on cannabis to cope with symptoms of mental health disorders despite the lack of evidence to support the therapeutic use of cannabis.²



Cannabis use may worsen symptoms of mental health disorders.^{1,9}

While cannabis use is higher among young Veterans who have served in Operations Enduring Freedom, Iraqi Freedom, and New Dawn (OEF/OIF/OND)⁶, older Veterans are more likely to use medicinal cannabis.⁴ Younger Veterans who served in recent conflicts (OEF/OIF/OND) have high rates of comorbidities¹⁰, but little is known about comorbidities in older Veterans.

PURPOSE

This research attempts to address the following:

- The relationship between mental health disorders, cannabis use, and CUD is complex and unclear.
- Existing research focuses on CUD in young Veterans.
- The nature and prevalence of CUD in older Veterans are not well-understood.

This research aims to characterize CUD and cooccurring disorders among older Veterans.

METHODS



Data on mental and physical health of Veterans' Health Administration (VHA) patients obtained from the Corporate Data Warehouse



CUD diagnosis identified using
International Classification of Diseases
- Ninth Edition - Clinician's Modification
(ICD-9-CM) and ICD - Tenth Edition (ICD-10)

RESULTED IN 127,860 TOTAL IDENTIFIED PATIENTS



Co-occurring mental health disorder and SUD diagnoses identified using ICD-9-CM and ICD-10

Conducted descriptive analyses and determined odds ratios for comorbidities using SPSS Version 28

RESULTS

Of the 127,860 Veterans aged 40 years and younger and 65 years and older with CUD:

- there are more Veterans in the 65 and older age group than in the 40 and younger age group
- a large percentage of Veterans are male in both age groups
- the majority are White
- more than 1/3 of Veterans aged 65 years and older are African American/ Black
- most Veterans identify as "never married"

Mean Age (in Years) and Demographic Frequencies (%) by Age Category

65 and older

| Demographic | N = $51,001$ | N = 76,859 | |
|-----------------|---------------|---------------|---|
| Mean Age (in | 25 26 (2 22*) | 70.20 (4.01*) | _ |
| Years) | 35.26 (3.22*) | 70.20 (4.01*) | |
| Gender | | | |
| Female | 10.5 | 2.7 | |
| Male | 89.5 | 97.3 | |
| Race | | | |
| American | 1.3 | 1.0 | |
| Indian | 1.3 | 1.0 | |
| Asian | 1.0 | 0.2 | |
| African | 21.3 | 35.0 | |
| American/Black | 21.3 | 33.0 | |
| Native Hawaiian | 0.9 | 0.9 | |
| Unknown | 6.5 | 6.0 | |
| Caucasian/ | 69.0 | 56.9 | |
| White | 07.0 | 30.7 | |
| Marital Status | | | |
| Divorced | 19.6 | 0.4 | |
| Married | 25.3 | 0.0 | |
| Never Married | 44.5 | 42.6 | |
| Separated | 8.3 | 28.7 | |
| Single | 0.4 | 14.9 | |
| Unknown | 1.1 | 7.6 | |
| Widow/ | 0.0 | 0.1 | |
| Widower | 0.0 | | |
| Widowed | 0.2 | 0.5 | |

*Standard Deviation

Prevalence of Mental Health Diagnosis and Other Substance Use and Odds Ratios for Mental Health Comorbidities by Age Category

| | 40 and younger $N = 51,001$ | 65 and older N = 76,859 | OR (95% CI)* |
|---------------------------------|-----------------------------|----------------------------|-------------------|
| PTSD | 60.5% | 37.9% | 0.40 (0.39, 0.41) |
| Generalized Anxiety Disorder | 12.0% | 6.6% | 0.52 (0.50, 0.54) |
| Depression | 67.4% | 61.5% | 0.77 (0.75, 0.79) |
| Persistent Depression | 5.7% | 8.5% | 1.52 (1.45, 1.59) |
| Panic Disorder | 6.7% | 2.6% | 0.37 (0.35, 0.39) |
| Adjustment Disorder | 23.9% | 14.5% | 0.54 (0.52, 0.55) |
| Bipolar | 12.7% | 7.7% | 0.57 (0.55, 0.60) |
| Schizophrenia | 5.9% | 7.5% | 1.31 (1.25, 1.37) |
| Specific Phobia | 0.2% | 0.2% | 0.99 (0.77, 1.28) |
| Social Anxiety | 1.5% | 0.5% | 0.32 (0.28, 0.36) |
| Agoraphobia | 0.3% | 0.1% | 0.53 (0.41, 0.68) |
| Acute Stress | 0.6% | 0.3% | 0.44 (0.37, 0.53) |
| Insomnia | 21.7% | 15.5% | 0.66 (0.64, 0.68) |
| Alcohol Use Disorder | 55.4% | 55.6% | 1.01 (0.99, 1.03) |
| Opioid Use Disorder | 16.5% | 12.1% | 0.70 (0.68, 0.72) |
| Amphetamine Use Disorder | 9.2% | 4.4% | 0.45 (0.43, 0.48) |
| Cocaine Use Disorder | 13.0% | 27.8% | 2.56 (2.49, 2.64) |
| Tobacco Use Disorder | 45.6% | 58.8% | 1.71 (1.67, 1.75) |

Odds Ratio > 1

Comorbidities more common in older Veterans

PTSD = posttraumatic stress disorder, * = odds ratio (95 percentage confidence interval)

CONCLUSIONS

- CUD often co-occurs with other SUDs this is especially true for older Veterans with alcohol use disorder, cocaine use disorder, and tobacco use disorder.
- Although younger Veterans are more likely to have CUD and other comorbidities, older Veterans have very high rates of comorbidities including depression and PTSD.
- Further investigating CUD in older Veterans with comorbidities and encouraging their recovery from CUD may significantly impact their overall health.

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