Medical and Nonmedical Marijuana Use Among Three Age Groups of Adults
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Objective
Examine potential differences between nonmedical (recreational) & medical marijuana users with regard to:
1) substance use & mental disorders
2) physical health conditions
3) pain interference

Methods

Data & Sample:
• 2012-2013 U.S. National Epidemiologic Survey on Alcohol and Related Conditions (NESARC-III)
• Semi-structured diagnostic interview using NIAAA’s Alcohol Use Disorder and Associated Disabilities Interview Schedule (AUDADIS-5)
• N=36,309 individuals aged 18+

Measures:
• Marijuana use & medical marijuana use
• Substance use & mental disorders
• Diagnosed medical conditions
• Pain interference
• Sociodemographic variables as controls

Analysis
• Stata/MP 14’s svy function
• X², t tests, binary logistic regression

Results
• 10% used marijuana medically &/or nonmedically in past year.
• 11% of past-year marijuana users used medically (but few medical only users).
• 25% of nonmedical only users & 33% of medical users (with or without nonmedical use) had past-year marijuana use disorder (MUD).
• Nearly 50% of medical & nonmedical users had nicotine use disorder.
• 48% of nonmedical users & 38% of medical users had alcohol use disorder.
• Multivariable analyses:
  • Medical use associated with MUD (no age group difference).
  • Compared to nonmedical use, medical use also associated with cancer, sleep disorders, fibromyalgia (even after controlling for pain), & pain interference, but not with the mental disorders examined (MDE, dysthymia, anxiety, PTSD).
  • Among those with alcohol use disorder, the 30-49 & 50+ age groups were less likely to use medical marijuana than the 18-29 age group.
• Age group specific results for correlates of medical use:
  • MUD significant correlate for 18-29 & 39-49 age groups.
  • Anxiety disorder significant correlate for 18-29 age group.
  • Dysthymia significant correlate for 50+ age group.
  • Pain interference significant correlate for 18-29 & 50+ age groups.
• Medical problem associations also differ by age group.

Discussion & Conclusions
• Given high rates of marijuana use disorder among nonmedical marijuana users & among medical users who also use nonmedically, non-marijuana based approaches should be considered for patients for pain relief, sleep disorders, & other medical problems who are at risk of marijuana use disorder.
• Rates of other substance use & mental disorders among marijuana users are also a concern that should be addressed.

Limitations
• Study shows correlation, not causation.
• Small sample size of medical users/limited statistical power.
• Social desirability bias may have affected responses.
• Medical use may have been reported even if not doctor recommended.