

Background

- Emerging adults (ages 15-24) have a higher prevalence for cannabis use
- Those who struggle with a mental illness are ten times more likely to use cannabis weekly or have cannabis use disorder (CUD)
- Adolescent cannabis use may have longer-term effects on brain neurotransmitter systems, which may cause psychotic symptoms and perhaps depressive and anxiety symptoms
- The use of cannabis and other drugs may adversely affect functioning across developmental milestones in ways that impair mental health
- Only 20% of adolescents attending treatment have a self-perceived need for help, as most of the motivation stems from external pressures
- Emerging adults are a clinically challenging population in terms of treatment due to high social acceptance and low risk perceptions

Aims

- The goal of this secondary analysis was to investigate if 1) emerging adults with versus without a depressive or anxiety disorder who regularly use cannabis were more likely to meet diagnostic criteria for moderate or severe CUD versus mild or no CUD, 2) report greater quantity/frequency of use, and 3) self-perceive a problem with their usage

Methods

- Data came from parent study CANE was used for secondary analysis
- Participants are non-treatment seeking adolescents aged 18-21 who use cannabis at least 3 times per week.
 - Data from 42 participants has been collected to date (n=42)
- Participants completed baseline questionnaires and interviews and logged daily cannabis use on mobile device for two weeks
 - Three participants were excluded or otherwise did not complete the two-week monitoring period

Measures

- Socrates measure assesses readiness for change in substance users using three subscales
 - Recognition
 - ❖ Assesses user's recognition on if they perceive themselves to have a problem
 - Ambivalence
 - ❖ Assesses user's ambivalence towards their usage
 - Taking Steps
 - ❖ Assesses if users have made or attempted changes in substance usage
- MINI (DSM-5) structured interview used to determine CUD symptoms
- Timeline Follow Back (TLFB) used to evaluate frequency and quantity of use
- Daily evening substance use surveys reported on mobile phone

Results

Characteristic	Depression/Anxiety N=11	No Depression/anxiety N=31	Entire Sample N=42
	Mean (SD)	Mean (SD)	Mean (SD)
Age	19.2 (0.98)	19.6 (1.03)	19.5 (1.01)
Age at first use	15.3 (2.14)	15.4 (1.28)	15.3 (1.52)
Average amount of cannabis used (grams) [#]	2.27 (2.28)	1.39 (1.53)	1.59 (1.74)
Socrates Recognition Score [#]	12.9 (5.4)	11.8 (4.5)	12.05 (4.7)
	N (%)	N (%)	N (%)
Female	8 (72.7)	15 (48.4)	23 (54.8)
Male	3 (27.2)	16 (51.6)	19 (45.2)
Mild or No CUD	0 (0.0)	9 (29.0)	9 (21.4)
Moderate or Severe CUD	11 (100)*	22 (71.0)*	33 (78.6)

#N=39
 *P < 0.05, V = 0.311 (moderate size effect)

Conclusion

- Cannabis users with depression or anxiety may be more likely to meet criteria for moderate to severe CUD
- Differences in CUD severity cannot be explained by differences in quantity or frequency of use
- Other factors such as family history, trauma, and other substance use could account for the difference in CUD severity
- Cannabis use may be perceived as a form of self-medication and not as a harmful substance

Acknowledgments

This work was supported in part by the NIDA grant R25 DA020537 and the NIH Grant K12 HD055885.