



BACKGROUND

- More than 75,000 people died in the U.S. from opioid overdoses during the 12-month period ending April 2021 (CDC, 2021).
- The medical use of cannabis was associated with reducing the opioid overdose deaths by 8% (95% CI: -0.21-0.04, $p=0.2$, and opioid prescription by 7% (95% CI: -0.13-0.01, $p=0.017$) (Chihuri & Li, 2019).
- Studies suggest mixed results of opioid-sparing effects from cannabinoids use for pain relief, particularly THC (Nielsen et al., 2022).
- However, research on co-presence of opioids in cannabinoid-related mortality (CRM) is limited.
- Cannabinoids are chemical substances found in Cannabis sativa plant.
- A drug is considered a cause of death if it plays a causal role in a person's death as determined by the medical examiner through autopsy and toxicology results as defined by the Florida Department of Law Enforcement (FDLE).

PURPOSE

- The study aims to report the co-presence of opioids in cannabinoids as a cause of death (COD) in Florida during the initial year of the COVID-19 pandemic, 2020.

METHOD

- Retrospective analysis of people who died from cannabinoids as a cause of death with the co-presence of opioids in their system at a time of death in all Florida counties (n=67) in 2020.
- Descriptive statistics was used to describe decedents with CRM, using de-identified data from FDLE in 2020.

RESULTS

- A total of 42 decedents died from cannabinoids as a cause of death in Florida in 2020.
- Age range from 17-74 years, mean age of 39.52 (SD=14.829).
- Most decedents were male (83.3%), non-Hispanic whites (n=33 or 78.6%).
- 100% of decedents died in accidents, 38% (n= 16) of deaths resulted from vehicular motor accidents.
- 50% of decedents cases (n= 21) died from polysubstance use while under the influence of cannabis.
- 40% (n= 17) of decedents had active tetrahydrocannabinol or THC in their system at a time of death (no dosage reported).

Table 1. Decedent's Characteristics (N =42)

Characteristics	n	%
Age		
Mean= 39.52 (SD= 14.829)		
Age Group		
0-17 years old	1	2.4
18-24 years old	6	14.3
25-34 years old	12	28.6
35-44 years old	6	14.3
45-54 years old	10	23.8
55-64 years old	5	11.9
65 years and above	2	4.8
Total	42	100%
Race/Ethnicity		
Non-Hispanic White	33	78.6
Black	6	14.3
Hispanic	3	7.1
Total	42	100
Sex		
Male	35	83.3
Female	7	16.7
Total	42	100
Population Density		
Large Central Metropolitan County	1	2.4
Medium Metropolitan County	32	76.2
Small Metropolitan County	9	21.4
Total	42	100

Table 2. The Co-Presence of Opioids in Cannabinoid-Related Mortality (COD) in Florida, 2020 (N= 42)

Opioids	n	%
Buprenorphine	2	0.047
Codeine	3	0.5
Fentanyl	11	26.19
Heroin	6	3
Hydrocodone	1	0.023
Morphine	12	28.57
Oxycodone	2	0.047

IMPLICATION/CONCLUSION

Cannabinoid-related mortality is indeed a serious problem. The co-presence of opioids such as morphine and fentanyl is notable and warrants further study. Until a safety level of the analgesic effect of cannabinoids is proven safe, the public is warned about the potential adverse effects of using the drugs concurrently.

REFERENCES

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