

## Background

- Florida has one of the largest medical cannabis (MC) programs in the US, with over 830,000 current qualified users in 2022.
- 30% of MC users nationally report pain as a main reason for use despite not being specifically listed as an approved qualifying medical condition in Florida.
- Chronic pain is significantly associated with more than 1 year of frequent cannabis use.
- Little is known about pain intensity among those with different durations of cannabis use experience.

### Aims:

- Describe sociodemographic characteristics and self-reported pain among MC users with varying years of cannabis use experience.
- Examine associations between MC user characteristics (i.e., cannabis use experience and sociodemographics) and self-reported pain intensity.

## Methods

### Study population:

- Cross-sectional cohort of current MC users enrolled in the Medical Marijuana & Me (M<sup>3</sup>) study from dispensaries across the state (n=629).



### Outcome/Measures:

- Self-reported pain was measured using a single item asking about bodily pain severity in the past 4 weeks and by using a single item from the Brief Pain Inventory (BPI): Pain Intensity in Past 24 hours.
  - The outcome variable for our multinominal analysis was Bodily Pain in the Past 4 weeks.
  - BPI: Possible scores ranging 0-10
- Cannabis use experience was organized by year categories (<1 year, 1-5 years, and >5 years).

### Analyses:

- We compared sociodemographic characteristics and BPI scores using a bivariate analysis.
- A multinominal regression was created using statistically significant (p<0.2) variables from the bivariate analysis.

## Results

Table 1. Characteristics of the sample by years of cannabis experience

Characteristic	Cannabis use experience			
	All (n=629)	Less than 1 year (n=75)	1-5 years (n=215)	More than 5 years (n=339)
<b>Age, median (IQR)*</b>	45 (35-58)	46.5 (35.8-60.0)	41 (31-55)	46 (37-60)
<b>Race, n(%)*</b>				
White	543 (86.3)	71 (94.7)	179 (83.3)	293 (86.4)
Black	51 (8.1)	3 (4.0)	25 (11.6)	23 (6.8)
Hispanic	93 (14.8)	11 (14.7)	33 (15.3)	49 (14.5)
Other	61 (9.7)	4 (5.3)	20 (9.3)	37 (10.9)
<b>Female, n(%)*</b>	393 (62.5)	45 (60.0)	145 (67.4)	203 (59.9)
<b>Education, n(%)</b>				
High School/GED or less	107 (17.0)	9 (12.0)	36 (16.7)	62 (18.3)
Some college or college graduate	407 (64.7)	49 (65.3)	140 (65.1)	218 (64.3)
Graduate degree	115 (18.3)	17 (22.7)	39 (18.1)	59 (17.4)
<b>Currently working, n(%)*</b>	367 (58.3)	36 (48.0)	127 (59.1)	204 (60.2)
<b>Bodily Pain in Past 4 Weeks, n(%)</b>				
None	53 (8.4)	9 (12.0)	18 (8.4)	26 (7.7)
Very mild/Mild	244 (38.8)	24 (32.0)	89 (41.4)	131 (28.6)
Moderate	191 (30.4)	25 (33.3)	61 (28.4)	105 (31.0)
Severe/Very severe	252 (22.4)	17 (22.7)	47 (21.9)	77 (22.7)
<b>BPI - Pain Intensity in Past 24 Hours, mean (SD)</b>				
<b>Worst Pain Intensity, mean (DE)*</b>	7.7 (1.7)	7.4 (1.9)	7.6 (1.6)	8.0 (1.7)
Least Pain Intensity	3.1 (2.0)	2.9 (1.9)	3.0 (2.1)	3.2 (2.0)
Average Pain Intensity	5.2 (1.9)	4.9 (5.3)	5.3 (1.8)	5.2 (1.8)
Pain Intensity Now	4.8 (2.6)	4.3 (2.7)	4.7 (2.5)	4.9 (2.5)

\*p<0.2

Table 2. Associations with bodily pain in the past 4 weeks

Variable	Bodily Pain in Past 4 Weeks OR (95%CI)
More than 5 years of weekly use	Ref.
1-5 years of weekly use	0.52 (0.22-1.21)
Less than 1 year of weekly use	0.49 (0.20-1.19)
Age	0.95 (0.92-0.97)
Female	0.98 (0.53-1.8)
White race	0.72 (0.34-1.55)
Currently working	0.47 (0.22-1.00)

### Results:

- In the **bivariate analyses**, age, female, currently working, and Bodily Pain in Past 4 Weeks were statistically associated with self-reported pain.
- In the **multivariate analysis**, only younger age remained statistically associated with Bodily Pain in Past 4 Weeks.
- Although not statistically significant, a trend can be identified in how fewer years of cannabis use experience and currently working having lower odds of pain.

## Conclusion

- Most respondents had more than 5 years of previous cannabis use experience, but there was no statistically significant relationship between this experience and self-reported pain.
- Younger individuals are more likely to experience pain and may represent a trend of younger people using cannabis for pain relief in FL.
- Future research studies should assess pain longitudinally and validate the BPI further to assess causal relationships between pain and previous cannabis use experience.
- Differences among subgroups, such as cultural beliefs about cannabis use or pain expression could influence pain.

## Acknowledgements

This study is sponsored by state funding to the Consortium for Medical Marijuana Clinical Outcomes Research.

## Contact Us



Scan QR code or visit website at  
<https://mmjoutcomes.org>  
✉ mmjoutcomes@cop.ufl.edu