

PARKINSON ALLIANCE

CANNABIS USE TO RELIEVE SYMPTOMS OF PARKINSON'S DISEASE

- 2022 -



"I found smoking two puffs before bed helped me sleep through the night. It relaxed my internal and external tremors. I wake up feeling refreshed in the morning."

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Study Overview

This research by the Cannabis Education and Research Institute (CERI) shows that people living with Parkinson's Disease (PD) are turning to Cannabis for relief of their symptoms and that a substantial percentage of them are finding symptom relief. At CERI, we believe there is potential for Cannabis for patients living with Parkinson's disease and we hope this study prompts further research. The study also found that a substantial number of people using Cannabis for symptoms of Parkinson's disease are reluctant to discuss their use with their physicians. We also hope that this research will encourage health care providers to learn more about Cannabis and to be more open to discussing Cannabis with patients interested in using the botanical. Finally, we want to thank The Parkinson Alliance for their assistance in this research.

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Overview



Frequency of Cannabis use

- 15% use several times a day
- 32% use 6-7 days a week
- 11% use 3-5 days a week
- 9% use 1-2 days a week
- 8% use less than weekly
- 26% seldom use

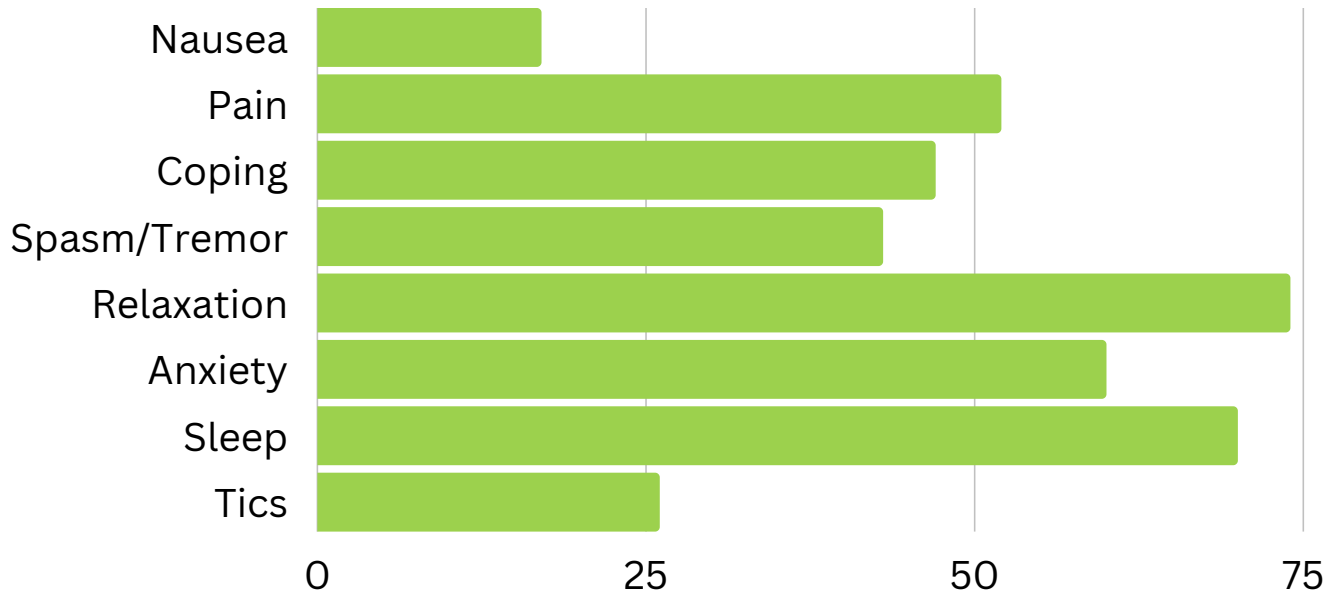
NEARLY 80% OF PARTICIPANTS REPORTED SOME RELIEF OF SYMPTOMS

- Most participants were not using Cannabis at the time of diagnosis
 - (83.6%)
- However, almost 3/4 of respondents reported using Cannabis to treat symptoms
 - (72.1%)
- A third were confident about continuing to use or trying to use Cannabis to treat symptoms in the future
 - (36.7%)



Symptom Relief

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PARTICIPANTS' CANNABIS USE TO TREAT PARKINSON'S SYMPTOMS

Preferred methods of use included

- Oil Tincture
 - 24.6%
- Smoke as a joint
 - 17.4%
- Eaten as a cooked recipe
 - 17.2%
- Smoked through vaporizer
 - 12.2%
- Smoked through water pipe
 - 9.7%
- Drunk as tea
 - 1.6%
- Eaten as leaf/flower
 - 1.1%
- Other (predominantly gummies)
 - 16.3%



05 Efficacy



- Reported reasons they decided to try Cannabis
 - A friend who also has PD recommended it
 - Helping with tremors
 - Help with anxiety
 - "Because it used to make me laugh"
 - "Taking the edge off"
 - Helping with sleep
 - Seeking out alternative treatments
 - Family suggestion
 - It's a natural medicine
 - Nothing else helped

80% OF PEOPLE REPORT SYMPTOM RELIEF

- A third of participants reported great relief
 - (31.7%)
- Nearly half of participants reported getting a little relief
 - (48%)
- Some participants reported Cannabis making no difference
 - (15.4%)
- Only 11 participants reported Cannabis making them feeling worse
 - (5%)



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Cannabis Access



- Although a medicinal Cannabis dispensary is the most common source of obtaining Cannabis, it is still only a relatively small percent (27%).
- Other notable methods
 - Friends/Family in area (11%)
 - Friends/Family out of area (5%)
 - Grow their own (2%)
 - Legacy Dealer (4%)
 - Other sources (4%)

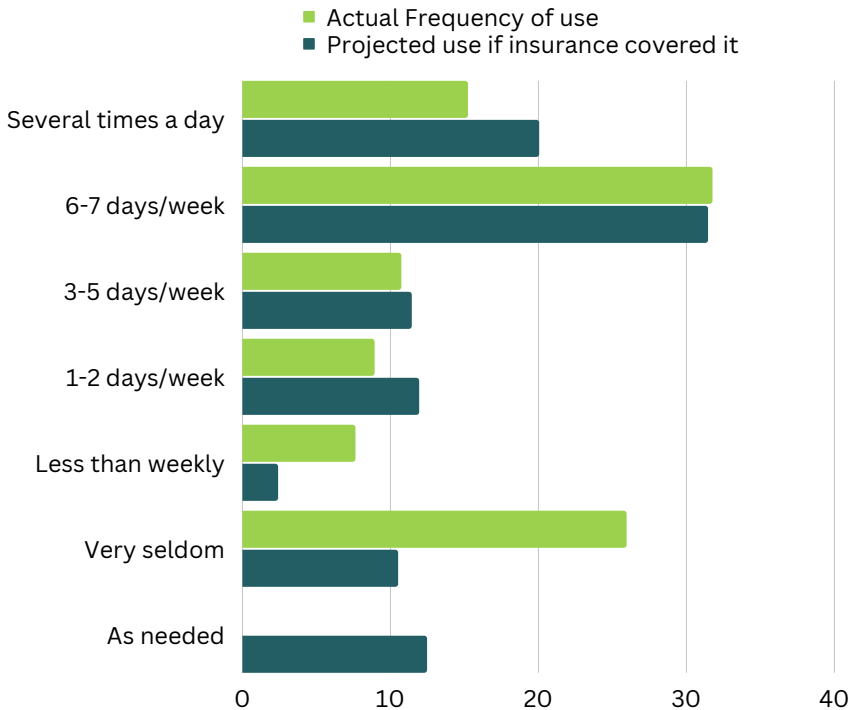
ON AVERAGE MONEY SPENT IS \$96 A MONTH ON CANNABIS, ALTHOUGH THE MEDIAN AMOUNT IS \$60

- Most participants reported being able to afford Cannabis (76.4%).
- However a quarter of participants felt that it was either very difficult or were unable to afford it (24.6%).
- Many participants chose not to answer this question.



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Affordability



- There is not a statistically significant difference* between survey respondents actual current use and projected changes in their use if medical insurance would cover the cost of medicinal Cannabis.
 - This is not to be used to justify the exclusion of medicinal Cannabis from insurance coverage. This may be attributed to the relief it provides. People will find a way to pay for it with or without insurance.
- *chi square

THE LOWEST INCOME BRACKET ON THE SURVEY HAD THE FEWEST RESPONSES. WE CAN'T EFFECTIVELY REPORT ON WHETHER MEDICINAL CANNABIS IS AN AFFORDABILITY PROBLEM.

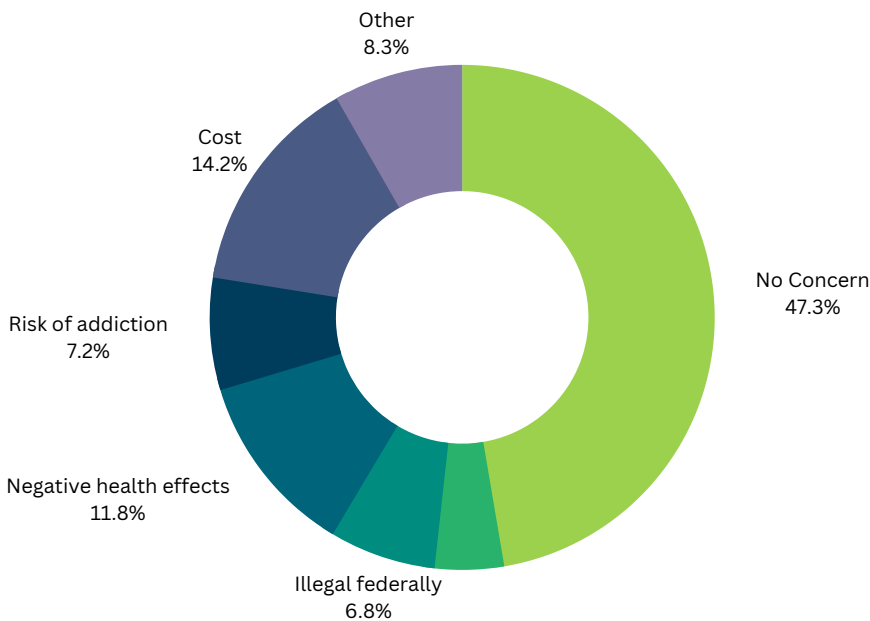
- There is a clear balance in the number of people who completed the survey and their income bracket, except for low income individuals (less than \$25,000/year). This data likely does not accurately reflect their reality. The highest survey representation comes from the highest income group (\$100,000+/year).
- A chi square analysis does not show that there is a significant difference between frequency of use and income ($p < .967$). Again, this may be due to the benefits of relief being strong enough that people will find a way to buy it, even if it causes financial hardship.



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Medical Providers

PERSONAL CONCERNS ABOUT USE OF CANNABIS



DISCLOSING USE TO PRIMARY CARE PHYSICIAN

- 77% of people told their primary care doctors about their Cannabis use.
 - 56.5% were supportive
 - 34% were neutral
 - 9.5% were unsupportive
- Reasons for not disclosing use to doctors include:
 - It is illegal
 - Don't want to be judged
 - PT instructor doesn't approve
 - Doctor told me I would be addicted if I tried it
 - Believing they wouldn't approve
 - No need to discuss
 - Stigma

DISCLOSING USE TO NEUROLOGIST / PARKINSON'S DOCTOR

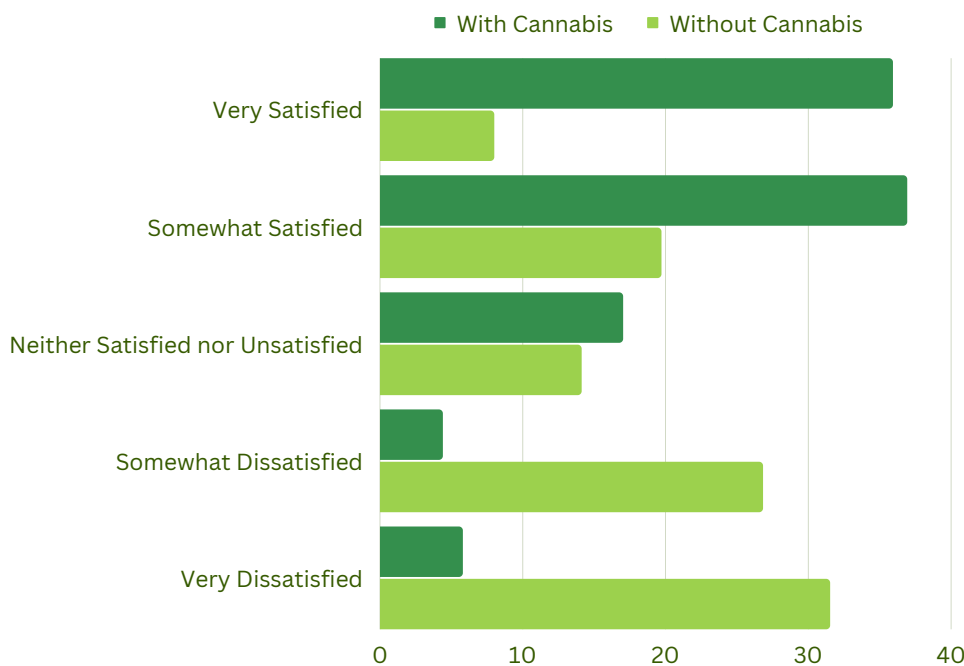
- 77% of people told their doctors about their Cannabis use.
 - 60.6% were supportive
 - 28.5% were neutral
 - 11% were unsupportive
- Reasons for not disclosing use to doctors include:
 - Afraid they would report to police
 - No research exists for them to have an opinion
 - Don't want to be judged
 - Only uses infrequently
 - My doctor says the research doesn't support it
 - It is illegal
 - They do not approve of it



Cannabis and Sleep

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Sleep Satisfaction With & Without Cannabis Use



- More than two-thirds reported being somewhat or very satisfied by their sleep with Cannabis use (77%).
- More than half of participants reported being dissatisfied or very dissatisfied by sleep without Cannabis use (58%).

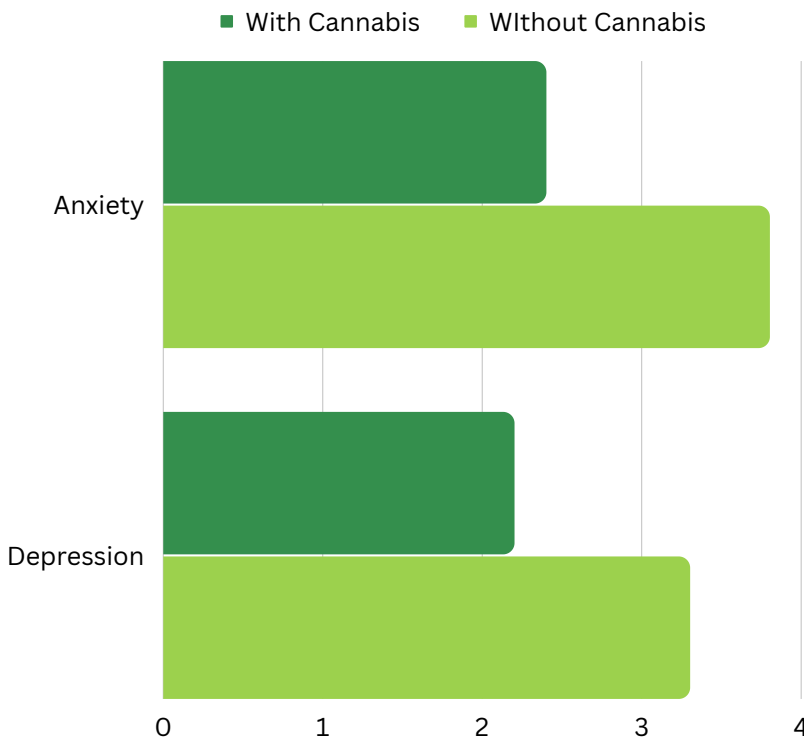
- On average sleep without waking (consecutive hours) when they **USE Cannabis is 5.4 hours**, and when they **DO NOT use Cannabis is 4 hours**.



Anxiety & Depression

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Anxiety and Depression With & Without Cannabis Use



- Most participants reported being very or somewhat satisfied with sleep with Cannabis use (73%).
- 17% were neutral about the effects of Cannabis on their sleep.
- 10% were somewhat or very dissatisfied.

- Statistically* the entire sample shows a decrease in both depression and anxiety with Cannabis use.
- People without DBS showed significantly more improvement in both depression and anxiety, although the improvement is significant with a moderate effect size for both people with and without DBS. *t-test

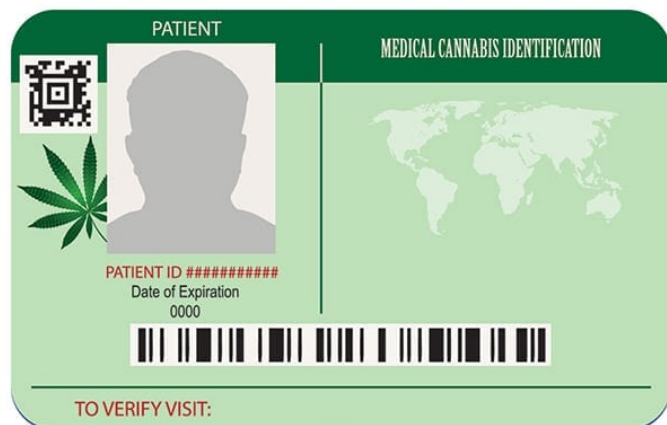
Effect Sizes for Deep Brain Stimulation & Anxiety and Depression

	DBS	No DBS
Anxiety	.527	.641
Depression	.598	.602

Effect size is a measure of the magnitude of the effect. The larger the effect the stronger the relationship. This table reflects moderate effect sizes.

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Closing Thoughts



- Only 49.4% of respondents have a medicinal Cannabis card.
 - 11.5% began using Cannabis before they had a medicinal card, and 37.9% waited until they had their card before using Cannabis.
 - Legalization of cannabis on the federal level will go a long way to removing many of the real and perceived barriers identified in the survey to securing Cannabis for symptom relief.

The illegal status of medicinal Cannabis in many states keeps people who are suffering from access to the relief that Cannabis can provide. If these individuals are accessing Cannabis, they are less likely to speak with their primary care and Parkinson's care doctors about their use due to the illegal status. Additionally, many who do use medicinal Cannabis, even in states where it is legal, still face stigma and judgment from their providers, leading them often to either cease use, or stop communicating about their use with their care providers. Several respondents indicated that their doctors were not comfortable recommending Cannabis as a treatment for symptom relief due to the lack of empirical research on the efficacy. It is our hope that this report can be used to advocate for people with Parkinson's Disease and allow their use of Cannabis to be a part of their comprehensive plan of care with their care team.

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Authors

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Robert Donaldson is a graduate student in Counselor Education at The College of New Jersey. His interests include addiction counseling and research, specifically biomarkers and their applications in clinical settings, as well as public health drug policy.