

Misericordia University

Misericordia Digital Commons

Student Research Poster Presentations 2021

Student Research Poster Presentations

2021

PROTOCOL: The Effects of Medical Cannabis on Pain and Quality of Life in Individuals with Parkinson's Disease and/or Chronic Pain

Hailey S. Inge
Misericordia University

Jenna M. Hiryak
Misericordia University

Patrick DeMichele

Olivia J. Meyer
Misericordia University

Maureen Pascal
Misericordia University

Follow this and additional works at: https://digitalcommons.misericordia.edu/research_posters2021



Part of the [Rehabilitation and Therapy Commons](#)

Recommended Citation

Inge, Hailey S.; Hiryak, Jenna M.; DeMichele, Patrick; Meyer, Olivia J.; and Pascal, Maureen, "PROTOCOL: The Effects of Medical Cannabis on Pain and Quality of Life in Individuals with Parkinson's Disease and/or Chronic Pain" (2021). *Student Research Poster Presentations 2021*. 29.
https://digitalcommons.misericordia.edu/research_posters2021/29

This Poster is brought to you for free and open access by the Student Research Poster Presentations at Misericordia Digital Commons. It has been accepted for inclusion in Student Research Poster Presentations 2021 by an authorized administrator of Misericordia Digital Commons. For more information, please contact mcech@misericordia.edu.



Protocol: The Effects of Medical Cannabis on Pain and Quality of Life in Individuals with Parkinson's Disease and/or Chronic Pain

MISERICORDIA
UNIVERSITY®

Maureen R. Pascal, PT, DPT, NCS; Patrick T. DeMichele, SPT; Jenna M. Hiryak, SPT;
Hailey S. Inge, SPT; Olivia J. Meyer, SPT.

BACKGROUND

The earliest evidence of cultivation of cannabis comes from a small village in China in 4000 BCE.

Cannabis was once worshipped and seen in value as it was known to be one of the 5 main grains. Used widely for its medicinal purposes and recreationally. It was shown to be helpful in treatment of over 100 ailments.

Cannabinoids and Terpenes make up a majority of cannabis.

The most prevalent cannabinoids are Tetrahydrocannabinol (THC) and cannabidiol (CBD).

Cannabinoids bind to Cannabinoid receptors to initiate therapeutic effects.

CB1 receptor is present in the CNS and is responsible for regulating sleep, appetite, perception of time, short term memory and coordination.

CB2 receptor present on cells of the immune system and is responsible for regulating pain, inflammation, and tissue damage.

PARTICIPANTS

The sample that will be gathered will be collected by convenience at the Ethos Cannabis Dispensary in Wilkes Barre, PA.

Participants will be new or current customers at the dispensary and will have a certification and prescription to use medical cannabis in the state of Pennsylvania. From this group, we will invite patients who are currently diagnosed with Parkinson's disease, chronic pain, or both to participate in our study.

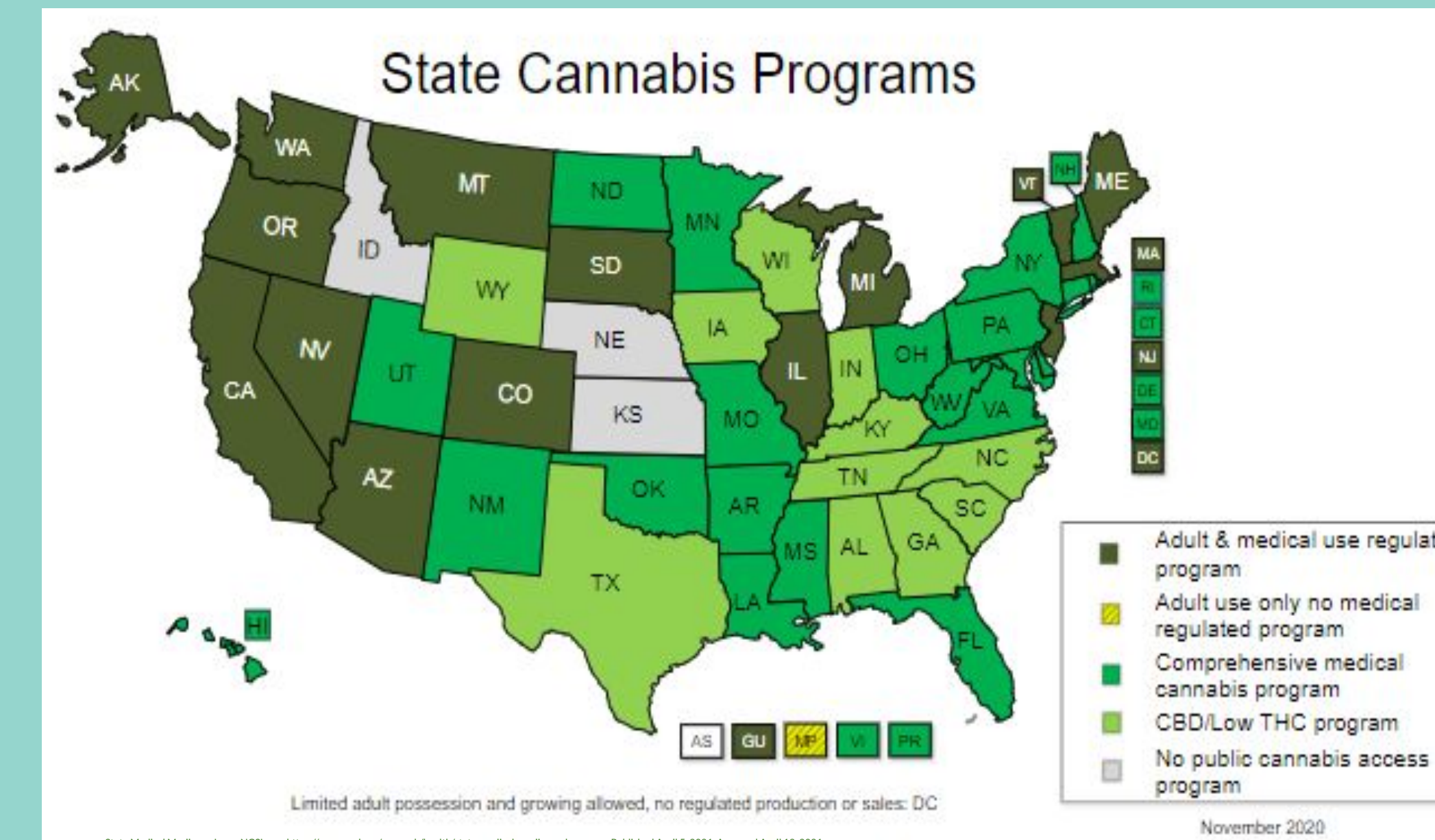
We are aiming to obtain a total of 100 participants that will complete our survey.

Inclusion Criteria:

- Individuals 18 years of age or older
- Diagnosis of chronic pain, Parkinson's disease or both
- Are able to understand English

Exclusion Criteria:

- Individuals with other neurological diagnoses (Stroke or Spinal Cord Injury)



OUTCOME MEASURES

Pain

Wong-Baker FACES Pain Rating Scale



Quality of Life

Life Satisfaction Questionnaire-11 (LISAT-11)

- Life as a whole
- Vocation
- Financial
- Leisure
- Contact with friends and acquaintances
- Sexual life
- Self-care management
- Family life
- Partnership
- Physical health
- Psychological health

PHYSICAL THERAPY IMPLICATIONS

Increase awareness of the possible effects/benefits of medical cannabis for individuals with Parkinson's Disease and/or chronic pain.

Be able to discuss alternative medicines with patients and other healthcare providers.

FURTHER RESEARCH

Continued research is needed to study links between medical cannabis, Parkinson's disease, and chronic pain.

Research is needed to study the impact of the use of medical cannabis on individual's participation in Physical Therapy.

CONSIDERATIONS

As of April 2016, cannabis has been approved for medicinal use in the state of Pennsylvania.

Increased support at the state level may promote the use of medical cannabis for many medical conditions.

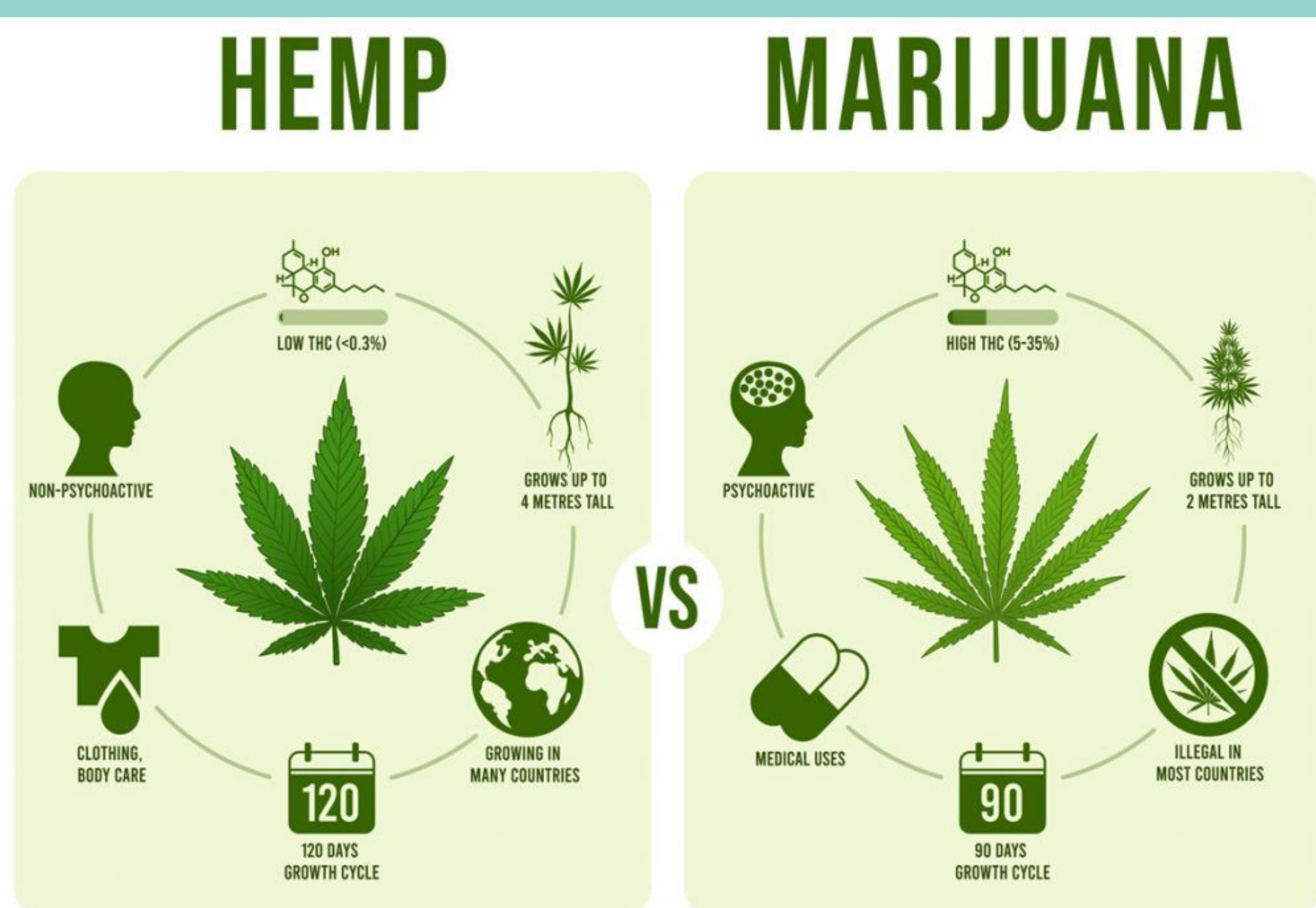
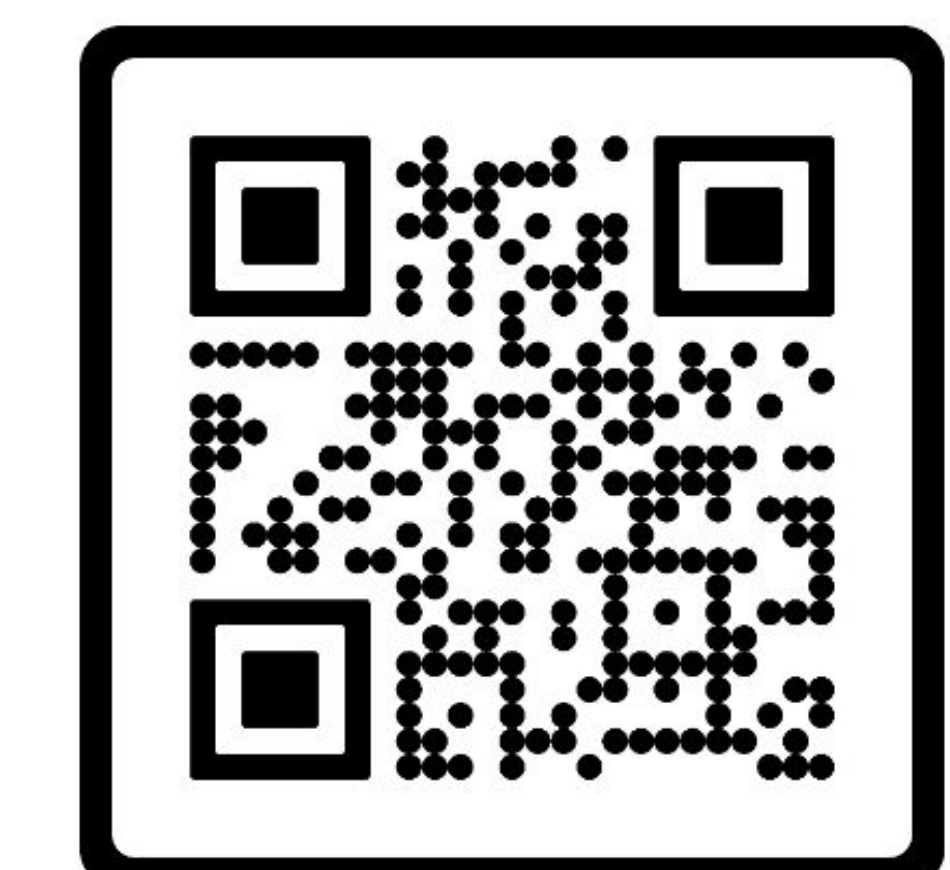
There is currently limited support at the federal level regarding the use of medical cannabis.

ACKNOWLEDGEMENTS

A special thank you to Ethos Cannabis Dispensary in Wilkes Barre, PA for their interest and collaboration to make this research possible.



REFERENCES



PURPOSE & HYPOTHESIS

The purpose of this study is to determine the effects of medical cannabis and its impact on the quality of life and pain levels for those with Parkinson's disease and/or chronic pain.

We hypothesize that medical cannabis will reduce pain and increase quality of life in patients with Parkinson's disease and chronic pain.

METHODS

The electronic survey will be available via a QR code displayed on the flyer that will be hung in the Ethos Cannabis lobby.

Paper copies of the survey will also be available upon request. The paper copies will include a pre-addressed and stamped return envelope addressed to Maureen Pascal at Misericordia University.

Upon completion, participants may contact Maureen Pascal via the email provided to receive a free \$5 gift card to Dunkin'.

The survey has been constructed by the researchers to evaluate physical, mental, and pain status before and after medical cannabis use.

Oral delivery methods will be noted on the survey to acknowledge any effects that route of administration have on the results of the study.