

# Perceived Effect of Recreational Marijuana Use in Medically Managed Mental Health Patients

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## Background and Purpose

- Marijuana is the most widely used recreational drug in the US (NIDA, 2015) and 44.7 million adults in the US are living with a mental illness (NIMH, 2017). With a large portion of the population suffering from mental illness and a large portion using marijuana, there is a possibility that a significant number of individuals being treated for mental illness are also using marijuana. Therefore, the purpose of this study was to investigate the perceived positive and/or negative effects of marijuana on symptoms of depression and/or anxiety when used concomitantly with psychiatric medications in the treatment of Major Depressive Disorder, Persistent Depressive Disorder, Generalized Anxiety Disorder, Panic Disorder, and Bipolar Disorder I and II.

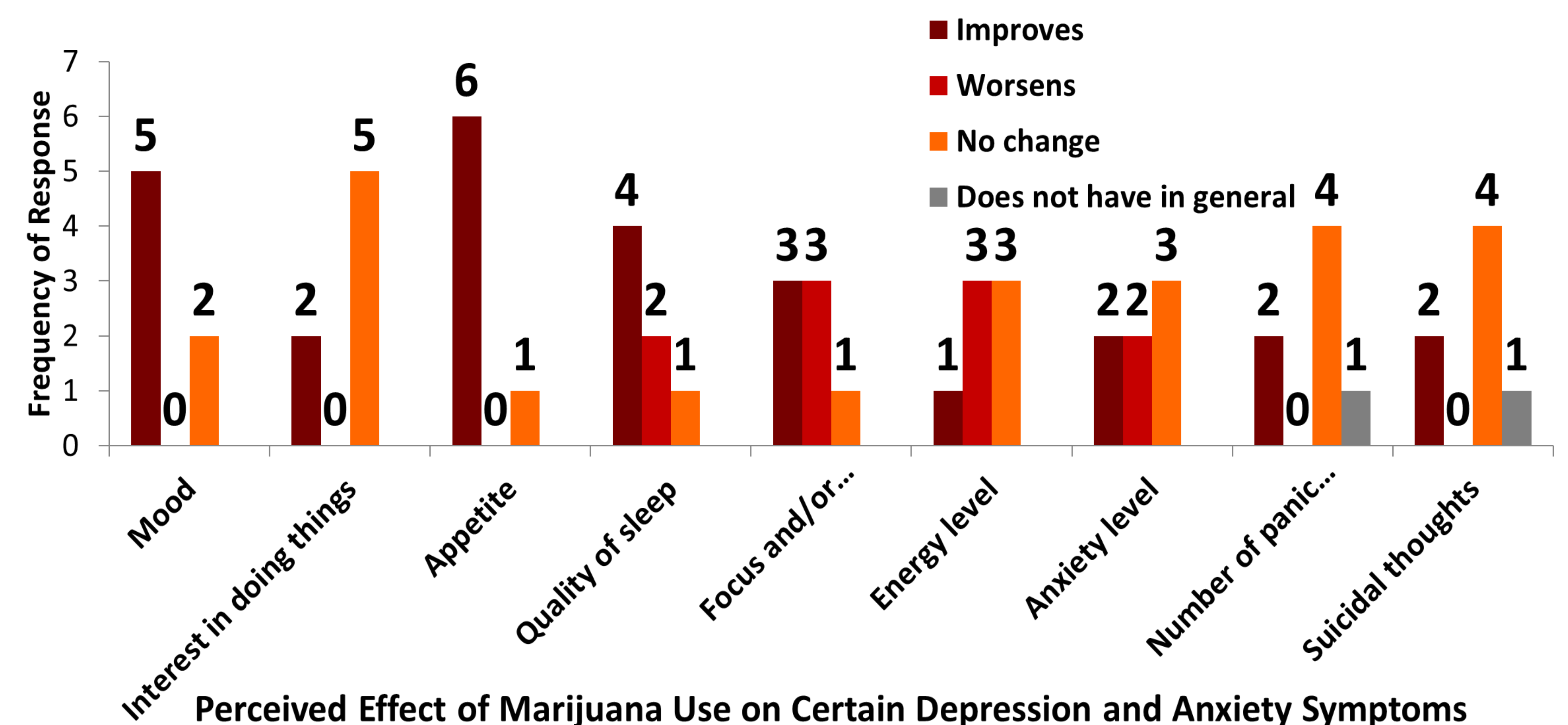
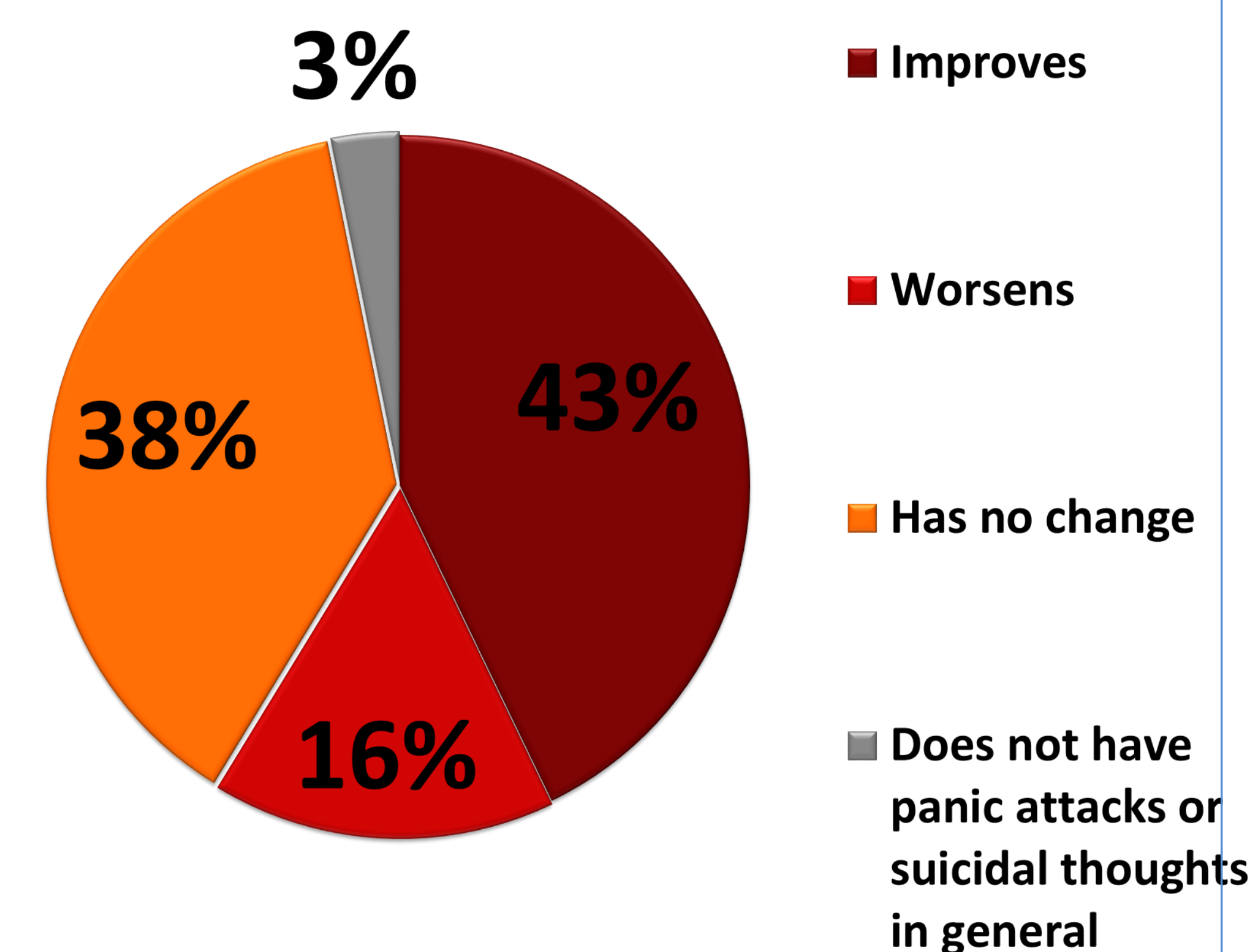
## Methods

- A self-validated 16-question survey was distributed to participants in two outpatient psychiatric clinics in Western New York (WNY), one using paper surveys and the other using an electronic survey. Survey questions included demographics, participant psychiatric diagnoses, whether their condition(s) are currently pharmacologically managed, recreational marijuana use, and questions regarding marijuana's impact on their depression and anxiety symptoms. The survey also included the Patient Health Questionnaire-9 (PHQ-9) and Generalized Anxiety Disorder-7 (GAD-7) to quantify current severity of depression and anxiety symptoms. Participants included any adult over the age of 18. A total of 51 surveys were analyzed using Microsoft Excel and SPSS Statistics version 26. Analyses included demographic means, independent sample t-tests, one-way analysis of variance (ANOVA), and two-way ANOVA.

## Results

- Results revealed a mean age of 48 (SD=13.99), mostly female (n = 37, 72.55%), Caucasian (n = 49, 96%) participants who were non-marijuana users (n = 44, 86.27%).
- Depressive disorder(s) diagnoses (Major Depressive Disorder, Persistent Depressive Disorder, and/or Bipolar Disorder I and II) were reported by 35% (n = 18), anxiety disorder(s) (General Anxiety Disorder and/or Panic Disorder) were reported by 24% (n = 12), and a combination of two or more depressive and anxiety disorders were reported by 41% (n = 21).
- Analyses of users' (n = 7) perceived impact of marijuana on their depression and anxiety symptoms revealed that overall, most perceptions were positive in nature (43%), particularly regarding appetite, mood, and sleep quality. A lesser majority reported perceptions that were neutral (38%) and 16% of perceptions were negative in nature, with impacts reported on focus and/or concentration, energy level, sleep quality, and anxiety level.
- Most participating marijuana users (n = 4, 57.14%) stated they use recreational marijuana to better manage their symptoms alongside medication(s).
- Overall, t-tests failed to show a statistically significant difference in PHQ-9 and GAD-7 scores between marijuana users and non-users (p = 0.82).
- ANOVA analyses of interaction effects between marijuana use status and other independent variables, including psychiatric diagnosis and time since first starting prescription psychiatric medication(s), did not demonstrate significant differences in scores between users and non-users (p = 0.12, p = 0.33, respectively).
- Amongst marijuana users themselves, frequency of use did not have a significant effect on scoring outcomes (p = 0.68).

Overall Perceived Impact of Marijuana Use on Depression and Anxiety Symptoms



## Conclusions

- Contrary to indications from the literature, most of the results from this study infer that recreational marijuana use will neither positively nor negatively impact depression and anxiety symptom severity in pharmacologically managed psychiatric patients. These outcomes are in stark contrast to users' overall perceptions of their marijuana use regarding their mental illness, which are heavily perceived as positive in nature. Given the fact that most marijuana users admitted to using marijuana to better manage their symptoms alongside medications, this dissonance becomes more apparent. However, given the small sample size collected for examination, sampling error decreases the power of these analyses and warrants further replication of this study on a larger scale.

## References

- National Institute on Drug Abuse (NIDA). (2015). Drug facts: Nationwide trends. Retrieved from <https://www.drugabuse.gov/publications/drugfacts/nationwide-trends>
- National Institute of Mental Health (NIMH). (2017). Statistics: Mental illness. Retrieved from <https://www.nimh.nih.gov/health/statistics/mental-illness.shtml>