

# PTSD Patient Survey

Care By Design

**This report represents preliminary data. It is meant only to suggest possible areas for additional research. Care By Design products have not been evaluated by the Food and Drug Administration. The information herein is not intended to diagnose, treat or cure any disease. This information should not be interpreted as medical advice or treatment.**

For questions or suggestions, please email: [research@cbd.org](mailto:research@cbd.org)

# Background

## The Problem

Between seven and eight percent of people will develop PTSD (Post-Traumatic Stress Disorder) in their lifetime.<sup>i</sup> Among veterans, the prevalence rates are higher. The U.S. Department of Veterans Affairs (VA) estimates that PTSD afflicts about 30% of Vietnam veterans, and 11-20% of veterans of more recent U.S. wars.<sup>ii</sup>

Common symptoms of PTSD included elevated anger, sleep problems, depression, irritability, and anxiety.<sup>iii, iv</sup>

Several studies show “a robust relationship” between PTSD and suicide after controlling for physical illness and other mental disorders.<sup>v</sup> “PTSD was significantly associated with suicidal ideation or attempts” with anger and impulsivity being predictors of suicide risk in those with PTSD.<sup>vi</sup>

People with PTSD are also more likely than others with the same sort of background to have drinking problems. An astonishing sixty to eighty percent of Vietnam Veterans seeking PTSD treatment have alcohol use problems; 75% of those who have survived abusive or violent trauma report drinking problems.<sup>vii</sup>

PTSD often responds poorly to conventional treatments. A groundbreaking 2014 survey by the American Legion found that 59% of veterans reported feeling no improvement or feeling worse after undergoing treatment for PTSD.<sup>viii</sup> A sizable proportion of survey participants reported taking up to 10 medications for PTSD across their treatment experience. Nearly half of respondents had asked their healthcare provider about complementary or alternative treatments.<sup>ix</sup>

## Exploring Solutions

A growing body of research suggests that there is a strong connection between the endocannabinoid system and PTSD, and that cannabis therapy may help mitigate the hallmark symptoms of PTSD, including impaired fear extinction, poor memory consolidation, and chronic anxiety.

The goal of this survey is to explore how cannabis compares therapeutically to other medications used for PTSD symptom reduction, and to advocate for research into the use of cannabis therapeutics in the treatment of PTSD.

# Methodology & Limitations

## Methodology

Care By Design surveyed 300 patients on their use of cannabis and other medications to treat PTSD. We asked what medications patients had been prescribed for PTSD-related symptoms (including cannabis), and we asked respondents to assess each in terms of its impact on five hallmark symptoms of PTSD: (i) anger or irritability, (ii) anxiety, (iii) depression, (iv) pain and (v) sleep problems. We also asked about the impact of cannabis on alcohol use.

We did not seek to quantify the *degree* of improvement or worsening of symptoms. We merely sought to assess whether a symptom got better, worse or stayed the same while on a particular medication. So, while respondents often reported that cannabis was likely to help symptoms, we do not know whether it helped a little or lot.

## LIMITATIONS

**There are a number of limitations to this survey that deserve note. Most significant is the way participants were selected; we recruited from people who are registered subscribers to Care By Design. This means that all our participants were interested in marijuana as a treatment, many of them already knew about CBD, and most had already found cannabis to be helpful. This likely had the effect of increasing the proportion of patients who reported improvements in the five measured symptoms, and decreasing the proportion of patients whose symptoms worsened.**

**Furthermore, the biased selection of patients may have also introduced a systematic bias in other categories, though this is less clear. For example, since cannabis is rarely a first-line treatment, patients who turn to cannabis may be more likely to respond poorly to other medications. This sample bias cannot be distinguished from the data, and the data must be viewed with this qualification in mind.**

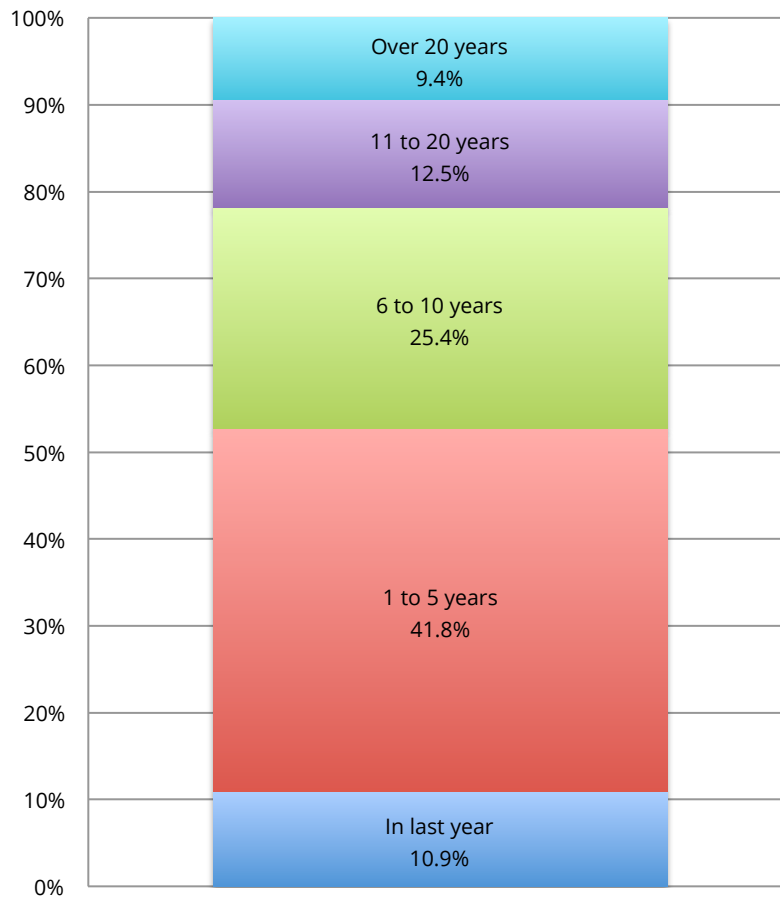
Despite these limitations, this survey is not without significant merit. While many preclinical studies (studies on cells and mice) suggest that cannabis or cannabinoids found promote the extinction of fearful memories (the underlying pathology of PTSD), few have surveyed patients. Similarly, there are many preclinical studies of the effect of cannabis on anxiety, depression, pain, and sleep problems, but many less so in PTSD patients.

# Key Findings

- ✓ Survey respondents reported being prescribed numerous medications for the treatment of PTSD. In order of frequency, they were prescribed: anti-depressants, anti-anxiety medications, cannabis, sleeping medication, mood stabilizers, narcotic pain medication, non-narcotic pain medication, anti-psychotics, beta-blockers, tranquilizers, and anti-convulsants.
- ✓ Half of respondents had been prescribed at least 5 medications for PTSD, and 7.5% had been prescribed as many as eleven.
- ✓ Survey respondents reported that cannabis was the most likely to improve PTSD symptoms—albeit to an unknown degree—and the least likely to make symptoms worse.
- ✓ The most common medication prescribed for the treatment of PTSD among survey respondents was anti-depressants. Yet, few report it was effective. Only 18.1% of respondents said their depression got better on anti-depressants. Half reported that their depression got worse on anti-depressants. In fact, a significant percentage of respondents reported that their depression worsened on every medication they were prescribed for PTSD except cannabis with a *majority* of respondents reporting that their depression worsened on anti-psychotics, tranquilizers, narcotic pain medication, mood stabilizers and anti-convulsants.
- ✓ Roughly half of respondents reported they had been prescribed narcotics for PTSD. The majority of them reported that their anger and irritability, depression and sleep problems got worse on the medication. Anti-psychotics were similarly reported to make PTSD symptoms (particularly depression) worse in a majority of patients.
- ✓ Almost half of survey respondents reported that they were using CBD-rich cannabis for PTSD rather than high-THC cannabis. CBD-rich cannabis is usually minimally or non-psychoactive.
- ✓ 80% of survey respondents reported that they consume less alcohol when using cannabis. This suggests that, when used medically, marijuana is not a “gateway” drug.
- ✓ Veterans reported being prescribed more medications than civilians. They were also more likely to be prescribed medications that generally worsened symptoms, including anti-psychotics, narcotic pain medication and mood stabilizers.

# PTSD History

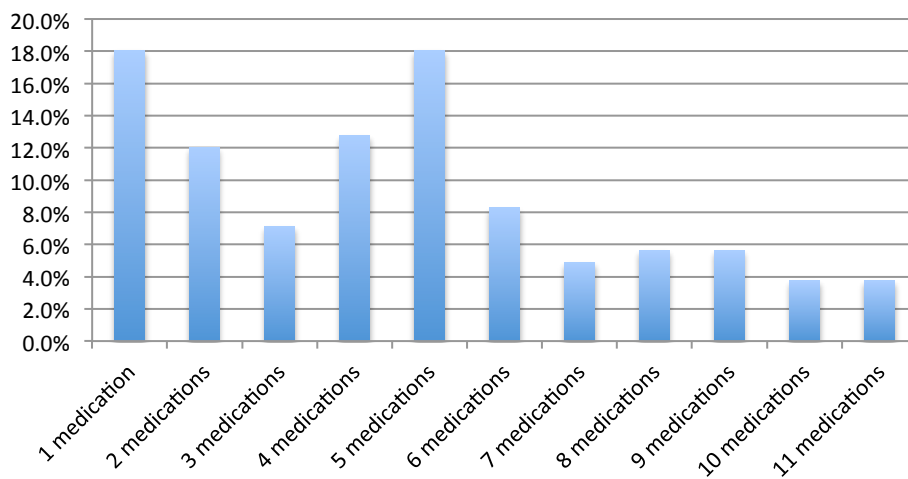
Survey respondents included people who have suffered with PTSD for anywhere from one to over forty years. Most respondents had received a PTSD diagnosis in the previous 10 years. However, a sizable number (about one-fifth) reported having PTSD for over 10 years. Almost 10 percent reported having PTSD for over 20 years.



# Medication Use

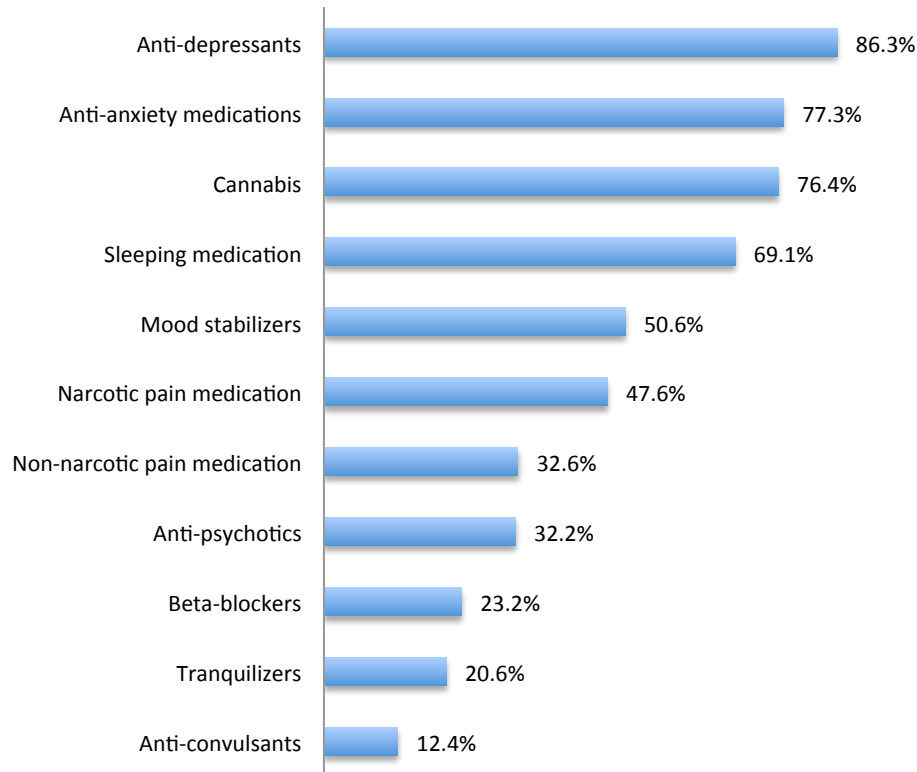
## Number of Medications

A majority of respondents—82.0%—had been prescribed multiple medications to treat PTSD symptoms. Half had been prescribed at least 5 medications for PTSD. Seven and a half percent (7.5%) reported being prescribed *10 or more* medications for PTSD.



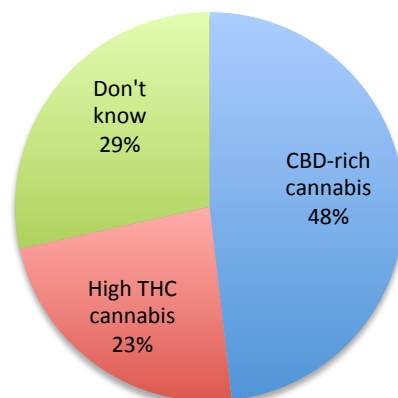
## Type of Medications

By far, the most common medication used for the treatment of PTSD among survey respondents was anti-depressants.



## CBD-Rich Cannabis

CBD—also known as Cannabidiol—is a cannabis compound that has significant medical benefits, but does not make people feel “stoned” and can actually counteract the psychoactivity of THC. About half of survey respondents reported using CBD-rich cannabis for PTSD as compared to about one quarter who reported using high-THC cannabis.

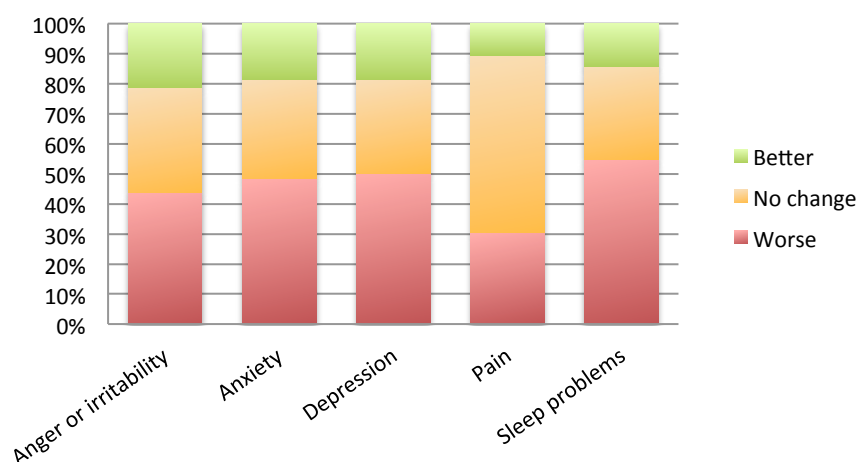


# Medication Assessment

*This section summarizes survey responses on the efficacy of medications used to treat PTSD. Medications are ordered based on the frequency with which they were reportedly prescribed with the most commonly prescribed medication being listed first.*

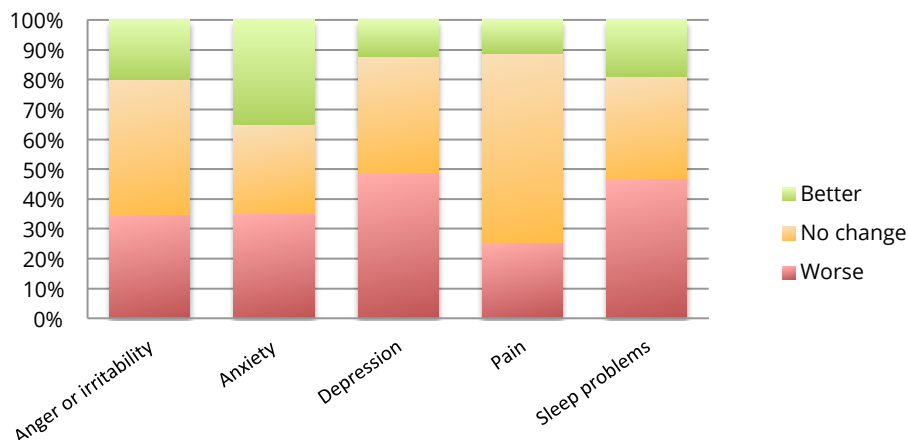
## Anti-Depressants

More respondents reported that their symptoms got worse on anti-depressants than reported that they got better with half reporting that their *depression* got worse on anti-depressants.



## Anti-Anxiety Medication

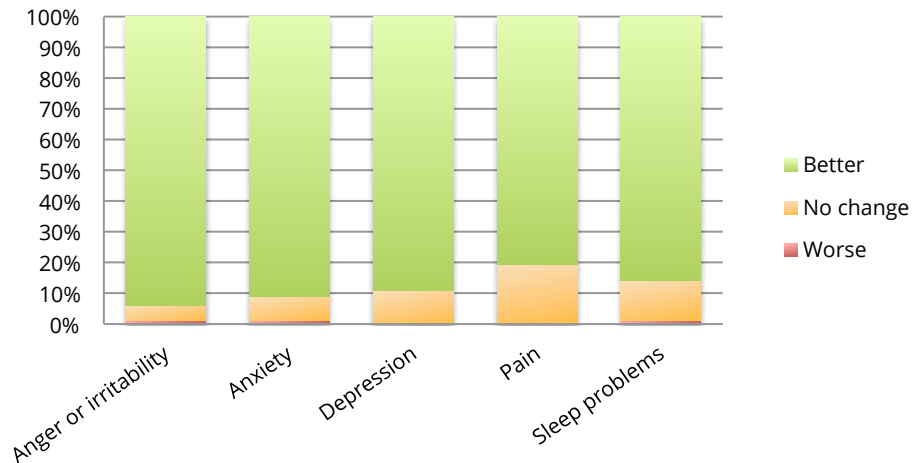
An equal number of survey respondents reported that their anxiety got better on anti-anxiety medication as reported that it got worse.





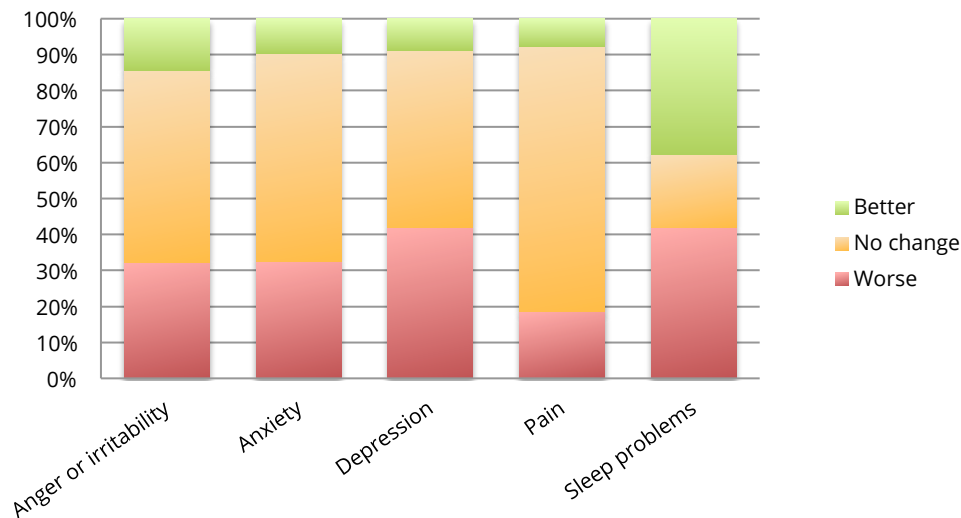
## Cannabis

The majority of survey respondents reported some improvement for all five common PTSD symptoms from cannabis. Very few respondents reported worsening of symptoms.



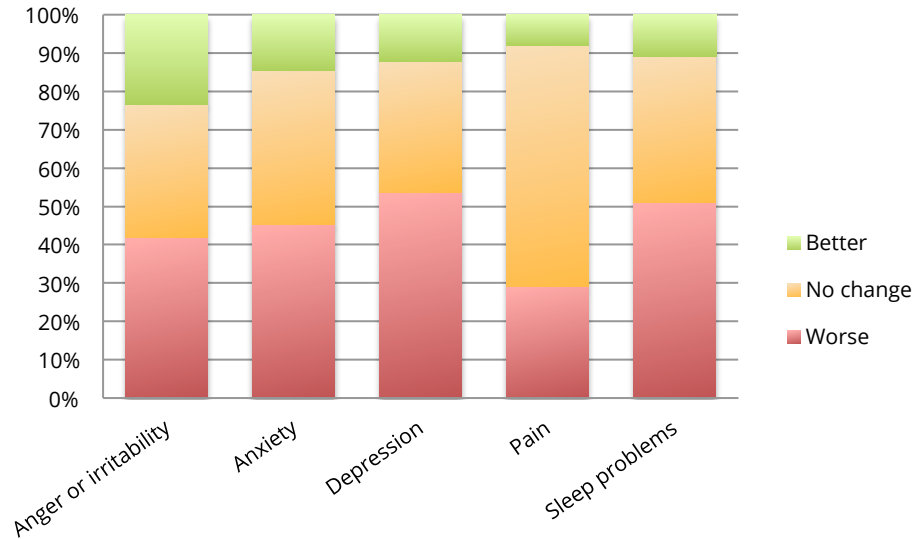
## Sleeping medication

About a third of survey respondents reported that sleep problems got better on sleep medication while slightly more reported that sleep problems got worse.



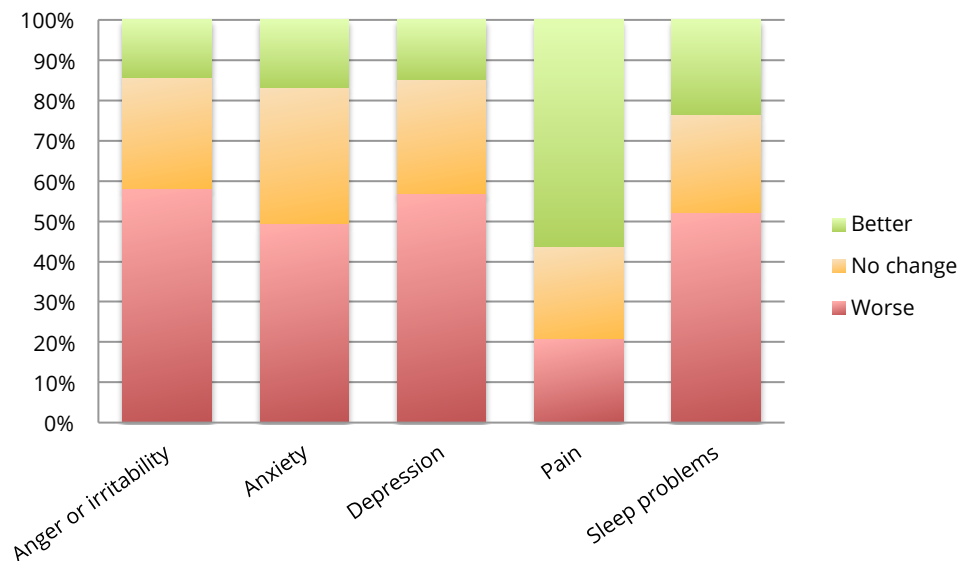
## Mood stabilizers

Close to half of survey respondents reported that on mood stabilizers their anger or irritability, anxiety, depression and sleep problems got worse.



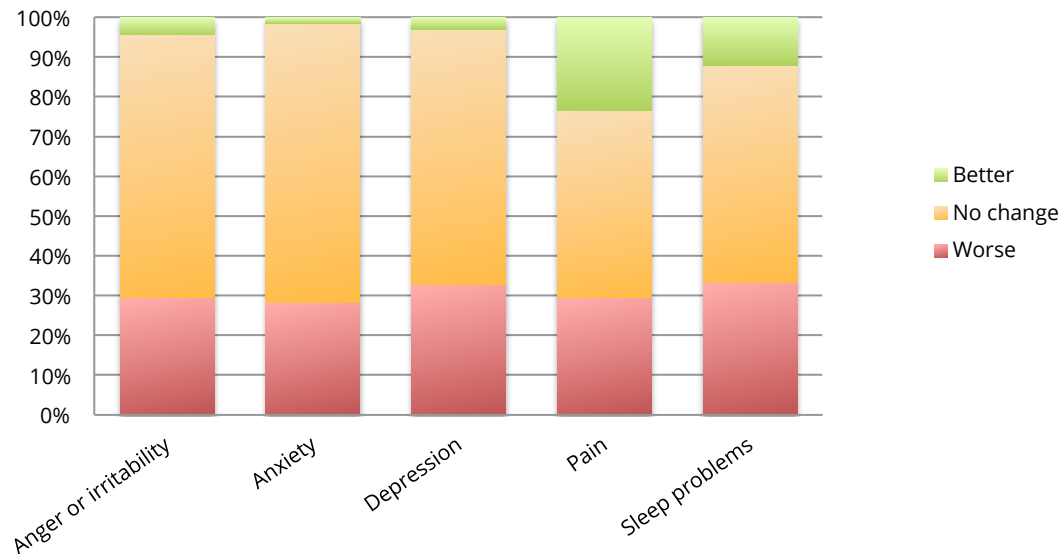
## Narcotic pain medication

Over half of respondents reported that narcotic pain medication was effective on pain. However, about half of respondents reported that their anger and irritability, depression, sleep problems and anxiety got worse, and around a fifth reported that their pain got worse.



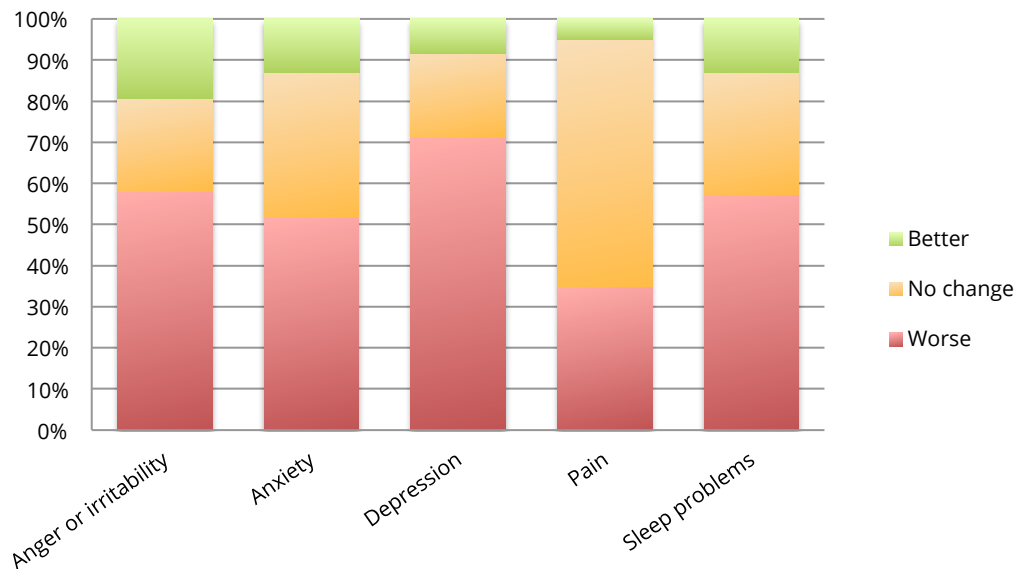
## Non-narcotic pain medication

Survey respondents were more likely to report that non-narcotic pain medication made their pain worse than made it better. The majority of respondents reported no changes in other PTSD symptoms from non-narcotic pain medication.



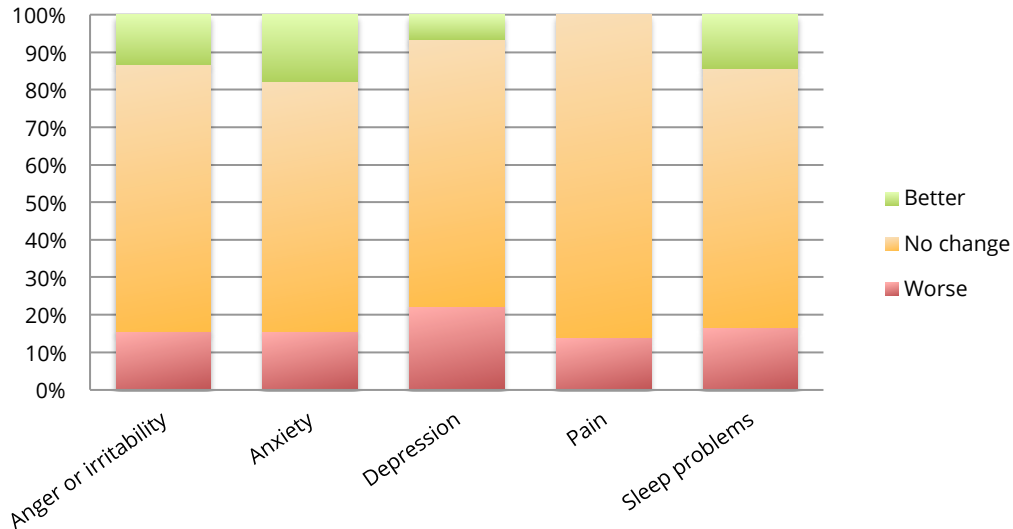
## Anti-psychotics

Anti-psychotics had the highest reports of worsening symptoms than any other medication. A majority of respondents reported that anger/irritability, depression, sleep problems and anxiety got worse.



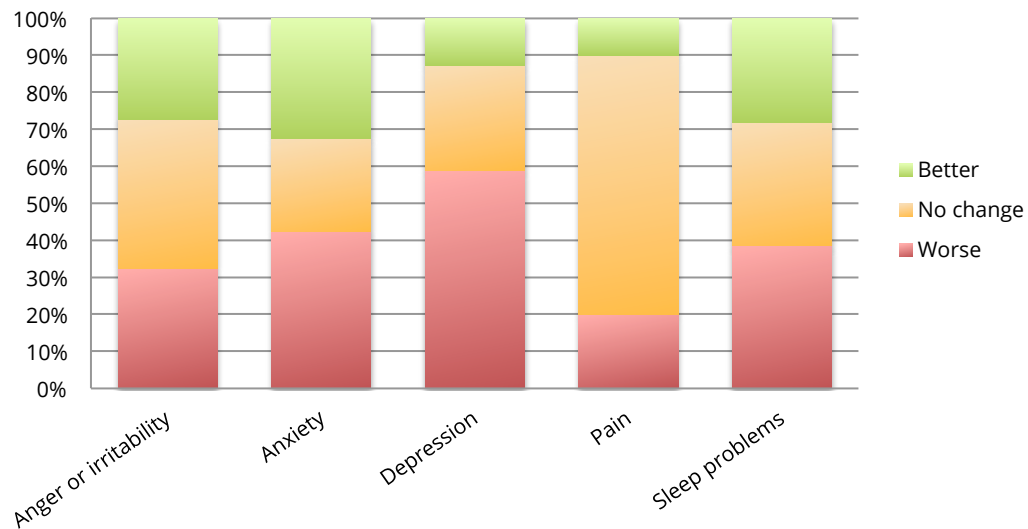
## Beta-blockers

About three-quarters of survey respondents reported that their PTSD symptoms were largely unchanged on beta-blockers.



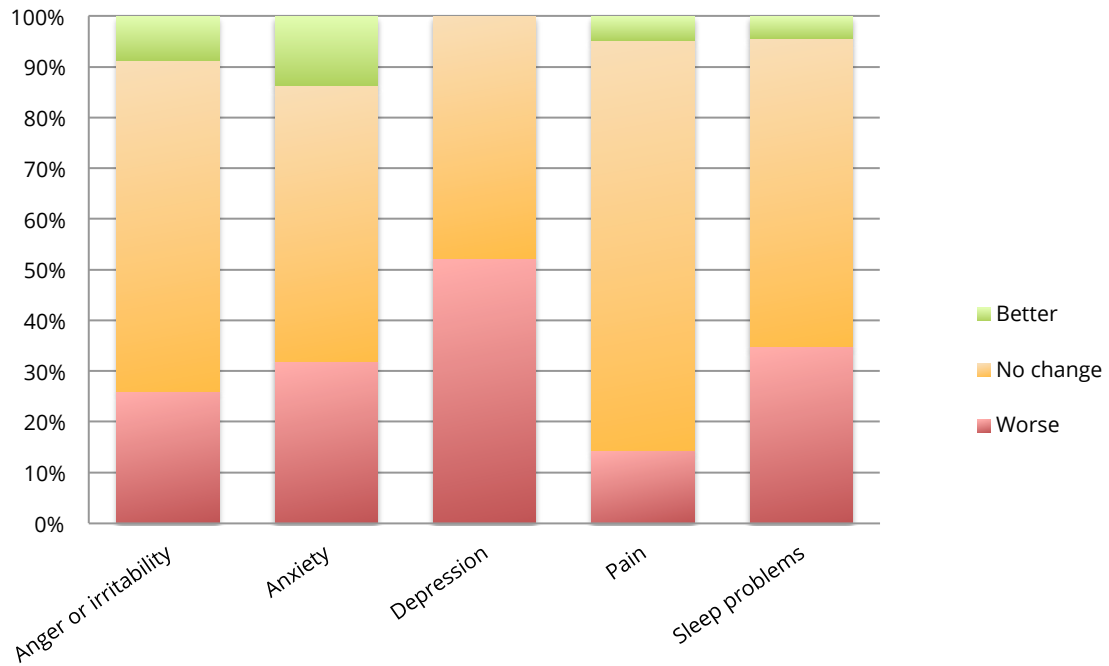
## Tranquilizers

A significant minority of survey respondents reported that their anxiety, sleep problems and anger and irritability improved on tranquilizers. However, more than half reported that their depression got worse.



## Anti-convulsants

A small percentage of survey respondents reported improvements in anxiety, and anger and irritability. Over half of survey respondents reported that their depression got worse on anti-convulsants.

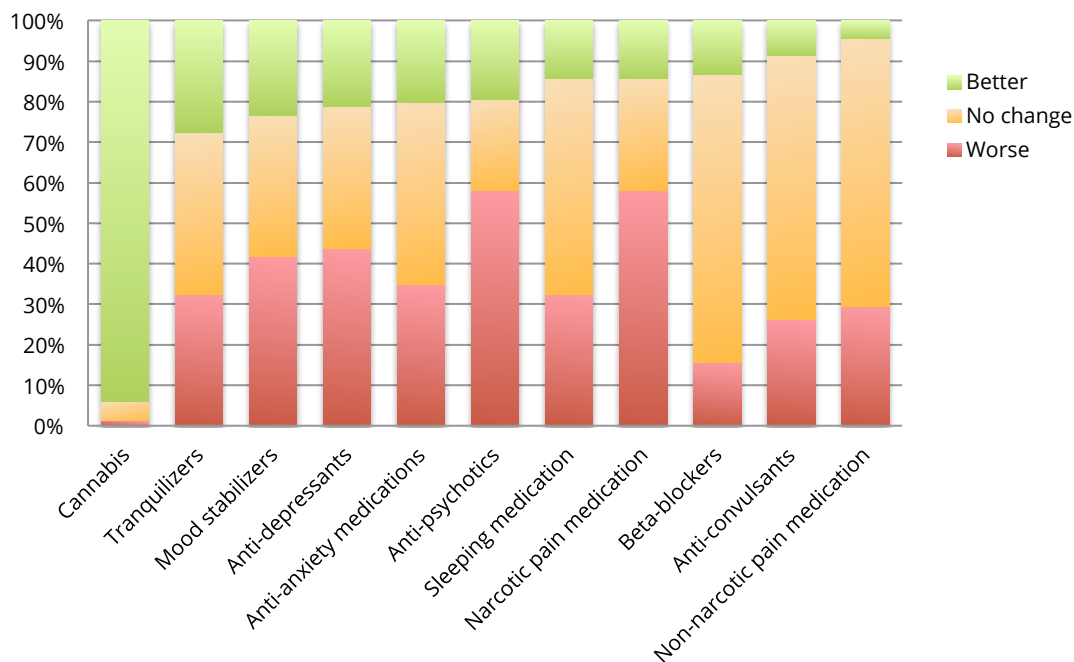


# Medication Comparison

*This section compares survey respondents' assessment of the impact of eleven medications (including cannabis) on PTSD symptoms. Medications are ordered in the chart based on the percentage of survey respondents who reported improvements.*

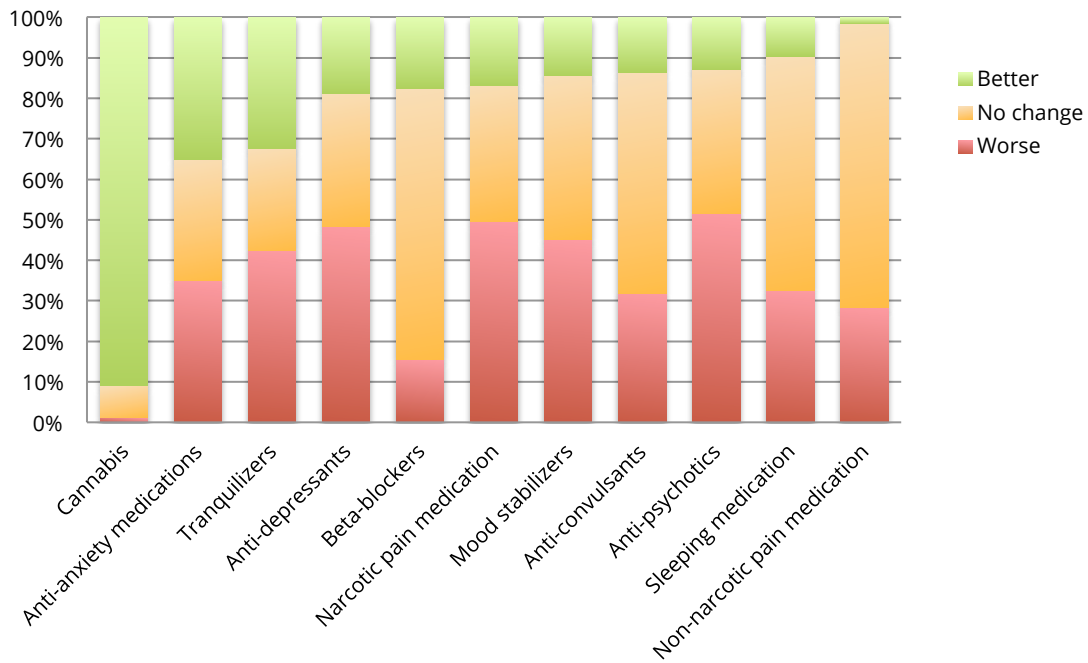
## Anger & Irritability

The majority of survey respondents (over 90%) reported that cannabis helped with anger and irritability. Tranquilizers and mood stabilizers were reported to be the next most likely to help with anger and irritability. However, more people reported their anger and irritability got worse on tranquilizers and mood stabilizers than reported that it got better. The majority of respondents who were prescribed narcotic pain medication and/or anti-psychotics for PTSD reported that these medications made their symptoms of anger and irritability worse.



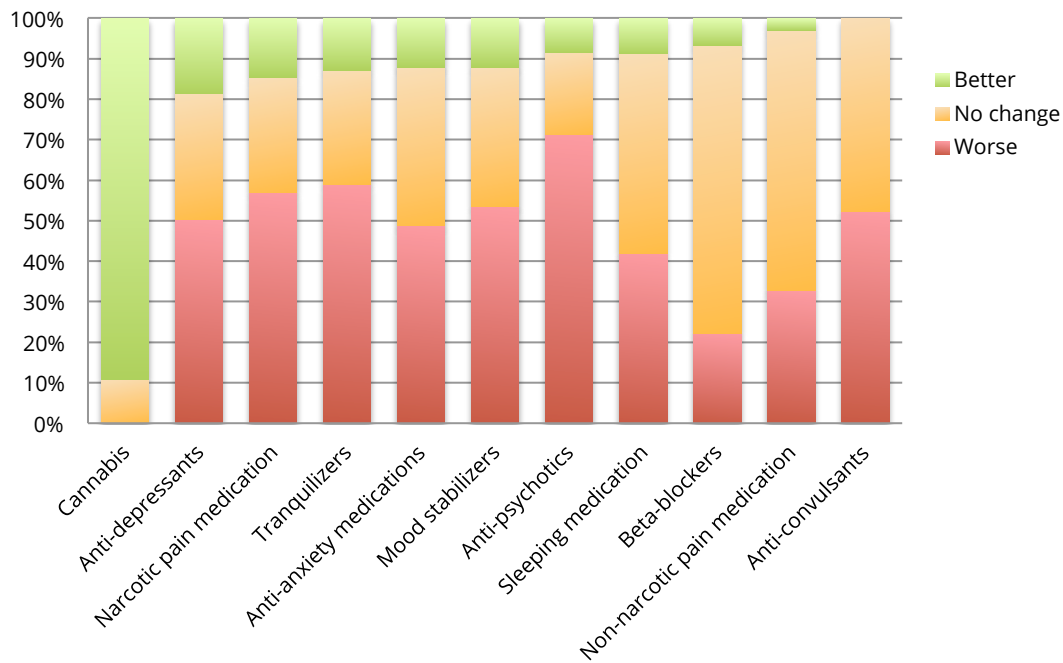
## Anxiety

The majority of survey respondents (around 90%) reported that cannabis had a positive impact on anxiety. By comparison, only about a third of survey respondents reported that *anti-anxiety medication* made their anxiety better. About half of survey respondents reported that anti-psychotics and narcotic pain medication made their anxiety *worse*.



## Depression

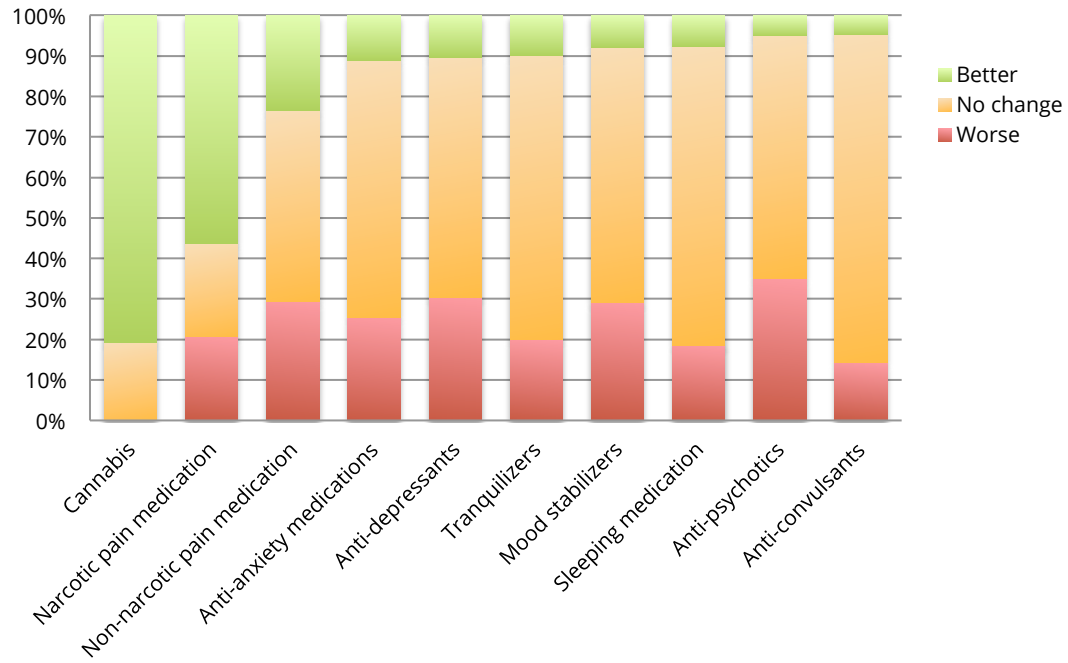
With the exception of cannabis, survey respondents reported that the medications they were prescribed for PTSD rarely improved depression, and often made it worse. Less than one-fifth of survey respondents reported that their depression improved on anti-depressants *while over 50% reported that their depression worsened on anti-depressants*. A majority of respondents also reported that their depression worsened on anti-psychotics, tranquilizers, narcotic pain medication, mood stabilizers and anti-convulsants.





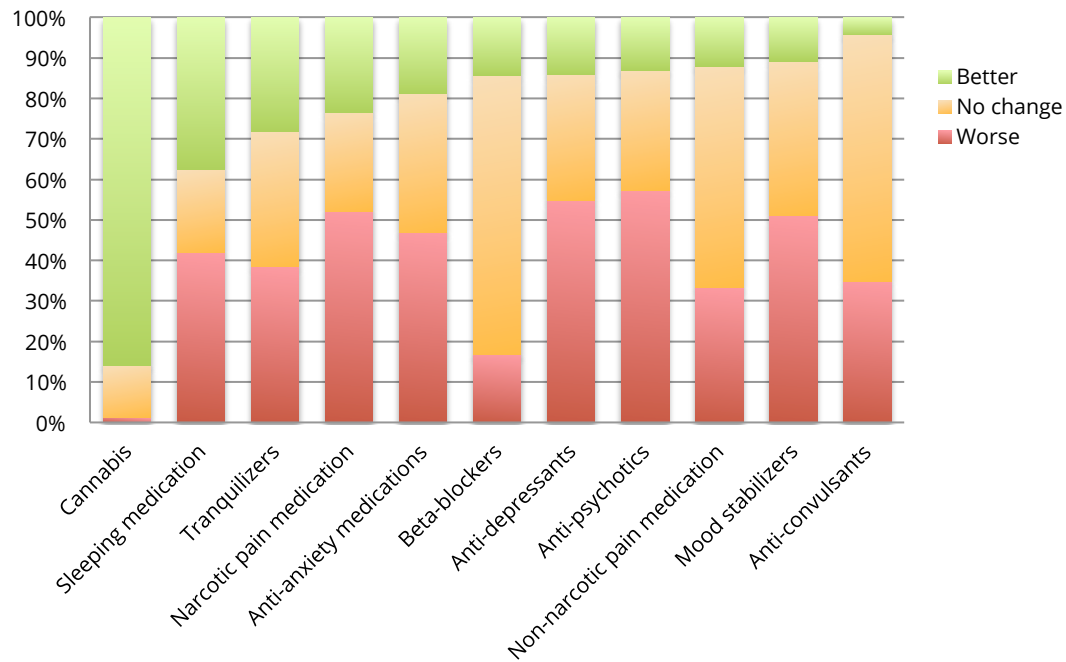
## Pain

Cannabis and narcotic pain medication were the only medications that reportedly mitigated pain to some extent for a majority of patients. However, about one-fifth of respondents reported that narcotic pain medication made their pain worse.



## Sleep Problems

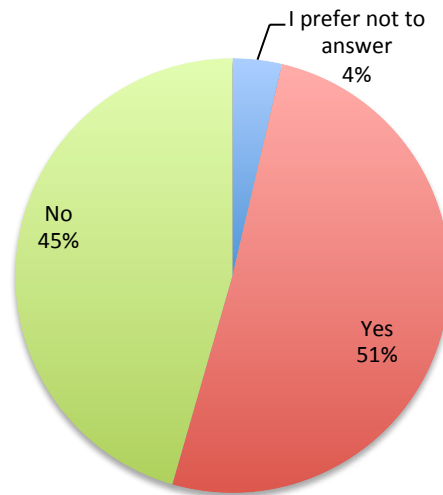
With the exception of cannabis, all of the medications prescribed to survey respondents for PTSD reportedly made sleep problems worse more often than they made them better (including sleep medications).



# Alcohol & Cannabis

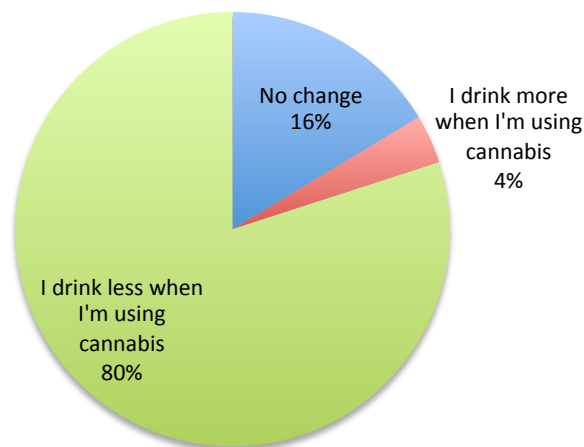
## Prevalence of Alcohol Problems Among Respondents

Over half of respondents reported that they either have or have in the past had a problem with alcohol.



## Changes in Alcohol Consumption While Using Cannabis

Eighty percent of respondents reported that their alcohol consumption decreased to some extent while using cannabis. Four percent reported an increase in alcohol consumption.



# Veterans vs. Civilians

Seventy two percent (72%) of survey respondents were veterans and 28% were civilians. There were several notable differences in the reported treatment of PTSD in veterans versus civilians:

- ✓ Respondents reporting that they had had PTSD for over 20 years were almost twice as likely to be veterans (9.7%) as civilians (5.5%).
- ✓ Veterans reported being prescribed more medications: 52.8% of veterans received 5 or more medications versus 42.5% of civilians.
- ✓ As compared to civilians, veterans were more likely to receive mood stabilizers (46.7% vs. 36.0%), narcotic pain medication (43.1% vs. 36.0%) and anti-psychotics (29.7% vs. 22.7%)—medications for which surveys respondents reported high rates of worsening symptoms.
- ✓ Veterans were more likely than civilians to report that they had a problem with alcohol (55.9% vs. 39.5%).

# Endnotes

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<sup>i</sup> *What Is PTSD?* U.S. Department of Veterans Affairs, August 2015. Web. 22 Feb. 2016.

<sup>ii</sup> Ibid.

<sup>iii</sup> *The American Legion Survey of Patient Healthcare Experiences*. Jeff Greenberg, Ph.D., Data Recognition Corporation (DRC). Institute for the Advancement of Military and Veteran Healthcare.

<sup>iv</sup> *Post-Traumatic Stress Disorder*. Mental Health Information. National Institute of Mental Health, Feb. 2016. Web. 22 Feb. 2016.

<sup>v</sup> Sareen, J., Houlahan, T., Cox, B., & Asmundson, G. J. G. (2005). Anxiety disorders associated with suicidal ideation and suicide attempts in the National Comorbidity Survey. *Journal of Nervous and Mental Disease*. 193, 450-454. doi: 10.1097/01.nmd.0000168263.89652.6b

<sup>vi</sup> Ibid.

<sup>vii</sup> *PTSD and Problems with Alcohol Use*. U.S. Department of Veterans Affairs, August 2015. Web. 22 Feb. 2016.

<sup>viii</sup> *The American Legion Survey of Patient Healthcare Experiences*. Jeff Greenberg, Ph.D., Data Recognition Corporation (DRC). Institute for the Advancement of Military and Veteran Healthcare.

<sup>ix</sup> Ibid.