

BACKGROUND

- Chronic pain, defined as pain persisting for 3 or more months, affects 20% of adults in the US
- Despite the variety of existing pain medications, the majority offer only partial symptom relief, resulting in persistent pain and reduced quality of life for affected individuals
- Ketamine is commonly used to treat chronic neuropathic pain although its long-term analgesic effects are limited
- Ketamine may enhance the brain's receptivity to psychotherapy, such as cognitive behavioural therapy (CBT), and combining both has been proposed as a novel treatment for chronic neuropathic pain.

OBJECTIVES

1. Assess the feasibility of conducting a pilot trial designed to compare three interventions for chronic neuropathic pain
2. Assess changes in pain interference, pain intensity, pain catastrophizing, depression, and anxiety

METHODS

- 1) Pilot, randomized, single-blinded controlled trial with 3 arms: Ketamine, CBT, and Ketamine+CBT
- 2) Adults (≥18 years old) with chronic neuropathic pain were followed over a 20-week period
- 3) Feasibility assessed through recruitment rate, withdrawal rate, and attendance at
- 4) Analyses of secondary outcomes were done descriptively

RESULTS

Figure 1. Longitudinal distribution of PROMIS-Pain Interference change scores by treatment arm across follow-up

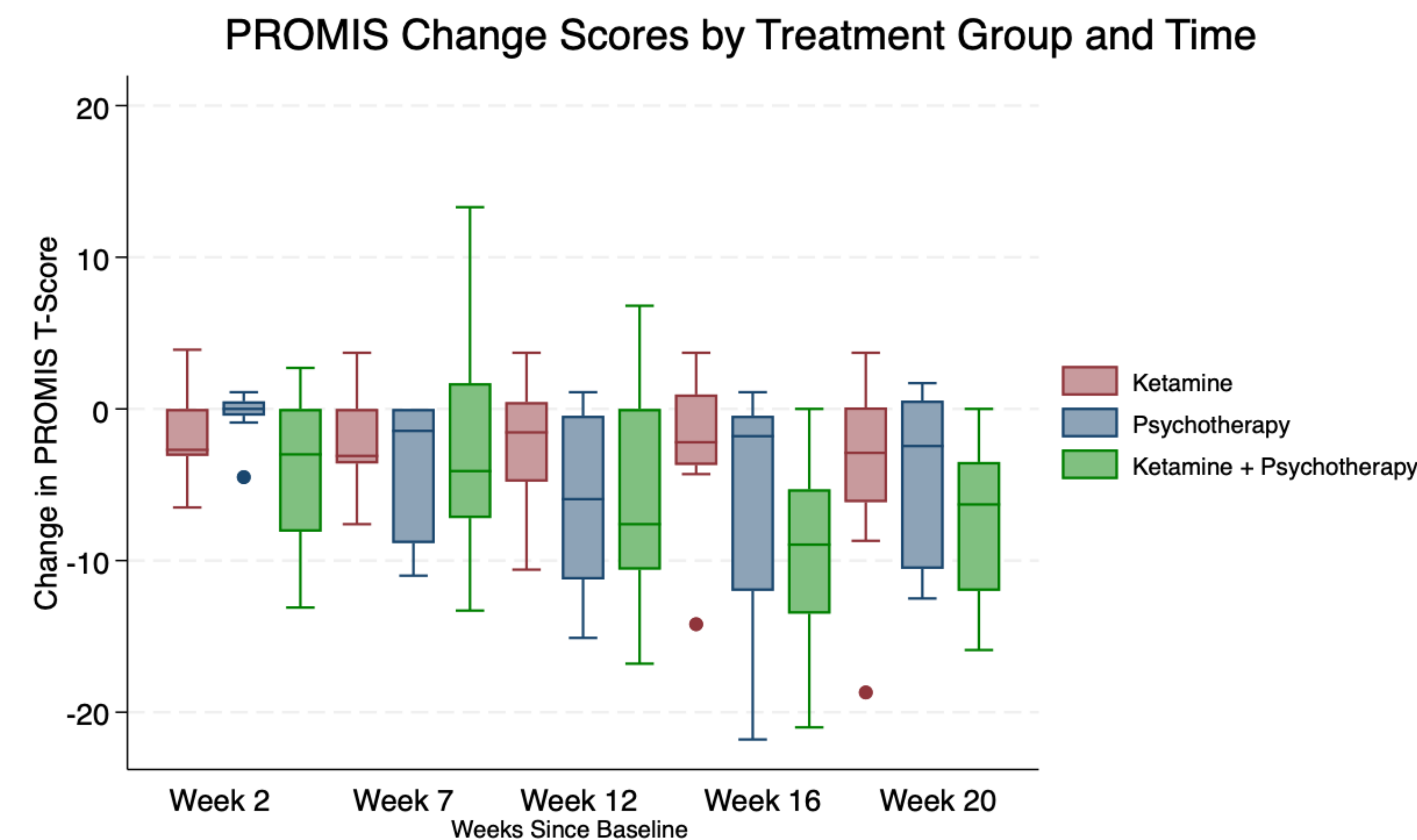
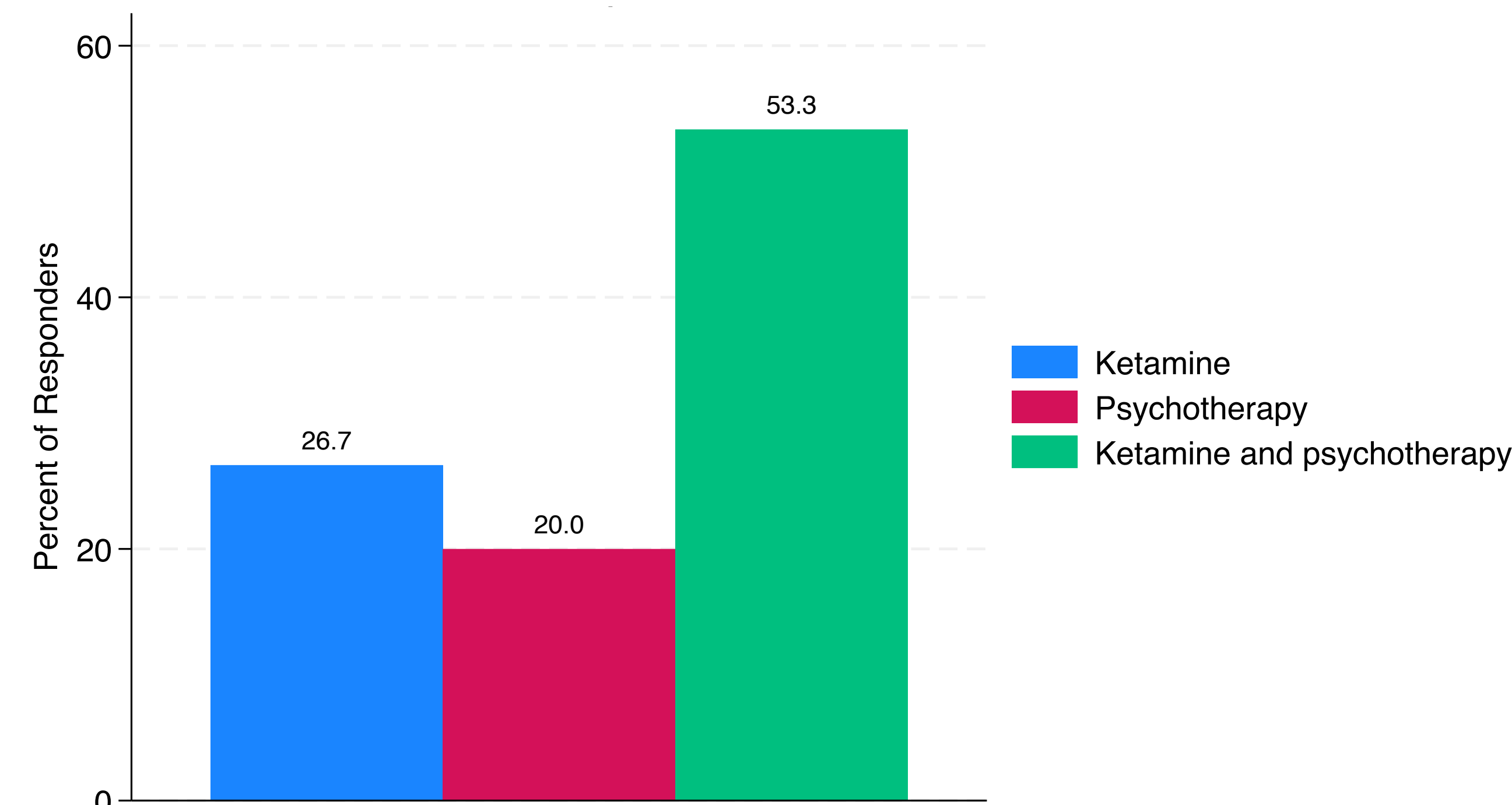


Figure 2. Distribution of participants who achieved a meaningful reduction in pain interference



- 30 participants were recruited after a 20-month period, 13% of which withdrew following randomization
- In the Ketamine plus CBT arm, 70% attended all ketamine and CBT sessions. 80% of the ketamine arm attended all ketamine sessions. In the CBT arm, 90% attended all psychotherapy sessions
- The combined ketamine plus CBT arm had greater reductions in pain interference at weeks 16 and 20 compared to the ketamine only and CBT only arms (Figure 1)

DISCUSSION

- Low withdrawal rates and increased protocol adherence among participants suggests trial feasibility
- Although underpowered, these results show support for combined ketamine and CBT as a treatment for chronic neuropathic pain
- The results of this pilot trial demonstrate the need for a larger, sufficiently powered RCT to determine whether the difference observed in pain interference is statistically significant