

MI-CRE 2026 Annual Research Symposium and Policy Forum

Recovery Beyond Symptoms: A Retrospective Observational Study of Quality of Life Following Medicinal Cannabis Treatment for Anxiety Disorders

Investigators: Roberts, Leah^{1,2}, Cumming, Craig^{1,2}, Budgeon, Charley A.³, Preen, David B.^{1,2}, Lee, Kenneth⁴

Author Affiliations:

¹ School of Population and Global Health, University of Western Australia, WA, Australia

² NHMRC Centre of Research Excellence in Medicines Intelligence, Australia

³ Cardiovascular Epidemiology Research Centre, School of Population and Global Health, University of Western Australia, WA, Australia

⁴ Department of Pharmacy, School of Health and Clinical Sciences, WA, Australia

Presenter's email address: craig.cumming@uwa.edu.au

Disclosure of Interests Statement: No disclosures of interest.

Is the presenter an HDR student? No.

Has this research been submitted or presented elsewhere? If so where and when? No.

Abstract

Background and Aims: Medicinal cannabis prescribing in Australia has increased substantially, for chronic pain, mental health, and sleep disorders. In mental health research, there is increasing emphasis on quality of life (QoL) outcomes beyond symptom reduction. Many individuals with anxiety disorders seek alternatives to standard treatments, including medicinal cannabis, despite limited evidence regarding long-term QoL outcomes. This study evaluated longitudinal changes in mental and physical QoL following initiation of medicinal cannabis treatment among individuals with anxiety or post-traumatic stress disorder (PTSD).

Design and Methods: We conducted a retrospective longitudinal cohort study using data from the Australian Emyria Clinical e-Registry. Participants included medicinal cannabis-naïve adults (≥18 years) with anxiety or PTSD who commenced treatment between December 2018 and November 2022 and completed a baseline RAND SF-36 assessment and at least one follow-up assessment within 365 days. Participants with psychosis, bipolar disorder, or recent cannabis use were excluded. QoL was assessed using the RAND SF-36 Mental Component Summary (MCS) and Physical Component Summary (PCS) scores. Mixed-effects models accounting for non-linear change over time were fitted. Significant interactions were observed between follow-up time and anxiety diagnosis type for MCS trajectories, and between follow-up time and gender for PCS trajectories. Clinically meaningful improvement was defined as a ≥5-point increase in RAND SF-36 scores.

Results: Of the 370 eligible participants, all diagnosis groups demonstrated statistically significant increases in MCS scores over the first 90 days, with mean increases ranging from 4.2 to 10.7 points. Clinically meaningful improvement at 90 days was observed in Primary Anxiety (10.7 points), Primary PTSD (6.7 points), and Other PTSD (6.7 points), while Other Anxiety did not initially meet the threshold (4.2

points). Across 365 days, all diagnosis groups exceeded the minimally important difference threshold for MCS improvement, indicating sustained improvements in mental health-related QoL. Although PCS scores improved over time, neither males nor females reached the threshold for clinically meaningful improvement.

Conclusion: Medicinal cannabis treatment was associated with sustained improvements in mental health-related QoL among individuals with anxiety and/or PTSD. Further high-quality research is needed to compare QoL outcomes with standard treatments and evaluate medicinal cannabis integration into anxiety management.