

Feasibility and preliminary efficacy of online delivery of the Cognitive Enhancement program in a community outpatient setting for people who use methamphetamines.

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Introduction: Methamphetamine is the most commonly consumed substance in Australia, and negatively impacts cognitive function. The Alcohol and Other Drugs (AOD) Cognitive Enhancement (ACE) Project demonstrated the efficacy of a cognitive remediation (CR) intervention in residential AOD treatment. The current study aimed to examine the feasibility/preliminary efficacy of an online adaptation of this intervention in community outpatient methamphetamine treatment.

Method: Nineteen clients attending treatment for methamphetamine use at Illawarra Shoalhaven AOD Services were enrolled in the study. Four cycles of the online 10-module CR Intervention were conducted. The primary outcome was feasibility and acceptability, shown through descriptive statistics and results from post-intervention interviews. Preliminary efficacy was assessed using paired-samples t-tests of Pre/Post-Intervention BRIEF-A scores. Substance dependence severity (SDS) and perceptions of recovery (SURE) were also assessed.

Key Findings: Across the 19 participants, 31.6% ($n=6$) did not complete any modules, 31.6% ($n=6$) completed 1-4, 21.1% ($n=4$) completed 5-8, and 15.8% ($n=3$) completed 9-10 (of those who commenced modules, average modules completed was 5.54, $SD=2.73$). There were significant decreases in BRIEF-A and SDS scores, and a significant increase in SURE scores. Overall, participants reported positive feedback regarding the content, strategies, and facilitation of the intervention.

Discussions and Conclusions: Despite low recruitment and high attrition, these findings indicate the feasibility and acceptability of the ACE CR intervention for people experiencing difficulties with cognitive impairment and methamphetamine use. CR interventions are a valuable tool in improving cognitive function and substance use treatment outcomes, though further research is needed.

Implications for Practice or Policy: Interventions aiming to improve cognition are effective in community-based methamphetamine treatment, even when delivered online. In addition, participants showed improvements in perceptions of recovery and reduced dependence severity, highlighting the potential utility of including CR within routine service delivery to improve cognitive functioning and other substance use treatment outcomes.

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