



Impact of Gender on Response to Contingency Management Treatment in Methamphetamine Use Disorder

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Introduction

Research Question: Does gender impact treatment response to Contingency Management (CM) interventions in methamphetamine use disorder (MUD)?

- MUD is an important public health and safety problem that has been demonstrated to have disproportionately increased in rural communities in Washington.²
- Methamphetamine related deaths per year quadrupled during 2008-2016 resulting in an increase from 83 to 364 deaths.⁷
- CM interventions have shown to be effective in promoting abstinence among people with substance use disorders including MUD.^{4,6}
- CM has also been shown to be equally efficacious among men and women in a large study assessing alcohol, opioid, and cocaine use.³
- The impact of gender on treatment response to CM treatment for MUD have yet to be investigated.

Methods and Analysis

- Secondary analysis pooled from 2 randomized clinical trials evaluating efficacy of CM on MUD.^{1,5}
- Study 1 evaluated duration of CM treatment.⁵
- Study 2 evaluated different schedules of CM treatment.¹
- Each study had 4 treatment arms, one of which did not include CM.
- Only participants receiving CM were included in the analysis.
- Total N=179 individuals, 109 men and 70 women.
- Trials used the same inclusion/exclusion criteria. Length was 16 weeks.
- Participants underwent 3x weekly urine collection.
- Gender demographics were compared via chi-square for dichotomous variable and ANOVA for continuous variables.
- Multiple regressions were performed to evaluate gender in relation to each outcome.
- Treatment outcome responses was made the primary outcome separately for each model.
- Gender was made the primary predictor of interest for all models.
- Significance level set at p<.05.
- Stata 15.1 was utilized to perform all statistical analyses.

Results

- No significant outcome differences were identified based on gender.**
- Attendance (sessions): 30.8 men, 35 women (p=0.173).
- Longest duration of abstinence: 7.5 weeks men and 8.7 women (p=0.463).
- Mean percent of negative urinalysis: 62% men, 70% women (p=0.234).
- Treatment completer: 56.9% men, 67.1% women (p=0.257).
- Abstinence in last 2 weeks of treatment: 37% men, 23% women (p=0.598).
- Abstinent and retained in last week of treatment: 71% men, 55% women (p=0.386).
- Three or more weeks of consecutive abstinence: 71% men, 55% women (p=0.116).
- Complete abstinence during treatment: 19% men, 14% women (p=0.958).

Conclusions and Discussion

- This study suggests CM interventions are equally efficacious for men and women in the treatment of MUD.
- Findings are consistent with previous research suggesting equal CM efficacy among men and women in treatment of alcohol, opioid and cocaine use disorders.³
- Findings support application of CM interventions in the treatment of MUD.

Future Directions and Application

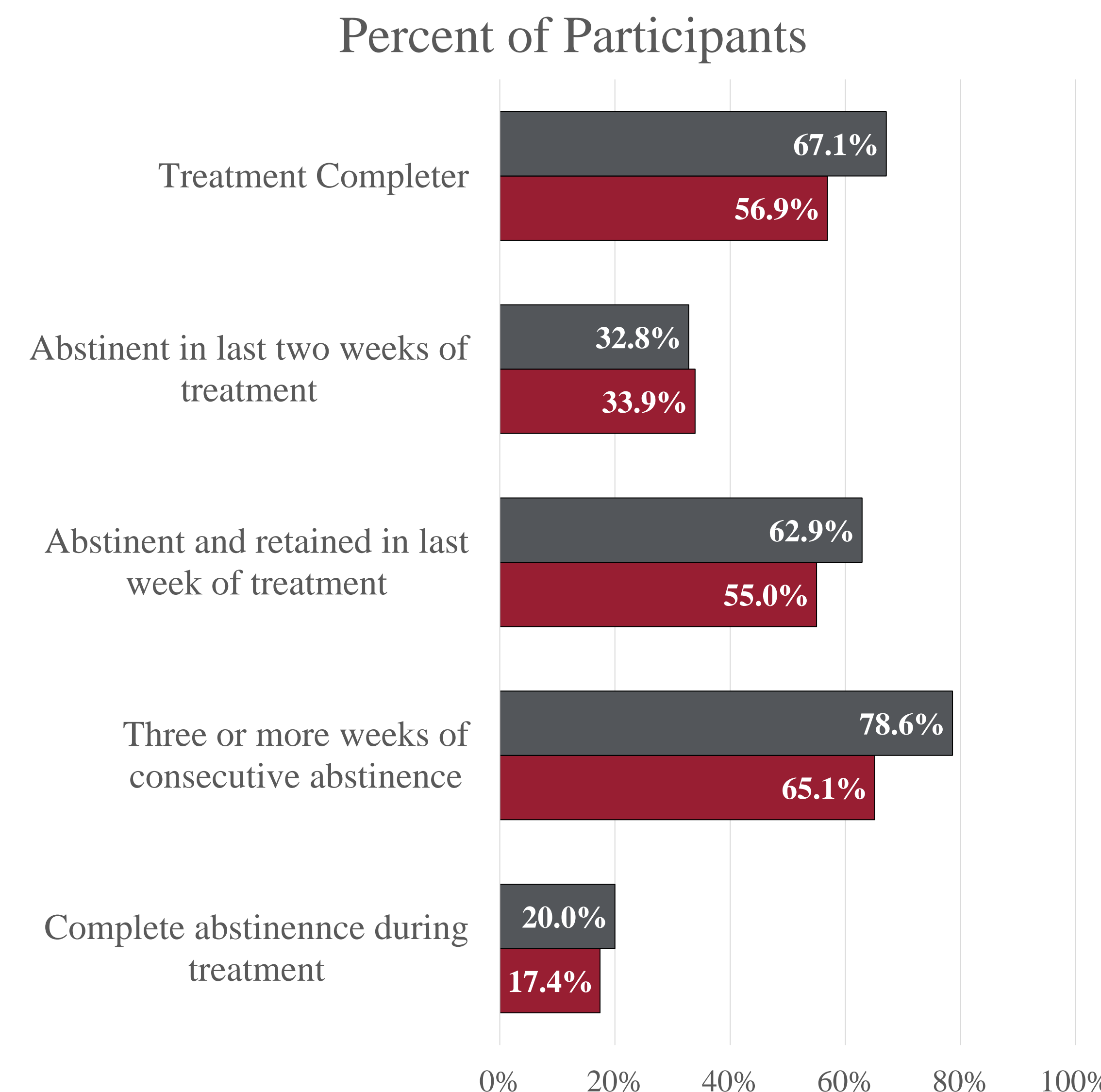
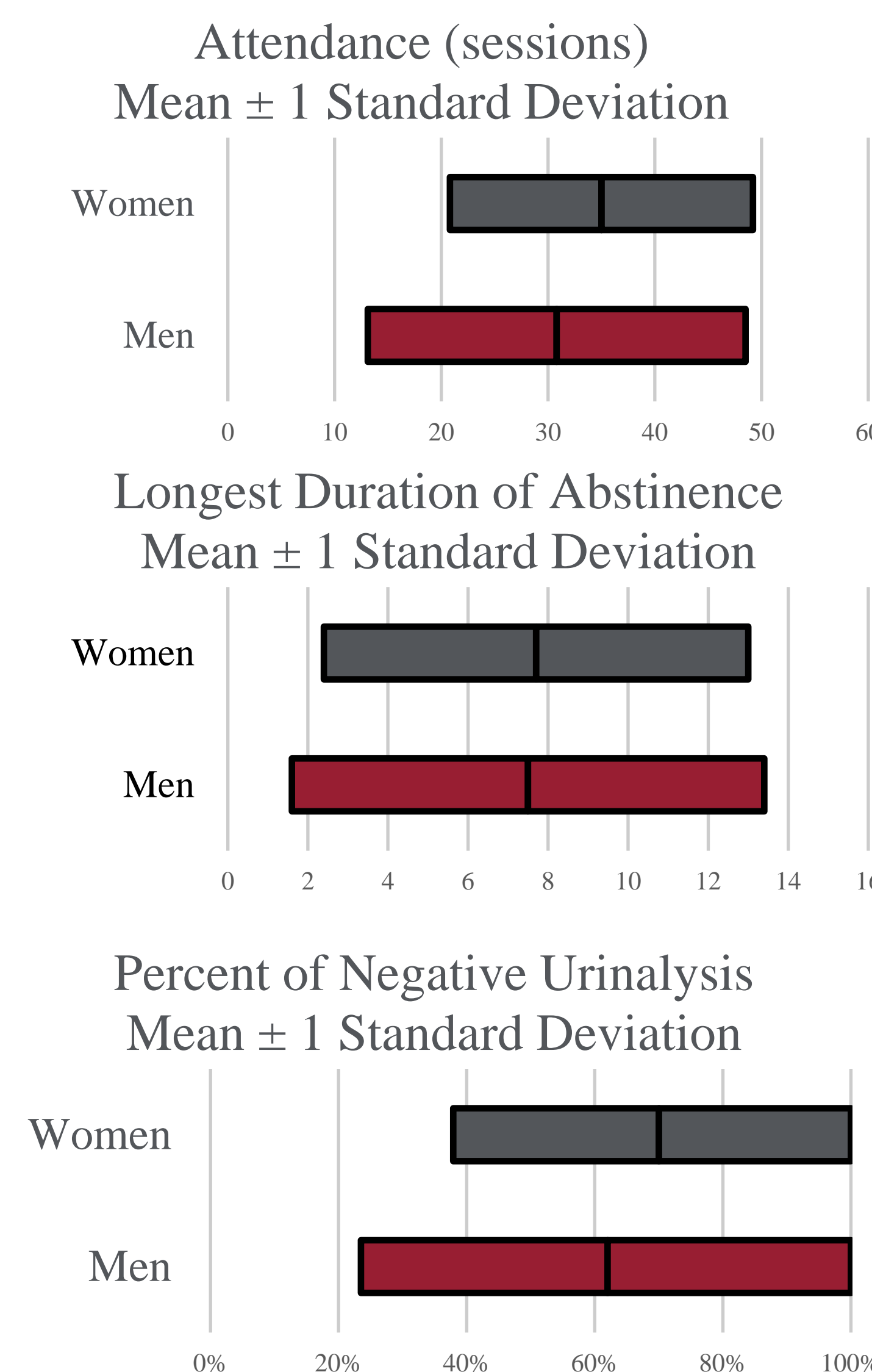
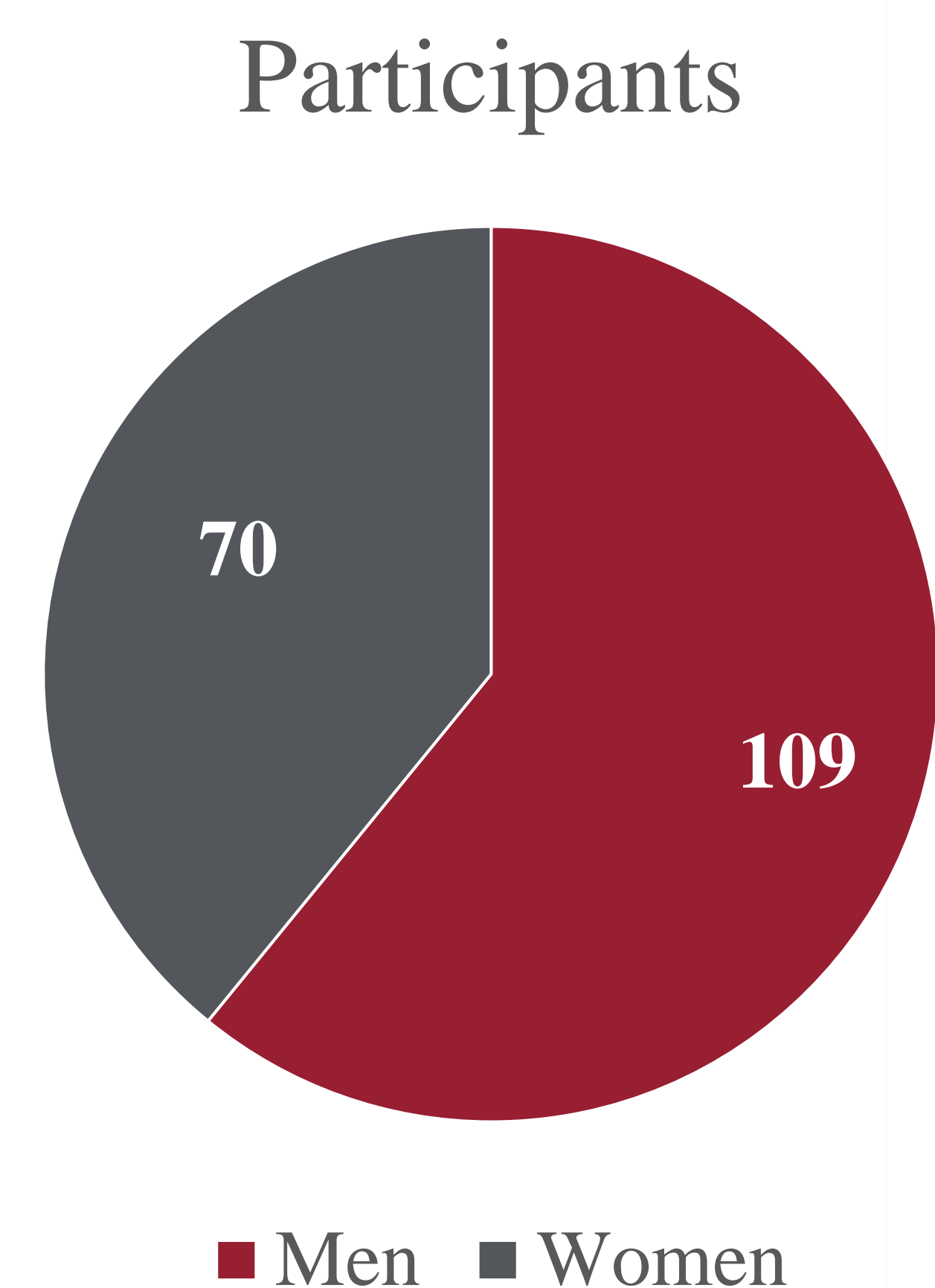
- Further studies with longer duration to investigate long term effects of CM on MUD and other substance use disorders.
- Further analysis of other demographic factors such as setting (rural vs urban), income, and housing status.
- Increased funding for CM interventions so they can be applied and studied more broadly.

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Disclosures

None



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