Comparisons of Treatment Attendance and Substance Use in Methadone Maintenance Treatment Sample

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Introduction
For over 50 years, methadone maintenance treatment (MMT) has been a fast, cheap, and effective form of treatment for the 2 million people in the U.S. who have an opioid use disorder (OUD). As the typical course of MMT requires daily clinic visits, the demanding schedule can be a barrier to those who need help. Further, underutilized MMT services lead to poorer outcomes not only for the people with OUD, but also for the treatment providers. Previous research on substance use treatments, including MMT, has studied differences in treatment attendance by dividing samples into those who have perfect or less-than-perfect attendance. In doing so, they have found significantly better outcomes for those with perfect attendance.

Present Study
Aims: To examine potential differences in attendance and substance use for individuals with OUD engaged in MMT
Hypothesis: Individuals in MMT with perfect attendance will significantly differ in their substance use from those with less-than-perfect attendance.

Methods
Participants
n = 279 (56% male, mean age = 49.78)
62% African American, 37% White (10% Hispanic)
52 perfect attenders (missed 0 or 1/365 days), 227 less-than-perfect attenders

Procedure
Adults receiving MMT from outpatient clinics in the metropolitan area of a large Midwestern city were recruited for part of a larger study
Participants provided consent for their file to be reviewed for relevant information (i.e., demographics, drug screening results, treatment attendance)

Results
Higher treatment attendance was significantly related to less positive drug screenings for any/all substances (r = .28, p < .001), cocaine (r = .20, p < .001), and opioids (r = .27, p < .001)
Comparative statistical analyses revealed significant differences between the perfect and less-than-perfect attenders on the variables of days in treatment, with perfect attenders having been in treatment longer (t[277] = 2.822, p = .006, 95% CI [12.601, 72.750] d = .41).
Finally, perfect treatment attenders had significantly fewer positive drug screenings for any/all substances (t[277] = -4.312, p < .001, 95% CI [-.355, -.141] d = .69), cocaine (t[277] = -2.828, p = .006, 95% CI [-.256, -.045] d = .42), and opioids (t[277] = -4.171, p < .001, 95% CI [-.257, -.099] d = .68).

Discussion
Although MMT is specifically for OUD, there were improvements in drug screening results for other substances as well when treatment was more frequently attended.
Not only was increased treatment attendance related to decreased substance use, but also that perfect attendance was an even stronger predictor.
No significant differences between groups on background variables such as gender, age, or income.

Limitations/Implications
Convenience sample, more likely have captured a well-attending sample
Drug screening laboratories were changed
Demographic information was collected at intake
Only have data from past year
Implications
Find more effective ways to incentivize people in MMT to attend consistently
Continue searching for other improvable differences
More research is needed on potential qualitative differences of those with perfect attendance

Primary References

MMT attendance predicted overall decreases in substance use. Individuals with perfect attendance had better outcomes than those with less-than-perfect attendance.