Medication-Assisted Treatment: Clinic Visit Predictors

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Abstract

While evidence suggests that medication-assisted treatment (MAT) helps reduce alcohol and opiate use, access to pharmacological therapies continues to be limited for criminal justice (CJ) populations. When access is provided, maintaining patient adherence to treatment regimens is often a challenge. This study explores risk factors associated with MAT treatment adherence among a sample of 91 substance-using probationers and parolees participating in an outpatient drug treatment program and referred to MAT. Using interactive voice response (IVR) technology, participants are asked to report daily alcohol and drug use, interpersonal events and stressors, and MAT adherence over a 2-week period during their outpatient treatment. Findings support the feasibility of using IVR to assess the MAT experience from a patient's point-of-view. Based on IVR reports, illegal drug use to cope with life stressors was related to MAT treatment adherence.

Background

- MAT is the use of medications in combination with counseling and behavioral therapies to provide a whole-patient approach to treatment of substance use disorders.
- Evidence shows MAT helps patients reduce opiate and alcohol use (Amato et al., 2005; Johnson, 2008), criminal behavior and arrest (Schwartz et al., 2009), and HIV risk behavior (Marsch, 1998).
- A limited number of studies focus on factors predicting clinic visit attendance among offenders under community supervision.

References

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Study Design

- Enrollment criteria: substance abuse disorder, parolee or probationer, participating in counseling and behavioral therapy-based substance abuse treatment, "MAT eligible" (opiates or alcohol = primary substance of abuse).
- Novel data collection method: Participants make daily telephone calls to an interactive voice response (IVR) survey system over a 2-week period during treatment. They answer questions about previous day events including stressors, psychological functioning, substance use, problems attending treatment, and MAT adherence.

Specific Aim

To identify predictors of keeping MAT clinic visits based on patient self-report the day prior to the appointment.

Data Collection using IVR

- IVR Technology
  - ✓ Automated computer-driven survey technology
  - ✓ Recorded voice prompts - questions that participants answer by using the telephone keypad
- Software - SmartQ by TeleSage (www.telesage.com/SmartQ.html)
- Survey Question Examples

For the next several questions, I'm going to ask you about things that you've done since this time yesterday. Answer each question using a scale of 0 to 3 where:

0 = no,
1 = yes, but yesterday only
2 = yes, but today only, or
3 = yes, both yesterday & today.

Did you use alcohol to cope with stress?
Did you use illegal drugs to cope with stress?
Did you use prescription drugs to cope with stress?
Did you do anything illegal other than using drugs?
Did you have stress about an argument with someone?
Did you have any stress about work or unemployment?
Did you have any stress about money problems?
Did you have any stress about your health?

- Reminder card for days when treatment is not scheduled

Sample

Demographic Characteristics	(*N* = 91)
Caucasian	20%
African American	77%
Ethnicity other	3%
Living with spouse/partner	35%
Have children that live with them	30%
Completed high school/GED	28% / 35%
Age in years	35.9 (mean)

Criminal Justice & Tx Service History	Mean	SD	Range
Age at first arrest	16.9	3.7	9-32
Arrests while using/seeking drugs	11.9	13.8	0-85
Arrests (lifetime)	16.2	15.1	1-85
Incarcerations (jail, prison, juvenile lockup)	11.3	11.7	1-60
Months incarcerated	72.3	68.9	0-485
Substance abuse treatment episodes	3.0	5.4	0-30
Hospitalizations for health problems	3.4	3.3	0-15
Hospitalizations for psychiatric problems (%)	3% one time 7% 2 or more		

Characteristics prior to MAT appointment from closest IVR call	*N* (%)
Kept MAT appointment	61 (67%)
Used alcohol to cope with stress	7 (8%)
Used illegal drugs to cope with stress	37 (41%)
Used prescription drugs to cope with stress	16 (18%)
Any (other) illegal activities (yesterday or today)	8 (9%)

Preliminary Results

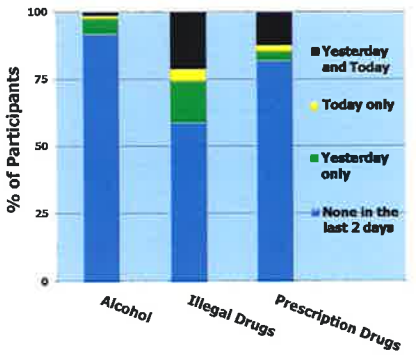
Keeping Scheduled MAT Clinic Visit and Use of Illegal Drugs to Cope with Stress

"did you take illegal drugs because of stress"

	Did not use illegal drugs because of stress *N* (%)	Used illegal drugs because of stress yesterday, today, or both *N* (%)
Missed scheduled MAT Clinic Visit	12 (13%)	18 (20%)
Kept scheduled MAT Clinic Visit	42 (46%)	19 (21%)

X^2 (1, *N* = 91) = 6.94, $p < .01$

Substance Use to Cope with Stress



Conclusions

- Use of illegal drugs to cope with stress prior to the MAT clinic visit was associated with missing the scheduled MAT clinic visit.
- There was a fairly high rate of service use for co-morbid mental health and health problems, an area of continued focus for this study.
- Continue to measure MAT participants treatment satisfaction, barriers to MAT, and support for MAT.

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