

Same-day vs. delayed buprenorphine prescribing and patient retention in an office-based buprenorphine treatment program



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BACKGROUND

- 46,000 people died from opioid overdose deaths in the United States in 2018¹
- Medications for opioid use disorder (OUD), such as buprenorphine, are effective in reducing mortality and health complications²
- Only 21% of 2.1 million Americans with OUD received treatment in 2016³
- Treatment barriers include shortage of treatment programs, lengthy intakes, and rigid program rules and restrictions
- Low-threshold buprenorphine treatment seeks to minimize barriers to treatment entry and continuation
- Same-day prescribing of buprenorphine (at intake) is a feature of low-threshold treatment and may improve retention in treatment by reducing early drop-out

OBJECTIVES

Specific Aim: To determine whether there was an association between delay in buprenorphine prescription and retention in buprenorphine treatment
Hypothesis: delays in buprenorphine prescription would be associated with lower retention

METHODS

Design: Retrospective study of 239 patients initiating buprenorphine
Setting: Montefiore FQHC in South Bronx -13 buprenorphine-waivered PCPs
 -Clinical pharmacist conducts majority of intakes
 -Patients can receive prescription after 1-3 visits (see Figure 1.)
Patients: All patients initiating buprenorphine June 1, 2015 -December 31, 2017 who received 1 or more buprenorphine prescription
Exclusions: 1) Received buprenorphine within 90 days before start of study period; 2) Experienced delays>30 days

METHODS

Figure 1. Buprenorphine initiation work-flow

Primary outcome: Retention in treatment at 30 days
Independent variable: Same-day vs. Delayed buprenorphine prescription receipt
Covariates: Age, Race/ethnicity, Sex, Insurance status, Self-reported housing status, History of buprenorphine treatment, Substance use
Analysis:

- Patient characteristics and Same-day vs. Delayed buprenorphine prescription: bivariable analyses
- Odds of treatment retention by Same day vs. Delayed buprenorphine prescription: Multivariable logistic regression

RESULTS

Table 1. Characteristics of patients by buprenorphine prescription receipt, N=220

	Same-day prescription receipt, n (%)	Delayed prescription receipt, n (%)
Total	93 (100)	127 (100)
Age, mean (SD)	46.0 (10)	45.4 (11)
Race		
Hispanic	70 (75)	89 (70)
Male sex	78 (84)	95 (75)
Insurance status		
Public	69 (74)	95 (75)
Substance use		
Cocaine	31 (33)	32 (25)
Alcohol*	12 (24)	48 (43)
Benzodiazepine*	9 (10)	28 (22)
Housing		
Stable housing	31 (67)	75 (67)
Unstable housing	14 (31)	37 (33)
Homeless	1 (2)	0 (0)

* p<0.05 for comparison between Same-day and Delayed prescription receipt. t-tests, Pearson's chi squared, and Fischer's exact tests used where appropriate.

RESULTS

Table 2. Odds of retention in treatment at 30 days by Same-day buprenorphine prescription receipt and other characteristics

	Unadjusted OR, N=220	Adjusted OR ^a , N=219
Same-day prescription receipt	2.18 (1.05-4.52)	1.93 (0.90-4.14)
Age	1.01 (0.98-1.04)	1.00 (0.97-1.04)
Female sex	1.03 (0.46-2.33)	1.20 (0.51-2.83)
Race		
Non-Hispanic White	ref	ref
Hispanic	2.04 (0.66-6.32)	1.16 (0.33-4.01)
Non-Hispanic black	1.88 (0.49-7.20)	0.94 (0.21-4.14)
Non-Hispanic other	0.91 (0.07-12.52)	0.58 (0.04-8.79)
Missing	2.27 (0.21-24.88)	0.80 (0.06-10.06)
Substance use		
Cocaine	1.42 (0.65-3.09)	
Alcohol	0.95 (0.42-2.12)	
Benzodiazepine	0.36 (0.17-0.80)	0.40 (0.17-0.95)

^aAdjusted for age, race, sex, and benzodiazepine use

DISCUSSION

- Delays in buprenorphine prescribing may be associated with worse retention
- Providers may hesitate to provide same-day buprenorphine prescriptions to patients with benzodiazepine and alcohol use
- Limitations
 - Single site
 - Study underpowered
 - Only included patients who received at least one prescription
- Prospective studies would strengthen findings
- In the absence of data on harms associated with same day prescribing, it should become the standard of care

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