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Forced withdrawal from methadone maintenance therapy in criminal justice settings: A critical treatment barrier in the United States

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Abstract

The World Health Organization classifies methadone as an essential medicine, yet methadone maintenance therapy remains widely unavailable in criminal justice settings throughout the United States. Methadone maintenance therapy is often terminated at the time of incarceration, with inmates forced to withdraw from this evidence-based therapy. We assessed whether these forced withdrawal policies deter opioid-dependent individuals in the community from engaging methadone maintenance therapy in two states that routinely force inmates to withdraw from methadone ($N=205$). Nearly half of all participants reported that concern regarding forced methadone withdrawal during incarceration deterred them engaging methadone maintenance therapy in the community. Participants in the state where more severe methadone withdrawal procedures are used during incarceration were more likely to report concern regarding forced withdrawal as a treatment deterrent. Methadone withdrawal policies in the criminal justice system may be a broader treatment deterrent for opioid-dependent individuals than previously realized. Redressing this treatment barrier is both a health and human rights imperative.

Keywords

Methadone maintenance therapy; Forced methadone withdrawal; Criminal justice settings; Human rights

1. Introduction

Methadone maintenance therapy is classified as an essential medicine by the World Health Organization and has been widely demonstrated to be successful in reducing opioid use, criminal activity and HIV and viral hepatitis transmission and improving other health and social outcomes among individuals who are opioid-dependent (Gottheil, Sterling, & Weinstein, 1993; Gowing et al., 2008; Gruber et al., 2008; Kinlock et al., 2008; Marsch, 1998; Mattick et al., 2003; Metzger et al., 1993; Sees et al., 2000; Serpelloni et al., 1994; Sheerin et al., 2004; Sullivan et al., 2005; Williams et al., 1992; Zaric, Barnett, & Brandeau,

2000). Yet, in the United States, a significant proportion of individuals who are opioid-dependent are not engaged in methadone maintenance therapy or any form of opioid substitution therapy, with the majority of methadone patients terminating treatment prematurely, often within the first year (Hubbard et al., 1989; Reisinger et al., 2009; Simpson et al., 1997).

In a 2009 qualitative study, incarceration was among the most frequently reported causes for premature discharge from methadone maintenance programs (Reisinger et al., 2009). A 2001 study found that approximately 10% of those enrolled in methadone maintenance programs, an estimated 14,000 to 17,000 individuals, are arrested every year (Appel et al., 2001), and in a recent randomized trial comparing patient outcomes across methadone programs, 30.6% of patients reported at least one arrest over the course of a year (Schwartz et al., 2012). Although methadone is an essential medicine and is widely available in the community (Nunn et al., 2009), only 2% of 245 jails surveyed in 2004 reported using methadone or other opioids for medically-assisted detoxification, as is clinically recommended (Fiscella et al., 2004).

In addition to precipitating painful withdrawal symptoms, possibly even more severe than the symptoms associated with heroin withdrawal (Gossop & Strang, 1991), forced methadone withdrawal during incarceration can increase individuals' risk of drug relapse, overdose, and re-arrest in the period following release (Seal et al., 2001). These adverse experiences can have a significant impact on treatment engagement and retention (Schwartz et al., 2011). An ethnographic study conducted by Mitchell et al. (2009) found that individuals' experiences of forced methadone withdrawal during incarceration decreased their willingness to re-initiate treatment in the community following release. Methadone withdrawal policies in the criminal justice system may also serve as a broader treatment deterrent. Opioid-dependent individuals interact frequently with the criminal justice system, with an estimated 21% of jail inmates and 23% of state prison inmates reporting a prior history of opioid use (Bureau of Justice Statistics, 2004). Awareness of correctional methadone withdrawal policies and anticipation of arrest may deter opioid-dependent individuals from initiating treatment out of concern that, if incarcerated, they may be forced to undergo withdrawal. Thus far, studies have only demonstrated that forced methadone withdrawal in the criminal justice system discourages individuals who were on treatment at the time of arrest from re-initiating treatment after release. It remains unknown whether these policies serve as a broader treatment barrier for opioid-dependent individuals in the community.

We assessed whether correctional methadone withdrawal policies deter use of methadone maintenance therapy in the community among opioid-dependent individuals in two northeastern states, Massachusetts and Rhode Island, that routinely force inmates to withdraw from methadone following incarceration. In Rhode Island correctional facilities, individuals incarcerated while undergoing methadone maintenance therapy are maintained on the same dosage of methadone for 7 days and then placed on a 30-day methadone taper. In Massachusetts correctional facilities, individuals must undergo immediate cessation of methadone ('cold turkey' withdrawal). Given the more severe withdrawal procedures in Massachusetts, we also assessed whether opioid-dependent individuals from Massachusetts had an increased odds of reporting methadone withdrawal policies as a deterrent to undergoing methadone maintenance therapy in the community.

2. Materials and methods

We surveyed a cross-sectional sample of 215 individuals at two state-subsidized, inpatient medication-assisted detoxification facilities in Rhode Island and Massachusetts between

March 2008 and May 2009. Eligibility criteria included opioid-dependence prior to program entry, proficiency in English and being 18 years or older. All individuals undergoing opioid detoxification at the facility were confirmed to be opioid-dependent based on intake screening conducted by clinical staff at each facility. A 10-minute group information session introducing the study was conducted by research assistants for eligible individuals during a scheduled break time. Information was presented on the purposes of the study, risks and benefits of study participation, and study eligibility criteria. Individuals were also informed that no identifying information would be collected and the survey would be self-administered and anonymous. The 30-minute paper survey included questions about current (previous 30 days) and lifetime drug use, attitudes toward forced withdrawal from methadone maintenance therapy, drug treatment history, criminal justice history, access to syringes, access to other health services and HIV risk behaviors. Eligible individuals interested in volunteering for the study were subsequently led through the informed consent process by research assistants and self-administered the anonymous survey. Thirty eligible individuals (14%) declined participation. No incentives were provided. The Miriam Hospital Institutional Review Board approved all aspects of the study.

For analysis, participants were stratified on the basis of which state, Massachusetts or Rhode Island, they reported spending the majority of their time prior to entering the detoxification facility, as it was deemed to be a more reliable indicator of their primary location than state residency. Those who reported a state that was neither Massachusetts nor Rhode Island and those who selected both states were excluded from analysis, resulting in a total sample size of 205 individuals. Data were analyzed using STATA 11.0 (STATA Corporation, College Station, TX). Chi-squared (χ^2) contingency analyses were used to compare characteristics of the two analysis groups. All tests were two-sided. Multivariate logistic regression was used to assess factors associated with reporting forced methadone withdrawal during incarceration as a deterrent to accessing MMT in the community. *p*-Values <0.05 were considered statistically significant.

3. Results

Participant characteristics are presented in Table 1. There were no statistically significant differences with regard to demographic characteristics, substance use, injection drug use, and drug treatment history between the Massachusetts and Rhode Island comparison groups. The majority of participants were Caucasian and all reported opioid use in the 30 days prior to entering the detoxification facility, with 87% reporting heroin use in the 6 months prior. Sixty-three percent of participants reported being incarcerated in the last year, with 42% reporting being incarcerated two or more times. Over half (55%) of participants reported ever having undergone methadone maintenance therapy.

Table 2 describes participants' perceptions of forced methadone withdrawal during incarceration as a deterrent to accessing methadone maintenance therapy in the community. Seventy percent of participants reported that they would rather be forced to withdraw from heroin than from methadone during incarceration, and reporting of this belief did not differ between the Massachusetts and Rhode Island group. Nearly half of all participants (47%) reported that concern of being forced to withdraw from methadone during incarceration deterred them from accessing treatment in the community, with significantly more respondents from the Massachusetts group reporting this belief (56.9 versus 35.4%, *p*=0.02). When reporting of this belief was compared between participants who had ever undergone methadone maintenance therapy and those who were treatment-naïve, there were no significant differences found, with 70% of those who were treatment-naïve reporting concern of forced methadone withdrawal during incarceration as a treatment barrier (data not shown).

In multivariate logistic regression analysis, even after controlling for age, gender, prior engagement in MMT, and frequency of incarceration in the past year, those spending the majority of their time in Massachusetts were more likely to report that concern of forced methadone withdrawal during incarceration would deter them from accessing treatment in the community (AOR=2.32, $p=0.005$). None of the other variables, including prior engagement in MMT and frequency of incarceration in the last year, were associated with reporting this belief.

4. Discussion

Our findings suggest that forced methadone withdrawal policies in the criminal justice system may create reluctance to enter methadone maintenance therapy among opioid-dependent individuals in the community. Most individuals reported that if they were incarcerated and forced into withdrawal, they would rather withdraw from heroin than from methadone. Importantly, nearly half of the sample reported that concern of being forced to withdraw from methadone during incarceration was a deterrent to engaging methadone maintenance therapy in the community. Prior experience with methadone maintenance therapy was not associated with reporting forced methadone withdrawal as a treatment deterrent, a belief that was highly prevalent even among those who were treatment-naïve. These findings suggest that correctional methadone withdrawal policies may pose a broader barrier to treatment than previously realized, as many individuals did not need to have ever experienced forced withdrawal themselves to identify this event as a treatment barrier.

We found that individuals spending the majority of their time in Massachusetts, where correctional methadone withdrawal procedures are more severe, were more likely to identify these policies as a treatment barrier in the community. Although neither state routinely maintains inmates on methadone through the course of their incarceration, our findings suggest that even small differences in correctional methadone withdrawal procedures may have distinct impacts at the community-level, with more severe withdrawal procedures potentially contributing to more reluctance to enter treatment among opioid-dependent individuals in the community.

Data from this study may not be generalizable to all opioid-dependent individuals as our sample included only opioid-dependent individuals who were voluntarily undergoing community-based, in-patient opioid detoxification. However, our findings further underscore the negative consequences of forced methadone withdrawal in criminal justice settings and the importance of expanding access to opioid substitution therapy for those incarcerated. Several studies have shown that initiating opioid-dependent inmates on opioid substitution therapy during incarceration and after release promotes treatment retention and can significantly reduce the risk of relapse, overdose, and re-incarceration as well as HIV risk behaviors (Hedrich et al.; Kinlock et al., 2009; Larney et al., 1998; Sees et al., 2000; Sullivan et al., 2005; Zaller et al., 2010). Conversely, methadone withdrawal policies in prisons and jails only contribute to these adverse events and both directly and, as this study suggests, indirectly hinder a key population from accessing this essential medicine and important HIV prevention modality.

Failure to provide essential medicines such as opioid substitution therapy in confined settings is internationally recognized as a human rights violation and also violates eighth amendment protections against cruel and unusual punishment (Bruce & Schleifer, 2008). Yet, the shortage of opioid substitution therapy in prisons and jails across the United States has long been overlooked and is rarely highlighted as a rights-based issue (Bruce & Schleifer, 2008). There are currently few other instances in the American criminal justice system of evidence-based treatments being withheld or forcibly terminated. Denying

inmates insulin therapy, for example, would be widely condemned as a constitutional violation.

Forced methadone withdrawal in criminal justice settings violates inmates' right to health care and directly disrupts provision of an evidence-based therapy. As findings from this study suggest, these policies may also deter opioid-dependent individuals from accessing methadone maintenance therapy in the community. Limited access to methadone maintenance therapy in the criminal justice system remains one of the primary treatment barriers confronted by Americans who are opioid-dependent. Redressing this gap in care is both health and human rights imperative.

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Table 1

Participant characteristics.

	Rhode Island		Massachusetts		p-value	Total	
	n	%	n	%		n	%
Gender							
Male	59	61.5	72	66.1	0.28	131	63.9
Female	35	36.5	37	33.9		72	35.1
No response	2	2.1	0	0.0		2	1.0
Mean age (Hubbard et al., 1989)	34.9 (13.1)		33.6 (11.4)		0.44	34.2 (12.2)	
Race/ethnicity							
Non-Hispanic White	75	78.1	95	87.2	0.20	170	82.9
Hispanic/Latino	12	12.5	3	2.8		15	7.3
Cape Verdean	3	3.1	4	3.7		7	3.4
Native American	2	2.1	3	2.8		5	2.4
Asian	1	1.0	0	0.0		1	0.5
Non-Hispanic Black	1	1.0	1	0.9		2	1.0
Other	2	2.1	3	2.8		5	2.4
Substances used, prior 6 months							
Heroin	81	84.4	97	89.0	0.33	178	86.8
Cocaine	55	57.3	58	53.2	0.56	113	55.1
Alcohol	46	47.9	48	44.0	0.58	94	45.9
Other	46	47.9	52	47.7	0.98	98	47.8
IDU, ever	76	79.2	93	85.3	0.37	169	82.4
No response	1	1.0	2	1.8		3	1.5
IDU, prior 6 months	64	66.7	86	78.9	0.14	150	73.2
No response	2	2.1	2	1.8		4	2.0
Incarceration, past year							
0×	28	29.2	40	36.7	0.01	68	33.2
1×	19	20.0	22	20.2		41	20.0
2–5×	23	24.0	34	31.2		57	27.8
>5×	24	25.0	7	6.4		31	15.1
No response	2	2.1	6	5.5		8	3.9

	Rhode Island		Massachusetts		p-value	Total	
	n	%	n	%		n	%
Drug treatment history							
Methadone maintenance therapy, ever	48	50.5	65	59.1	0.22	113	55.1
Buprenorphine maintenance therapy, ever	32	33.7	48	43.6	0.15	80	39.0
Naltrexone therapy, ever	2	2.1	3	2.7	0.77	5	2.4

Table 2

Attitudes toward forced methadone withdrawal during incarceration.

	Rhode Island		Massachusetts		p-value	Total	
	n	%	n	%		n	%
If incarcerated, would rather have to undergo withdrawal from:							
Heroin	66	69.5	78	70.9	0.20	144	70.2
Methadone	6	6.3	15	13.6		21	10.2
Not sure	16	16.8	12	10.9		28	13.7
No response	7	7.4	5	4.6		12	5.9
Concern of being forced to withdraw from methadone during incarceration is a deterrent to engaging methadone maintenance therapy in the community							
Yes	34	35.4	62	56.9	0.02	96	46.8
No	29	30.2	21	19.3		50	24.4
Not sure	30	31.3	25	22.9		55	26.8
No response	3	3.1	1	0.9		4	2.0

MMT, methadone maintenance therapy.