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Incarceration and opioid withdrawal: The experiences of methadone patients and out-of-treatment heroin users

Shannon Gwin Mitchell, Ph.D.[a,*], **Sharon M. Kelly, Ph.D.**[a], **Barry S. Brown, Ph.D.**[a,b], **Heather Schacht Reisinger, Ph.D.**[a,c], **James A. Peterson, Ed.D.**[a], **Adrienne Ruhf**[a], **Michael H. Agar, Ph.D.**[a,d], and **Robert P. Schwartz, M.D.**[a]

[a] Friends Research Institute, Inc., Social Research Center, Baltimore, Maryland, USA

[b] University of North Carolina, Wilmington, North Carolina, USA

[c] Iowa City VA Medical Center, Iowa City, Iowa, USA

[d] Ethknoworks, Santa Fe, New Mexico, USA

Abstract

Both heroin-addicted individuals and methadone maintenance patients are likely to face untreated opioid withdrawal while incarcerated. Limited research exists concerning the withdrawal experiences of addicted inmates and their impact on individuals' attitudes and plans concerning drug abuse treatment. In the present study, 53 opioid dependent adults (32 in methadone treatment and 21 out-of-treatment) were interviewed in an ethnographic investigation of withdrawal experiences during incarceration. When treatment for opioid withdrawal was unavailable, detoxification experiences were usually described as negative and were often associated with a variety of unhealthy behaviors designed to relieve withdrawal symptoms. Negative methadone withdrawal experiences also negatively influenced participants' receptivity to seeking methadone treatment upon release. A minority of participants took a positive view of their withdrawal experience and saw it as an opportunity to detox from heroin or discontinue methadone. Findings support the importance of providing appropriate opioid detoxification and/or maintenance therapy to opioid dependent inmates.

Keywords

Opioid addiction; Incarceration; Withdrawal; Methadone; Ethnography

1. Introduction

Of the hundreds of thousands of individuals entering America's jails and prisons each year, it is estimated that approximately 15% are addicted to heroin (U.S. Dept. of Health and Human Services 2007; Chaiken 2000) with some of these addicts enrolled in methadone treatment at the time of arrest (Rothbard et al. 1999). Although the situation would seem to make clear the need for a safe and effective detoxification, or of continuing opioid agonist treatment for these individuals, available studies suggest that such services are infrequently available (Fletcher & Chandler 2006; Rich et al. 2005; Fiscella, Moore et al. 2004; Fiscella, Pless et al. 2004; Freudenberg, 2002). The majority of U.S. jails reported that they do not provide any medications for opioid detoxification, and those that do often do not follow evidence-based practices (Taxman, Perdoni & Harrison 2007; Friedmann, Taxman & Henderson 2007;

*Corresponding Author: Friends Research Institute, Inc., 1040 Park Avenue, Suite 103, Baltimore, MD 21201, USA. Tel.: 410-837-3977, ext. 238; fax: 410-752-4218,. sgmitchell@frisrc.org.

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Fiscella, Pless et al. 2004), raising serious ethical and public health issues. Unfortunately, even when in the community the vast majority of heroin-dependent individuals in the US are neither in treatment nor seeking treatment for a variety of reasons, including the lack of treatment capacity and negative perceptions concerning methadone (Schwartz, McKenzie & Rich 2007; Rosenblum et al. 1991).

The KEEP Program in Rikers Island in New York City is a remarkable exception. It has been continuously operating since 1987. Between 1995 and 1999 the program provided, on average, 18,000 detoxifications per year and referred thousands to community-based treatment upon release (Fallon 2001; Tomasino 2001). This program has been successfully operating for the past 20 years and can be seen as a model for others to emulate.

Correctional institutions have great potential to play an important role in relation to public health and in furthering drug treatment (Braithwaite, Hammett & Arriola 2002). They could, for example, provide assistance in coordinating treatment entry for prisoners being released from correctional facilities. Countries in Western Europe and Australia have implemented methadone or buprenorphine programs within correctional facilities to reduce the risks associated with ongoing drug use in jail and of relapse and its consequences upon release. These consequences include increased risk of overdose death, spread of HIV infection and criminal recidivism (Davoli et al. 2007; Dolan & Wodak 1999; Shearer 2004).

The failure to provide opioid-agonist treatment for incarcerated individuals addicted to heroin raises multiple issues of concern. The first concern is that of HIV transmission. Heroin has been reportedly used in prisons throughout the world, including by injection (Seal et al. 2008; Albizu-Garcia et al. 2007; Stark et al. 2006; Kang et al. 2005; Small et al. 2005; Baillargeon & Bradshaw 2003). A qualitative study by Small and colleagues (Small et al. 2005) documented high rates of needle sharing in prison, a behavior that has been seen as contributing to outbreaks of HIV infection in prisons in several countries (Dolan & Wodak 1999; Taylor et al. 1995). To address this concern, the World Health Organization recommends opioid agonist therapy in prisons (World Health Organization 2004). Secondly, the loss of tolerance after detoxification (with or without medication) may contribute to risk of fatal overdose (Davoli et al. 2007; Farrell & Marsden 2007). Third, released inmates with heroin addiction histories who do not receive methadone as compared to those who do receive methadone while incarcerated are less likely to enter treatment in the community (Kinlock et al., 2007). Finally, untreated inmates are at extremely high risk of recidivism to criminal behavior upon release (Hanlon et al. 1998; Wexler et al. 1988; Maddux & Desmond 1981).

While there have been ethnographic studies conducted on various aspects of incarceration (Crewe 2006; Rhodes 2002; Wacquant 2002), limited research appears to exist which examines heroin or methadone withdrawal experiences during incarceration or their effects on inmates' plans and attitudes towards treatment-seeking upon release. To further explore these issues we conducted a qualitative study of heroin-addicted individuals who were either in- or out-of-treatment and who had experienced incarceration at some point during their addiction careers.

This qualitative study was part of a larger investigation conducted between November 2004 and November 2007 which examined factors associated with methadone treatment entry and engagement (Schwartz et al. 2008). The investigation included an out-of-treatment sample which, although meeting criteria for methadone maintenance treatment, was neither in-treatment nor seeking-treatment at the time of recruitment. The in-treatment sample was recruited at the time of enrollment in one of six Baltimore-area methadone maintenance programs.

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2. Method

2.1 Participants

A total of 92 participants were interviewed as part of our ethnographic investigation. Out of these 92, 53 participants discussed an incarceration experience (32 in-treatment participants and 21 out-of-treatment participants). The 53 participants who discussed incarceration had a mean age of 41 years, 70% were male, 70% were African American, 62% were either divorced or had never been married, and most had completed less than 12 years of formal education. The 53 participants who described an incarceration experience had been incarcerated significantly more times, $F(1, 90) = 17.16$, $p < .01$, and had spent significantly more months incarcerated than those participants who did not report an incarceration experience, $F(1, 90) = 9.69$, $p < .01$.

2.2 Semi-Structured Interviews

Questions regarding their addiction, treatment, and incarceration histories were asked during interviews. All ethnographic interviews began with specific questions concerning their drug and treatment histories and attitudes towards methadone, but the flow of the interviews was guided by the participants themselves and follow-up questions were often used to elicit greater detail. Interviews were conducted by one of four ethnographers and typically lasted between 30 and 60 minutes. All participants provided informed consent and were given $20 for each interview. The Friends Research Institute's Institutional Review Board approved the study.

2.3 Analysis

All interviews were recorded, transcribed, cleaned, and entered into Atlas.ti for analysis. Grounded theory methodology, a qualitative research approach that systematically analyzes data and inductively builds theory, was used in our analysis (Strauss & Corbin 1991). During the open coding phase, the investigators approached the data looking for descriptions of facilitators and barriers to treatment entry and engagement and noted the themes of "incarceration" and "withdrawal". During the selective coding phase, the data were categorized into "positive" and "negative" sub-codes and the in- versus out-of-treatment respondents were compared in terms of incarceration withdrawal experiences and their reported impact on drug using and treatment seeking behaviors.

3. Results

The descriptions of incarceration provided by the 53 participants fell into two broad evaluative categories (positive and negative) with both in- and out-of-treatment sample participants reporting life events to support each category. The majority of the incarceration experiences reported were clearly negative, with many referring to the pain and difficulty of withdrawal from either heroin or methadone. However, some participants identified positive, helpful aspects of their incarceration. Active heroin addicts sometimes viewed their incarceration and subsequent withdrawal as an opportunity to curb or temporarily discontinue their drug use. Similarly, some of those on methadone treatment at the time of their arrest reported that incarceration provided the helpful transition to being drug-free, if their plan had been to remain on methadone for only a limited time upon entering treatment.

3.1 Negative Factors Associated with Withdrawal during Incarceration

Whether dependent on heroin or methadone, one of the most salient and frequently mentioned aspects of incarceration concerned experiencing withdrawal in jail, often with limited medical care. Some participants described experiencing withdrawal in jail multiple times during different incarceration episodes and talked about different tactics taken to alleviate discomfort

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from the withdrawal symptoms. These tactics were either initiated by the participants themselves (just prior to or during incarceration) or by personnel at the correctional facility. Below, we explore the withdrawal experiences of the in- and out-of-treatment samples.

Out-of-treatment participants reporting withdrawal while incarcerated usually described difficulties associated with discontinuation of heroin use. The following quote is from a female out-of-treatment participant who was incarcerated at the time of the interview.

> This is one of the worst kicks I've ever had in jail. It gets to the point where, I mean, they don't give you anything here for withdrawal, but I was so sick that I managed to drag myself to the doctor here and tell him that I was an alcoholic. I had the shakes that bad from the drugs that they actually gave me Librium that they give alcoholics that come in here.

The participant's comment indicates that in order to receive assistance with her heroin withdrawal symptoms she believed she had to attribute them to alcohol dependence. The tactic of complaining of another physical condition, even including intentionally falling and injuring oneself in the corrections facility, was repeated by others as a way to receive medical treatment for withdrawal.

Another male participant with a 30-year heroin habit reported receiving medical care for his heroin withdrawal only after having a heart attack while going through withdrawal during a previous incarceration experience.

> Because when I go in with my medical background they give me Clonidine and something. Because the first time I went in and kicked cold turkey I had a heart attack… [Interviewer: So tell me about what happened when you went through withdrawal and had a heart attack.] Oh man. Well you start (the withdrawal) the hot and cold sweats. And with the diarrhea, stomach cramps and you throw up and you do that for like three days straight or four days straight. And then you be weak as I don't know what. And when I had the heart attack I was sleeping and it woke me up out of my sleep. And it just feels like a cinder-block hit me on my chest and I woke up in a sweat. Luckily the officer that was there knew what was going on and they rushed me to the hospital. And if they didn't I probably would have died… The second time I got locked up I had a slight heart attack, not a big one like I had the first time, because they caught it in time.

Despite the physical misery associated with his withdrawal, this participant did not report receiving any medical care during that first reported episode of incarceration until the cardiac problems created a life-threatening situation. In fact, more than one participant stated that they believed the physical symptoms associated with heroin withdrawal were considered to be a form of positive punishment, as mentioned by this male in-treatment participant.

> No, they don't give me anything (for withdrawal). You know, they might, the only thing they give you in jail is some Tylenol maybe… But really, as far as drugs, they let you 'cold turkey' hoping that you go through enough pain and that, you know, you don't do it no more…

Some participants reported receiving treatment for their withdrawal symptoms, including the administration of muscle relaxants, narcotic pain relievers, sedatives, anti-nausea medications, or Clonidine. Often, people had to wait several days and experienced severe symptoms before receiving care. Others stated that they were denied any medical treatment and so either bought sedatives or other drugs from their cell-mates or were limited to over-the-counter medications such as Tylenol and/or aspirin which they purchased from the dispensary.

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When withdrawing from heroin, most participants reported experiencing withdrawal symptoms from three to seven days in duration. However, the discomfort of heroin withdrawal was often contrasted with methadone withdrawal, which was consistently considered to be far worse. This observation was sometimes made by out-of-treatment participants who had experienced both heroin withdrawal and methadone withdrawal during different incarceration experiences. Others had personal experience with heroin withdrawal only, but had witnessed other inmates going through methadone withdrawal while incarcerated, as noted in the following quote by a male out-of-treatment participant.

> I knew a dude came in prison when I was in there and he was drinking methadone (when he got arrested)… I know with heroin, I'm saying in a week or so you straight. I'm talking about sixty days (later) he was still sick.

This person follows the quote by saying that he would never consider taking methadone because he never wants to go through methadone withdrawal of the kind he witnessed in prison. This comment underlies an assumption for many of the participants in our study; the question is not *if* they will be re-arrested but *when*. And this assumption of future re-incarceration has the potential to impact their treatment-seeking and utilization tactics once they are released back into the community.

Descriptions of withdrawal experiences by in-treatment participants did not differ meaningfully from the methadone withdrawal reports of the out-of-treatment participants.

> I mean, I went through the detox from the methadone and it was horrible. I was so sick. The only thing they gave me at Jail was Clonidines and something else… for my stomach, because I kept vomiting so much. And I never want to go on that (methadone) again because that, I was, I literally wanted to die because of how much pain I was in. And I was only on what 80 milligrams and I think I had been there for like 5 months.

As with the out-of-treatment participant, this quote from a female in-treatment participant illustrates how a miserable withdrawal experience in jail can negatively influence a person's receptivity to becoming involved in a future course of methadone treatment. Other methadone patients, if aware that arrest is imminent, may decide to alter their dosage level to minimize the withdrawal, as described below by a female participant who had been in treatment for approximately five months prior to her incarceration.

> I knew I was getting ready to go to court for a violation… So I had my counselor to start detoxing me. I told her to stop me on 20 mg so when I did get locked up I was only on 20 mg.

Another participant mentioned maintaining his methadone dose at a less-than-optimum therapeutic level for him because he had previously had a negative experience withdrawing from methadone in jail and was fearful that he would be re-arrested for a technical violation.

Patients' decision to reduce their methadone dose prior to an impending incarceration is often based upon the knowledge within the addict community (and sometimes from personal experience) that inmates coming from methadone maintenance are not likely to receive adequate treatment for opioid withdrawal. This knowledge, combined with the belief that methadone withdrawal is more severe and prolonged than heroin withdrawal, may discourage methadone treatment entry. Though these tactics may be effective at alleviating methadone withdrawal symptoms once incarcerated, they can also serve to undermine later receptivity to the long-term treatment required to effect behavior change.

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3.2 Coping with Withdrawal during Incarceration

Some people who experience withdrawal while incarcerated seek treatment for their symptoms, though this does not necessarily mean that they report to the medical staff that their symptoms are related to withdrawal. As stated earlier, in order to receive pharmacotherapy more than one participant reported misattributing withdrawal symptoms to other physical and psychological conditions or even intentionally injuring themselves. A male in-treatment participant said that he falsely told the jail medical staff that he was hearing voices so that he could get something to help him sleep and alleviate his withdrawal symptoms, but that he ended up with more problems than he started with.

> I told the psych doctor that I was hearing voices and shit so I could get something to help me sleep. I was prescribed Thorazine, which did the job but they forgot to, they for - -you're supposed to take, with Thorazine you're supposed to take Cogentin with it and that counteracts the side effects. Whew, that stuff had me hallucinating and tripping hard.

Another in-treatment male participant mentioned a different sort of negative experience when he complained of suicidal ideation in order to obtain treatment for his withdrawal.

> So I had a dope habit when I went into court and they locked me up right in court and gave me the five years… And I was withdrawing real bad, really depressed, and I told them I was going to kill myself. Well they sent me up (to a psychiatric institution) with real crazy people. People that had really real mental disorders. And that was a lesson in itself. So yeah I got over that sickness real quick. And I had to stay out there for a month.

Others reported that they self-medicated by purchasing sedatives and narcotic pain medications from their cell-mates or by purchasing heroin and other illegal drugs to reduce the withdrawal symptoms, though these details cannot be directly verified due to the self-report nature of our data. The following quote is by a female out-of-treatment participant describing how she obtained medications from a cell-mate after being denied medication from the prison staff for her heroin withdrawal.

> And I actually blackened my eye because it was like my whole body was like jumping, right, and I hit a rail coming down… But it's like it feels like I got bugs or something in my body. And it's terrible but this one girl started giving me her… some kind of sleep medicine… And like for my 32nd day still up, no sleep, and that was the only thing help me get through my withdrawals… She was spitting it out early in the morning because she got a morning dose and a night-time dose. She spit the four hundred (milligrams) out in the morning and I would just wait until eight, nine o'clock at night before I would take it, you know.

Clearly the sharing of medications via this route presents further health risks beyond those associated with heroin or methadone withdrawal itself. Health risks are also elevated when prisoners elect to use illicit drugs in jail or prison, particularly with respect to the threat of overdose and the sharing of "dirty" needles (Seal et al. 2008; Kang et al. 2005; Small et al. 2005; Baillargeon & Bradshaw 2003; Dolan & Wodak 1999). Ten different participants stated that drugs can be obtained in correctional facilities. A male in-treatment participant who was discharged from his program when he became incarcerated made the following comment concerning drug availability in jail.

> [Interviewer: I mean, could you easily get heroin in here (jail) if you wanted?] Oh yeah. It's something in here now, shooters and all. It's here.

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A male out-of-treatment participant who briefly entered treatment after his recruitment into the study also had his treatment interrupted by an incarceration episode. He described heroin availability in the following manner.

> [Interviewer: When you were incarcerated was heroin still available then? I mean, could you get it?] Yes, very available… I mean, it was available but it cost you. You know?

Despite the risks associated with obtaining and using drugs while incarcerated, a few participants admitted to doing so. These statements are in accord with prior research which indicates that heroin and other drugs may be obtained in jail or prison and that their use is often associated with other high-risk behaviors (Seal et al. 2008; Albizu-Garcia et al. 2007; Stark et al. 2006; Kang et al. 2005; Small et al. 2005; Baillargeon & Bradshaw 2003). One out-of-treatment participant stated that she wasn't aware of there being any heroin on her cell-block while she was withdrawing in jail, but that if she had known of its presence she definitely would have sniffed some. Another female participant who was incarcerated said during one of her interviews that she "took care of" her methadone withdrawal herself, but would not elaborate on what she used for fear of people listening to the conversation, which took place at a local jail.

3.3 Positive Factors Associated with Withdrawal during Incarceration

Not all participants looked at their incarceration as a negative, punitive experience. Some viewed the experience as an "opportunity" to detox themselves, either from a heroin habit that had gotten out of control or from a physical dependence on methadone that they had developed during treatment. Though withdrawal was uncomfortable, at best, they viewed it as an unavoidable experience that they had to endure eventually, whether in jail or out in the community. Incarceration simply became the impetus for making change.

3.4 Getting Control of Drug Use

Some out-of-treatment participants had developed such severe addictions that their drug consumption had become out of control from their perspective. The following quote from a female out-of-treatment participant illustrates how she viewed her arrest as life-saving, even admitting to additional charges in order to increase the amount of time served so that she would be able to "take a break" from drugs.

> The trouble is, deep down inside I think I wanted to get caught… They said when I --when they picked me up that I told them I have a detainer in Queen Anne's County. I don't remember telling them that but deep down inside I must have needed a break… I mean, they took me to the hospital and hit me with Narcan. [Interviewer: They did?] Yeah I was almost dead when they found me. I had been up like twenty days straight. So somewhere in the back of my mind I must have needed a break. I must of knew I needed a break.

This participant mentioned that she knew subconsciously that incarceration was an opportunity for her to get away from drugs and get her habit back under control, before it killed her. She did not, however, indicate that her self-imposed abstinence was expected to last beyond her release date.

3.5 Route to Abstinence

Others stated that incarceration was an opportunity to completely detox from heroin or methadone and re-enter the community drug free. One male out-of-treatment participant described his time behind bars as a way to "get back to me". He reported that he was in no hurry to be released, despite the fact that he could have easily made bail, and that he was using

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his incarceration as a sort of detox program, complete with work detail as a way to keep busy and make some additional money. This individual had previously served a six-year prison sentence and took pride in the fact that he was drug free during, and for a period of time following, his previous incarceration.

For some participants the reason for seeking methadone treatment in the first place, namely “heroin addiction”, no longer existed. Once methadone had been discontinued while they were in jail, participants no longer saw a reason to return to treatment upon their release. When asked whether he planned to return to his methadone treatment program when he was released from jail, a male participant who was incarcerated at the time of the interview made the following reply:

> Oh no. No way. [Interviewer: Why?] You know, I’m straight now. You know I withdrew from that. That was mean, you know? But still I don’t - - my sleeping pattern has not came back and it’s been four months now… But I don’t have no intentions of going back. The only reason you’re going back there, you’re going back to drugs and at my age now I just got right. [Interviewer: So you think it’ll be okay? Once you’re out you’ll be…] Oh I’m straight.

Our in-treatment participants often mentioned that when they entered treatment, they only intended to remain on methadone for a limited period of time. This was particularly true for those participants who viewed methadone as another drug to which they had become addicted. A male in-treatment participant who was incarcerated during the course of his involvement with the study made the following comment when asked about returning to methadone treatment.

> Actually if there was an option I’d rather do like a non-drug program… You know, because basically, like I said before, all it did was replace an illegal drug for a legal drug. I was still hooked on methadone, you know. It’s the same thing. I needed it every day.

For this person, being “drug free” meant not just abstinence from heroin, but also abstinence from methadone, and his incarceration allowed him to be completely clean of all substances.

4. Discussion

Individuals dependent on heroin or methadone at the time of incarceration face the likely prospect of imposed withdrawal. This withdrawal is infrequently treated and represents a lost opportunity to engage or retain heroin addicted individuals in treatment and thereby reduce their risk for contracting and spreading HIV, for overdose deaths, and for recidivism to drug use and crime (Davoli et al. 2007; Kinlock et al., 2007; Dolan & Wodak, 1999). Our study’s findings indicate that these negative withdrawal experiences may also adversely impact the willingness of formerly incarcerated individuals to seek methadone treatment upon release.

Despite ingrained institutional assumptions on the part of many concerning the deterrent effects of painfully withdrawing from drugs in prison, our study results seem to indicate that rather than avoiding heroin and other drugs while out in the community, many addicts simply resolve to try to avoid or minimize withdrawal during future incarceration episodes. Connors (1994) conducted an ethnographic investigation of HIV risk behaviors among injection-drug users and examined the experience of withdrawal and its tie to high-risk behaviors while out in the community. She framed her findings within an interpretation of pain avoidance, concluding that their risk-taking behaviors were an attempt to avoid the pain of withdrawal, a finding that seems to be supported by some of the incarceration behaviors described by our study participants.

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The fact that limited medical care is given to people withdrawing from heroin and methadone in jail was commonly known among the respondents in our ethnographic sample. A variety of drug-seeking tactics have been developed to circumvent this policy, some of which may potentially pose a greater threat to the health of the inmates than the withdrawal itself. Some participants complained of fictitious symptoms, including alcohol withdrawal and a variety of psychological disturbances, in order to obtain medications to alleviate their withdrawal symptoms, while others intentionally injured themselves to obtain pain medications. This may lead to inmates receiving inappropriate medications and other treatments, an unnecessary burden on the medical staff, and a cause for needless medical costs.

Those inmates who decided to alleviate their withdrawal symptoms without formal help from the corrections staff also put themselves at increased risk by using drugs in jail or buying “spitback” medications from other inmates (Jonsen & Stryker 1993). Inmates who use drugs while incarcerated are at risk for overdose as well as the transmission of disease whenever injection tools are shared (Farrell & Marsden 2007; Dolan & Wodak 1999; Taylor et al. 1995). Taking medications prescribed for other patients can pose serious health problems.

The inmates experiencing withdrawal are not the only ones affected by the situation. The vomiting and diarrhea of withdrawal heightens the likelihood of spreading viruses among other inmates as well as correctional staff. The milieu is negatively affected by the sickness and misery, as well as by the subversive drug-seeking behaviors of the inmates, and the institution experiences a drain on its human and financial resources while attempting to deal with the situation.

Ironically, while negative heroin withdrawal experiences in prison did not appear to impact participants’ descriptions of their drug use post-release, negative methadone withdrawal experiences during incarceration were mentioned by several participants as having a deterrent effect on their receptivity to seeking methadone treatment post-release. Methadone withdrawal was described as being more severe than heroin withdrawal and even those participants who said they would consider going back to methadone treatment often mentioned ways in which they could or had modified their methadone dose to minimize withdrawal during incarceration, including discontinuing treatment prematurely or staying on a sub-optimal dosage level. These tactics may help alleviate withdrawal upon incarceration, but also have the potential to undermine treatment effectiveness while in the community.

Not all participants described incarceration as being a negative experience. Some heroin addicts viewed it as a way to curb their drug use, at least temporarily, with one participant even describing it as “lifesaving”. In other words, it forced them to control their drug use when they, themselves, may have felt unable to do so. Although drug abuse researchers often do not consider the forced abstinence during incarceration to be true abstinence, many in our treatment sample indicated that drugs were available in jail and prison to those who wanted to use them and personally considered their time while incarcerated as “clean time”. Obviously, choosing not to use drugs in jail or prison is quite different from choosing not to use drugs while out in the community where drugs may be far more plentiful, the risks of getting caught are much lower, and the former inmate likely faces the same types of biological, social and environmental issues that nurtured his or her drug addiction in the first place. Prior to release, drug-addicted inmates should be presented with enough information to help them realistically appraise their ability to remain drug-free while out in the community. Those inmates who are willing to seek assistance should be linked to appropriate community resources, including support and treatment services. Some participants who had been on methadone maintenance programs saw incarceration as an opportunity to discontinue methadone, which they had intended to do eventually. For these people, methadone withdrawal was inevitable and they managed it as best as they could in the circumstances. They often thought of methadone as another drug on

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which they had become dependent, their ultimate goal being abstinence from all drugs. One participant mentioned that if he needed treatment again in the future he would select a program that did not use drug therapy. This may illustrate the confusion between physiological dependence and addictive behaviors, in which individuals exhibit a loss of control of opioid use and continue to use in spite of adverse consequences. Unfortunately, those who do wish to return to methadone treatment upon release often have difficulty doing so due to limited or no coordination between the criminal justice system and the treatment system (Schwartz, McKenzie & Rich 2007).

Many of the people in our sample seemed to consider future re-incarceration as being as likely as the prospect of future relapse to drug use, and research indicates that both are frequently recurring experiences in the lives and careers of those addicted to heroin (JFA Institute 2007; Kinlock et al. 2008; Hser et al. 2001; Nurco 1998). Often, our in-treatment participants were incarcerated during the course of their treatment either for minor offenses or for outstanding warrants related to offenses that occurred while they were actively using drugs. Whatever the reason, incarceration of current methadone patients abruptly ends the treatment process in which they were engaged. Jails and prisons provide few, if any, links for individuals ready to seek treatment when they transition back to the community, even when these inmates were engaged in treatment prior to their incarceration. Correctional institutions present a useful venue for providing, encouraging and facilitating access to substance abuse treatment (Schwartz et al. 2007; Freudenberg 2002). Unfortunately the current policies in many U.S. correctional institutions concerning the management of inmates with drug dependence, particularly those experiencing withdrawal, may have the opposite effect.

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References

Albizu-Garcia CE, Correa GC, Hernandez Viver AD, Kinlock TW, Gordon MS, Avila CA, et al. Feasibility of initiating treatment with buprenorphine-naloxone in a state prison for opiate dependent inmates nearing release. Journal of Addiction Medicine 2007;1 (6):126–132.

Baillargeon J, Bradshaw P. The association of infectious disease diagnosis with incarceration-related factors among prison inmates. Journal of Correctional Health Care 2003;10 (1):15–33.

Braithwaite RL, Hammett T, Arriola KJ. Introduction to the special issue: HIV/AIDS in correctional settings. AIDS Education and Prevention 2002;14:1–6.

Chaiken, JM. Correctional population of the United States, 1997. Washington, D.C: U.S. Department of Justice; 2000. (No. NCJ 177613)

Connors MM. Stories of pain and the problem of AIDS prevention: Injection drug withdrawal and its effect on risk behaviors. Medical Anthropology Quarterly 1994;8 (1):47–68.

Crewe B. Prison drug dealing and the ethnographic lense. The Howard Journal of Criminal Justice 2006;45 (4):347–368.

Davoli M, Bargagli AM, Perucci CA, Schifano P, Belleudi V, Hickman M, et al. Risk of fatal overdose during and after specialist drug treatment: The VEdeTTE study, a national multi-site prospective cohort study. Addiction 2007;102:1954–1959. [PubMed: 18031430]

Dolan K, Wodak A. HIV transmission in a prison system in an Australian state. Medical Journal of Australia 1999;171:14–17. [PubMed: 10451665]

Fallon BM. The Key Extended Entry Program (KEEP): From the community side of the bridge. The Mount Sinai Journal of Medicine 2001;68 (1):21–27.

Farrell M, Marsden J. Acute risk of drug-related death among newly released prisoners in England and Wales. Addiction 2007;103:251–255. [PubMed: 18199304]

NIH-PA Author Manuscript NIH-PA Author Manuscript NIH-PA Author Manuscript

Fiscella K, Moore A, Engerman J, Meldrum S. Jail management of arrestees/inmates enrolled in community methadone maintenance programs. Journal of Urban Health 2004;81 (4):645–654. [PubMed: 15466845]

Fiscella K, Pless N, Meldrum S, Fiscella P. Alcohol and opiate withdrawal in US jails. American Journal of Public Health 2004;94 (9):1522–1524. [PubMed: 15333308]

Fletcher, BW.; Chandler, RK. Principles of drug abuse treatment for criminal justice populations. Rockville, MD: National Institute on Drug Abuse; 2006. (NIH Publication No. 06–5316)

Friedmann PD, Taxman FS, Henderson CE. Evidence-based treatment practices for drug-involved adults in the criminal justice system. Journal of Substance Abuse Treatment 2007;32:267–277. [PubMed: 17383551]

Freudenberg N. Adverse effects of US jail and prison policies on the health and well-being of women of color. American Journal of Public Health 2002;92 (12):1895–1899. [PubMed: 12453803]

Hanlon TE, Nurco DN, Bateman RW, O'Grady KE. The response of drug abuser parolees to a combination of treatment and intensive supervision. The Prison Journal 1998;78:31–44.

Hser YI, Hoffman V, Grella CE, Anglin MD. A 33-year follow-up of narcotics addicts. Archives of General Psychiatry 2001;58(5):503–508. [PubMed: 11343531]

JFA Institute. Unlocking America: Why and how to reduce America's prison population. Washington, D.C: The JFA Institute; 2007.

Jonsen, AR.; Stryker, J., editors. The social impact of AIDS in the United States. Washington, D.C: National Academy Press; 1993.

Kang S, Deren S, Andia J, Colon HM, Robles R, Oliver-Velez D. HIV transmission behaviors in jail/prison among Puerto Rican drug injectors in New York and Puerto Rico. AIDS and Behavior 2005;9 (3):377–386. [PubMed: 16133901]

Kinlock TW, Gordon MS, Schwartz RP, O'Grady KE. A study of methadone maintenance for male prisoners. Criminal Justice and Behavior 2008;35 (1):34–47. [PubMed: 18612373]

Kinlock TW, Gordon MS, Schwartz RP, O'Grady KE, Fitzgerald TT, Wilson M. A randomized clinical trial of methadone maintenance for prisoners: Results at 1-month post-release. Drug and Alcohol Dependence 2007;91 (2–3):220–7. [PubMed: 17628351]

Maddux, JF.; Desmond, DP. Careers of opioid users. New York: Praeger; 1981.

Nurco DN. A long-term program of research on drug use and crime. Substance Use and Misuse 1998;33:1817–1837. [PubMed: 9718181]

Rhodes LA. Psychopathy and the face of control in Supermax. Ethnography 2002;3 (4):442–466.

Rich JD, Boutwell AE, Shield DC, Key RG, McKenzie M, Clarke JG, et al. Attitudes and practices regarding the use of methadone in U.S. state and federal prisons. Journal of Urban Health 2005;82:411–419. [PubMed: 15917502]

Rosenblum A, Magura S, Joseph H. Ambivalence toward methadone treatment among intravenous drug users. Journal of Psychoactive Drugs 1991;23:21–27. [PubMed: 1941364]

Rothbard A, Alterman A, Rutherford M, Liu F, Zelinski S, McKay J. Revisiting the effectiveness of methadone treatment on crime reductions in the 1990s. Journal of Substance Abuse Treatment 1999;16 (4):329–335. [PubMed: 10349606]

Schwartz RP, Kelly SM, O'Grady KE, Peterson JA, Reisinger HS, Mitchell SG, et al. In-treatment vs. out-of-treatment opioid dependent adults: Drug use and criminal history. The American Journal of Drug and Alcohol Abuse 2008;34 (1):17–28. [PubMed: 18161640]

Schwartz RP, McKenzie M, Rich JD. Opioid addiction and incarceration: An overview. Medicine and Health, Rhode Island 2007;90 (5):157–158.

Seal DW, Margolis AD, Morrow KM, Belcher L, Sosman J, Askew J, et al. Substance use and sexual behavior during incarceration among 18- to 29-year old men: Prevalence and correlates. AIDS and Behavior 2008;12 (1):27–40. [PubMed: 17345144]

Shearer, J.; Wodak, A.; Dolan, K. The prison opiate dependence treatment trial. Sydney: National Drug and Alcohol Research Centre; 2004. (Technical Report no. 199)

Small W, Kain S, Laliberte N, Schechter MT, O'Shaughnessy MV, Spittal PM. Incarceration, addiction and harm reduction: Inmates experience injecting drugs in prison. Substance Use and Misuse 2005;40:831–843. [PubMed: 15974143]

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Stark K, Herrmann U, Ehrhardt S, Bienzle U. A syringe exchange programme in prison as a prevention strategy against HIV infection and hepatitis B and C in Berlin, Germany. Epidemiology and Infection 2006;134(4):814–819. [PubMed: 16371183]

Strauss, A.; Corbin, J. Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, CA: Sage; 1991.

Taylor A, Goldberg D, Emslie J, Wrench J, Gruer L, Cameron S, et al. Outbreak of HIV infection in a Scottish Prison. British Medical Journal 1995;310:289–292. [PubMed: 7866169]

Taxman FS, Perdoni ML, Harrison LD. Drug treatment services for adult offenders: The state if the state. Journal of Substance Abuse Treatment 2007;32 (3):239–254. [PubMed: 17383549]

Tomasino V, Swanson AJ, Nolan J, Shuman HI. The Key Extended Entry Program (KEEP): A methadone treatment program for opiate-dependent inmates. The Mount Sinai Journal of Medicine 2001;68 (1): 14–20.

U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies. National survey on drug use and health, 2006. Research Triangle Park, NC: Research Triangle Institute [producer]; Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor]; 2007. [Computer file]. ICPSR21240-v32008-01-09

Wacquant L. The curious eclipse of prison ethnography in the age of mass incarceration. Ethnography 2002;3 (4):371–397.

Wexler, HK.; Lipton, DS.; Johnson, BD. A criminal justice system strategy for treating cocaine-heroin abusing offenders in custody. Washington, D.C: National Institute of Justice; 1988.

World Health Organization. Policy brief: Reduction of HIV transmission in prisons. 2004. Retrieved January 24, 2008 from http://www.emro.who.int/aiecf/web34.pdf