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Screaming Behind a Door: The Experiences of Individuals Incarcerated Without Opioid Maintenance Treatment

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SCREAMING BEHIND A DOOR:
THE EXPERIENCES OF INDIVIDUALS INCARCERATED WITHOUT OPIOID
MAINTENANCE TREATMENT

A Thesis Presented

by

Shoshana V. Aronowitz

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Abstract

Background & Purpose: Opioid maintenance therapy (OMT) is an effective method of treating opioid addiction. Of incarcerated individuals in the U.S., 50-85% have a history of substance abuse, and >80% of inmates with opioid addiction history do not receive treatment. The purpose of this study was to explore individuals' experiences after being tapered from OMT upon incarceration. **Methods:** Interpretative phenomenological analysis (IPA) was employed using in-depth interviewing of 10 participants. **Results:** Analysis identified six themes that captured the essence of the participants' experiences. **Implications & Conclusion:** Losing OMT upon incarceration was described as an extremely stressful experience for many individuals, and may create issues for both inmates and facility staff. Further research is needed to discover ways in which to improve addiction treatment in prison.

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Introduction

Substance related offenses are responsible for at least half of federal prison sentences. Between 50-85% of incarcerated individuals in the U.S. have a history of substance abuse, with 20% of those reporting intravenous (IV) drug use (Nunn 2009). Between 9-13% of incarcerated individuals in 2004 reported using heroin on a regular basis pre-incarceration (Mumola & Karberg, 2006), and between 12%-25% of newly arrested individuals tested positive for opioids upon urinalysis (National Institute of Justice, 2004). The availability of illicit substances in prisons has been well documented (United Nations Office on Drugs and Crime, 2010), and needle-sharing behaviors in prison settings greatly increase risk for HIV and hepatitis C acquisition during incarceration (United Nations Office on Drugs and Crime, 2010). Opioid maintenance treatment (OMT) with either methadone or buprenorphine is an effective method of decreasing opioid abuse and promoting increased health in community and prison settings. It has also been found to decrease individual involvement with the criminal justice system and HIV/hepatitis C infection (Gordon, Kinlock, Schwartz, O'Grady, 2008) as well as increase quality of life in the community-dwelling population (Nosyk et al., 2012). While detoxification programs are also utilized for treatment of opioid dependence, they have been found to be less effective than OMT at reducing illicit behaviors, substance use, and needle sharing (Nosyk et al., 2012). The World Health Organization has called for OMT to play a major role in substance abuse programs, including those in prison settings (2013), and the National Institute on Drug Abuse (NIDA) includes OMT in its principle for addiction treatment of both the general and inmate population (2012).

Opioid maintenance treatment in the prison setting has been found to result in a decrease in opioid use as well as decreased drug injecting and needle sharing (NIDA, 2012). While inmates frequently report accessibility to illicit substances and means to inject drugs in prison, only 55% of U.S. state and federal prisons provide methadone or buprenorphine, and more than

half of those prisons only do so for pregnant women or to treat chronic pain rather than addiction (Nunn 2009). More than 80% of inmates with known addiction histories do not receive treatment while incarcerated (Chandler, Fletcher & Volkow, 2009). Many incarcerated individuals with a history of opioid abuse have been enrolled in an OMT program prior to incarceration (Fiscella, Moore, Engerman, Meldrum, 2004), but rates of initiation into OMT after release from prison are low, and the risk of overdose is elevated in the period immediately following reintegration back into the community (World Health Organization, 2013). Hendrich et al. (2011) found that six months following release from prison, more than 50% of individuals who were able to receive OMT in prison continued treatment in the community, while only five percent of individuals who did not receive OMT while incarcerated enrolled in a community-based OMT program upon release from prison. Individuals with a history of pre-incarceration heroin addiction typically relapse within one month of release from prison if they are not enrolled in an OMT program (Gordon, Kinlock, Schwartz, O'Grady, 2008). Reasons for relapse can include anxiety and depression related to "stigma associated with being labeled an ex-offender, the need for housing and legitimate employment, stresses in reunifying with family, and multiple requirements for criminal justice supervision," (p. 184) as well as reintegration into a community where substances are highly available and accessible (Chandler, Fletcher, & Volkow, 2009).

Rates of successful long term, voluntary tapers from OMT in medically supervised community-based treatment centers are generally considered poor. Nosyk et al.'s (2012) population-based, retrospective cohort study found that only 13% of community-dwelling individuals who attempted a medically supervised, voluntary taper from OMT were considered successful, meaning they avoided relapse and/or reentry into OMT. Calsyn, Malcy, & Saxon (2006) reported a zero percent success rate following a voluntary, medically supervised methadone taper. However, because the accessibility of OMT in prison settings is poor, many individuals who are enrolled in an OMT program are involuntarily tapered from methadone or

buprenorphine upon incarceration at a rate that is much faster than what is generally considered appropriate within a community-based OMT setting (Fiscella, Moore, Engerman, Meldrum, 2004).

Purpose

Given the stress associated with incarceration, it is important to explore the experiences of individuals who have undergone involuntary discontinuation or taper while serving time in prison. The purpose of this study was to discover, explore, and describe these experiences. Implicit within the goal is to discover the essence of their experience during this time and learn about what the experience was like for them.

Research Question

The overarching research question was: “what are the experiences of individuals who are tapered from OMT upon incarceration?” Secondary aims explored how being tapered from OMT affected the participants’ lives following release and reintegration back into the community.

Significance

Little is known about the experiences of individuals who were tapered from OMT when incarcerated. This study provided information about the experiences of individuals tapered off of OMT, which is lacking in the current literature. The study findings may help guide further research in this area, which will help inform future policies about the delivery of addiction care in prison settings. This is particularly important considering the percentage of incarcerated individuals who report past or present substance abuse and addiction.

Advanced Practice Registered Nurse (APRN) Competencies

This study integrated the APRN competencies related to scientific foundations, quality of care, health policy, and health care delivery. The purpose of this study was to generate data about the experiences of individuals, the analysis of which inform health policy and improve the quality of nursing and healthcare for the incarcerated and drug-using populations. In these ways, this

study integrated all four of the previously stated competencies. A nurse researcher is the principal investigator and will collaborate with other nurses, medical providers, and counselors at a community OMT clinic to successfully complete the proposed study, thereby fulfilling the APRN leadership competencies.

Comprehensive Literature Review

This review of the literature will begin by providing background information about opioid maintenance treatment. It will then examine the current research relating to the effect of OMT on quality of life and overdose risk of community dwelling populations. It will conclude by reviewing research of OMT's use and effect in prison settings.

Opioid Maintenance Treatment

Opioid maintenance treatment (also known as replacement or substitution therapy) refers to the use of either methadone or buprenorphine to treat opioid addiction. Methadone is a full opioid agonist and buprenorphine is a partial opioid agonist, and both medications function by binding to opiate receptors and reducing drug withdrawal symptoms and drug cravings (Whelan and Remski, 2012). Correct doses of methadone and buprenorphine (which vary between patients) can also inhibit the effects of other opioids so that the "high" that is desired when an individual uses another opioid is not achieved. The primary goals of treatment are to help individuals addicted to opioids refrain from using illicit substances and abusing opioid prescription pain medication, decrease withdrawal symptoms, and aid in addiction recovery (Centers for Disease Control, 2002). Treatment with methadone or buprenorphine does not come without risks, as either of the medications can cause dose-dependent intoxication or fatality. Both medications also have abuse potential and are therefore subject to diversion and street dealing. (Whelan and Remski, 2012). In a randomized study comparing buprenorphine (16-32mg), low dose methadone (20mg), and high dose methadone (60-100mg), buprenorphine and high dose methadone were found to be equally more effective at reducing opioid abuse than low dose methadone, without significant differences in reported side effects (Johnson, Chutuape, Strain, Walsh, Stitzer & Bigelow, 2000).

Opioid maintenance therapy is most often administered at outpatient substance abuse clinics and inpatient treatment centers, and its effectiveness is increased when it is paired with

other treatment modalities such as counseling and group meetings such as 12-step programs (NIDA, 2012). Buprenorphine is a newer medication in the treatment of opioid addiction and has not been as widely utilized as methadone. It is administered at substance abuse treatment centers as well as in primary care settings by independent providers with special licensing. When utilized for substance abuse treatment purposes (as opposed to pain management), methadone must be administered through a federally certified substance abuse clinic (Substance Abuse and Mental Health Services Administration, 2013). The choice of medication to treat opioid addiction is related to numerous factors including level of opioid dependence, prescriber preference, and medication availability (Whelan and Remski, 2012). There are currently no clear, universal guidelines to help prescribing clinicians decide whether methadone or buprenorphine is appropriate for their patients. Some clinicians utilize their patients' drug-use histories to determine if buprenorphine will be effective, as individuals with heavier illicit opioid use might be better maintained on methadone as it can be successfully titrated to higher doses than buprenorphine (V. Esparza, personal interview, April 1, 2014). Buprenorphine is also more expensive in the United States than is methadone, which may affect prescribing in some situations (V. Esparza, personal interview, April 1, 2014).

The administration of OMT requires careful upward titration to ensure that patients receive a dose that eliminates withdrawal symptoms without causing intoxication, and the optimal dosage differs from patient to patient. Both medications also cause withdrawal symptoms when discontinued abruptly and slow tapering is advised to decrease the severity of withdrawal symptoms. Withdrawal symptoms can be extremely uncomfortable and include diarrhea, nausea, vomiting, body aches, sweating, chills, tremors, irritability, intense opioid cravings, and anxiety; these symptoms are reportedly so unbearable that stopping or even decreasing use is extremely difficult for most individuals to tolerate without some form of treatment (Harvard Medical School, 2004). Neurobiological changes in the brain from chronic drug exposure may

significantly limit impulse control in individuals suffering from opioid addiction, which can provide an extra challenge for individuals attempting to stop using substances (Chandler, Fletcher, Volkow, 2009). Opioid withdrawal is generally not life threatening, but it can cause miscarriage in pregnant individuals (Harvard Medical School, 2004).

Quality of Life and Opioid Maintenance Therapy

While there is a lack of information about the ways in which opioid maintenance treatment impacts the quality of life of prisoners, OMT has been found to have a positive effect on quality of life ratings of individuals in community settings. Baharom, Hassan, Ali and Shah (2012) conducted a retrospective chart review to compare quality of life for 122 men with histories of opioid addiction before beginning OMT to quality of life after six months of OMT at a Malaysian community clinic. The World Health Organization Quality of Life survey was administered at baseline and after six months in treatment and these scores were compared for changes in four categories: physical, psychological, relationships, and living situation/environment. The researchers found that six months of OMT was associated with significantly higher scores in all four categories, with the psychological category showing the most significant improvement.

A qualitative study conducted by De Maeyer et al. (2011) in Belgium utilizing in-depth interviews uncovered five recurrent themes that were associated with quality of life for individuals who had been enrolled in a community-based OMT program for 5-10 years. These themes were social relationships, psychological well-being, employment, independence, and leading a meaningful life. Each of these categories were reported to be either negatively or positively affected by methadone treatment. While participants reported that methadone increased their quality of life by allowing them to handle responsibilities and function better in relationships with others, they also reported that being enrolled in a methadone program caused them to experience discrimination, which negatively affected their relationships. A positive impact on

quality of life within the occupation theme was related to the ability to gain employment while maintained on methadone, but a reported negative impact with regards to limited job opportunities and lack of perceived high-quality jobs was also noted. This study highlights the complexity of issues surrounding quality of life and OMT treatment. While participants reported several negative impacts that OMT has had on their lives, many of these are perhaps due to stigma associated with OMT (discrimination with regards to employment or relationships) rather than OMT itself. This study is limited by a lack of a pre-OMT comparison group, so it is unknown whether the participants would have reported significantly lower scores before treatment.

Korthuis et al. (2011) compared self-reported health-related quality of life scores of 289 HIV-positive individuals with opioid addiction before beginning treatment with buprenorphine to scores after 12 months of treatment with buprenorphine OMT at a community-based clinic. Utilizing the Medical Outcomes Study Short Form Health Survey (SF-12), the researchers found that quality of life was significantly improved (β 1.13; 95% CI 0.72, 1.54) after 12 months of treatment, specifically in the mental health, vitality, social functioning, and emotional functioning categories. Individuals with previous 30-day incarceration were found to have lower mental health quality of life ratings. The significance of this is unclear and may be related to the individuals having HIV and a history of incarceration.

Ponizovsky et al. (2010) conducted a similar pre-post, 32-week longitudinal study of 105 HIV-negative individuals receiving buprenorphine over the time span of 32 weeks. Several different scales were utilized to assess quality of life, including the Quality of Life Enjoyment and Satisfaction Questionnaire, General Self-Efficacy Scale, and the Multidimensional Scale of Perceived Social Support. After 32 weeks in treatment, there was a significant improvement ($p < .001$) in quality of life, enjoyment and satisfaction, general self-efficacy, and perceived social support. Importantly, these effects were achieved at 16 weeks and sustained over 32 weeks.

Although not specific to incarcerated individuals, these findings suggest that OMT positively affects quality of life.

Although there are no studies comparing quality of life between individuals receiving methadone and buprenorphine, studies suggest that enrollment in either type of OMT has a positive impact on quality of life. Improved quality of life may provide motivation for individuals to avoid illicit substance use and activities, and may motivate them to make positive changes in their lives. While little is known about how OMT affects the quality of life of incarcerated individuals, the continuation of OMT upon incarceration may help individuals adjust to the prison setting and allow them to participate in daily activities such as work duty and classes without withdrawal symptoms. Participation in educational programs while in prison has been found to be associated with decreased rates of recidivism upon release (Davis, Bozick, Steele, Saunders, Miles, 2013). Individuals may be unable to fully participate in educational programs during the weeks-to-months long withdrawal phase, which may affect present and future quality of life as well as recidivism rates.

Decrease in Risk of Overdose & Community-based Opioid Maintenance Treatment

Overdose is the most common cause of death among injection drug users, outnumbering deaths due to infectious disease (e.g. HIV, hepatitis C, tuberculosis) and non-infectious causes (e.g. cancers, heart disease, liver disease) (World Health Organization, 2013). Cases of non-fatal overdose can cause significant morbidity related to cerebral hypoxia, including permanent brain damage (World Health Organization 2013). The World Health Organization reports that OMT is responsible for a significant decrease in the risk of opioid overdose (2013). Gronbladh, Ohlund, and Gunne (1990) conducted a seminal study that compared the mortality outcomes of a group of individuals addicted to heroin receiving methadone treatment (n=166) vs. a group of individuals addicted to heroin who were not receiving methadone treatment (n=115) over 8 years. The rate of deaths related to overdose in the group not receiving methadone treatment was found to be

significantly higher than in the group maintained on methadone ($\chi^2 = 20.29$, $P < 0.0001$), and none of the individuals in the group receiving methadone died from overdose due to heroin. Causes of mortality in the group receiving methadone included overdose due to substances other than heroin, endocarditis, and liver disease. Mortality rates for individuals maintained on methadone were 1.4% per year, compared to 7.2% for the untreated controls and 6.9% per year for those involuntarily discharged from the methadone program.

Similarly, Langendam, van Brussel, Coutinho, and van Ameijden (2001) utilized a prospective cohort model to study the rates of mortality from opioid overdose in drug users who were maintained on methadone compared to drug users who were not maintained on methadone. Eight hundred and twenty seven participants from the Amsterdam Cohort Study were included in the study. The researchers found that injection drug users who were not maintained on methadone were more than four times more likely to die due to overdose than injection drug users who were maintained, regardless of methadone dosage. More recently, a longitudinal time series analysis was conducted by Schwartz et al. (2013) that studied overdose deaths in Baltimore, Maryland between the years of 1995-2009. The researchers found that an increase in OMT availability throughout the city was associated with a decrease in annual deaths by opioid overdose by 37%. While this study found that OMT was associated with a decrease in opioid overdose, it was limited in that it only included overdoses from heroin and morphine, rather than overdoses caused by opioid prescription pain medication (oxycodone, hydrocodone, etc.).

Methadone and buprenorphine are also associated with overdose. Utilized for pain control (2% of prescriptions in 2009) as well as addiction treatment, methadone was implicated in at least 30% of deaths involving prescription pain medication during the year 2009 (Kuehn, 2012). However, while increased methadone prescribing for pain control has been associated with increases in methadone overdoses, higher rates of supervised methadone administration has been associated with lower rates of methadone associated overdose (Strang, Hall, Hickman, & Bird,

2010). Although the research is limited in this area, this suggests that the lethality associated with methadone and methadone overdose may be related to the clinical indications for use. For example, individuals receiving methadone for opioid dependence generally take methadone at lower dosing frequency and are maintained in a controlled environment (Substance Abuse and Mental Health Services Administration, 2013). Buprenorphine has been speculated to be safer than methadone due to the fact that it is a partial rather than full opioid agonist, which may partly account for its approval for administration in primary care and other less regulated settings (Auriacombe, Fraques, Tignol, 2001). However, buprenorphine can still cause overdose, and OMT clinics that prescribe it must be careful to carefully titrate doses and carefully monitor for signs of diversion.

Incarcerated Populations and Opioid Maintenance Treatment

The vast majority of incarcerated individuals with a history of opioid abuse do not have access to OMT (WHO, 2013). When individuals who are patients at a community-based OMT program in some states are incarcerated and their stay is estimated to be longer than 30 days, they are often tapered from their methadone or buprenorphine dose unless they are pregnant (Correct Care Solutions 2011; McKenzie et al. 2009; Fu et al., 2012). Cropsey et al. (2012) conducted a study in which the researchers mailed surveys regarding health care access to US prison administrators. Four hundred and thirty one facilities with a total of 7,843,785 inmates responded to the survey. It was reported that methadone was provided at 17.4% of these facilities, and 3.6% of inmates received treatment. Buprenorphine OMT program availability was not studied. Chandler, Fletcher and Volkow report that less than 1% of incarcerated individuals in the US have access to OMT (2009). Reasons for the discontinuation of OMT upon incarceration and the unavailability of OMT in prisons are not fully transparent, although they may have to do with concerns of diversion, logistical difficulties, and the belief that illicit substances are difficult to obtain in correctional facilities, as well as general stigma about opioid addiction (McKenzie et al.,

2009). Addiction medicine is a specialty and Chandler, Fletcher, and Volkow (2009) speculate that few prison providers have received adequate training to provide effective substance abuse treatment. Lack of understanding about the neuropathology of addiction can also lead to the stigmatization of substance users, which can cause decreased motivation on the part of both prison-based health care providers and policy makers to guarantee comprehensive treatment for all incarcerated individuals (Chandler, Fletcher, Volkow, 2009).

As mentioned previously, many different factors can contribute to the decision regarding whether to administer methadone or buprenorphine OMT to a patient. The administration of buprenorphine may take longer than that of methadone in a prison setting, with buprenorphine preparation and administration taking about 15 minutes and methadone preparation taking 1-3 minutes in one study (Magura, 2009). It may be that health resources cannot accommodate the associated time burden of buprenorphine administration. Buprenorphine may also be easier to divert, as it is administered in a dissolving tablet or film form, while liquid methadone must be swallowed immediately. As diversion of medication is a serious concern in the prison setting, it may be another reason why prisons are hesitant to provide OMT, with either methadone or buprenorphine (Magura, 2009).

Mental Illness & Stressors in the Prison Population

Incarceration can represent a major life change for many individuals and can cause stress related to separation from loved ones, fiscal worries (especially if the incarcerated individual had been financially supporting others), change in daily routine, and social difficulties with other inmates. For inmates who had been maintained on OMT prior to incarceration, tapering from OMT may be yet another cause of increased stress and come with significantly uncomfortable withdrawal symptoms. In addition, research suggests that prisoners report high numbers of past traumatic life events that can cause symptoms of post-traumatic stress disorder. Maschi, Gibson, Zgoba, and Morgen (2011) interviewed a random sample of 58 adult male inmates about history

of trauma, including abuse, witnessing violence, kidnapping, illness, and loss of a loved one. Forty-three percent reported being physically abused as a child, 89% reported witnessing violence, 61% reported seeing someone shoot another person, 29% reported experiencing a life threatening illness, and 88% reported the death of a loved one. Abram et al. (2007) found that more than 90% of incarcerated youth (n=898) interviewed reported history of a major traumatic event, with 11% reporting symptoms congruent with PTSD within the past year. In comparison, only 4-9% of non-incarcerated youth report these symptoms.

Cauffman et al. (1998) found that 65% of incarcerated female adolescents reported PTSD symptoms (n=96), which the researchers state is 6 times higher than the general population. In addition, 41-65% of those struggling with substance abuse also have or would meet criteria for co-morbid mental health disorders, including anxiety disorders and PTSD (U.S Department of Health and Human Services, 1999). Binswanger et al. (2010) found that 44% of incarcerated women and 22% of incarcerated men who responded to the US Survey of Inmates at Local Jails reported having a mental health diagnosis other than substance abuse disorders, including depression, anxiety, bipolar disorder, PTSD, and psychosis. Although self reported, these findings suggest high levels of PTSD or general stress within the inmate population that might make adjustment to a substantial life change (incarceration) difficult, especially when coupled with a second significant stressor such as tapering from OMT. In addition, untreated mental illness in the prison setting can lead to issues such as inmate violence (including sexual violence) (Dumond, 2003) and suicide attempts (Chavez, 2012). Increased stress related to untreated addiction may intensify these risks.

Retention in Opioid Maintenance Treatment, Relapse, and Recidivism

Gordon, Kinlock, Schwartz, and O'Grady (2008) conducted a randomized clinical trial that compared the effectiveness of three different types of interventions in male inmates (n=201) with a history of heroin addiction. Subjects were randomly allocated to receive either counseling

only, counseling with referral to OMT (specifically methadone) programs, and counseling with initiation of methadone treatment three to six months before release from prison. The counseling with initiation of methadone group began treatment with methadone a few weeks before their release dates and were then transferred to an outpatient treatment center for continuation of care once they were released from prison. At six months post release, 65% of counseling only participants, 48% of the counseling with referral participants, and 28% of the counseling with initiation of OMT participants tested positive for illicit opioids. The participants in the counseling with initiation of OMT group attended a treatment program for a significantly greater number of days than those in the two other groups, with the counseling only group having the lowest number of days. The individuals in the counseling only group also reported a significantly higher number of days in which they participated in criminal activity compared to the referral ($p < 0.0001$) and initiation groups ($p < 0.002$) (56.6 days vs. 35.6 and 28.5, respectively) (Gordon, Kinlock, Schwartz, and O'Grady 2008). These results suggest that OMT, when initiated prior to release from prison, may help previously incarcerated individuals avoid relapse and activities that could cause re-arrest.

Kinlock, Gordon, Schwartz, Fitzgerald, and O'Grady (2009) conducted a 12-month follow up study post-incarceration to examine opioid relapse and recidivism. Follow up data was available for 97% of initial participants. Participants who had received counseling with OMT reported an average of 166 days in a community based clinic, those who had received counseling with referral reported an average of 91.3, and those who had received only counseling reported an average of 23.1 (Kinlock et al., 2009). This suggests that the initiation of opioid maintenance treatment with counseling in prison is associated with greater long-term involvement in community-based treatment programs after release from prison than counseling with referral or counseling alone. Recidivism was not significantly related to intervention group in either study, but neither of the studies thoroughly analyzed the reasons for reincarceration. Kinlock et al.

(2009) suggest that arrests may have been related to probation violations and earlier offenses rather than substance abuse.

McMillan, Lapham and Lackey (2008) conducted a retrospective chart review to study the recidivism history of 589 inmates at a prison in the Southwest US with an OMT program. The program allowed inmates who had been patients at a methadone clinic prior to incarceration to continue to receive methadone while incarcerated. They compared time from release to reincarceration of inmates who had received OMT during incarceration versus inmates who did not receive OMT while incarcerated. A primary reason for an inmate not receiving OMT involved difficulty verifying dosage history with the community-based methadone clinic. No significant difference in time between release from prison to recidivism and reincarceration was seen between the two groups. However, this study did not take into consideration whether inmates were able to continue OMT at a community clinic after release. It also did not examine any differences that may have existed between inmates who were receiving OMT in prison and those who were not receiving OMT besides length of time incarcerated. Length of time incarcerated can affect ability to receive OMT because verification of dosage with the outside clinic can be a lengthy process and individuals with longer sentences may be more likely to have their dosage verified. This study also failed to explore reasons for re-incarceration, which may have included issues related to probation from previous offenses and crimes that were not drug related.

Larney, Toson, Burns, and Dolan (2011) found that while OMT in prison was not associated with reduced re-incarceration rates, continuation of treatment upon release decreased re-incarceration by 20%. Opioid maintenance treatment during incarceration is not itself associated with lower re-incarceration rates, but maintenance at community based OMT programs is, and OMT initiation and maintenance while in prison leads to higher rates of continued treatment upon release. Barriers to continuation of treatment upon release may confound the

benefits of prison OMT once individuals are reintegrated back into the community. Initiation and/or continuation of OMT in prison and the resources to smoothly transition from prison OMT to community OMT upon release benefits both the individuals and the greater community by reducing rates of re-incarceration.

Magura et al. (2009) compared the outcomes of methadone initiation in the prison setting to those of buprenorphine initiation. One hundred and sixteen adult male inmates at Riker's Island with heroin addiction were randomly administered methadone or buprenorphine treatment. The researchers found that while there was no significant difference ($p < 0.001$) between the two groups in completion of the study or rates of recidivism/re-incarceration at Riker's upon release, 48% of the individuals who had been initiated and maintained on buprenorphine vs. 14% of the individuals who had been initiated and maintained on methadone continued treatment at an OMT community clinic upon release. The researchers believed that this vast difference might have been due to the relative flexibility of community based buprenorphine administration compared to regionalized methadone centers. This study excluded individuals who had been previously maintained on methadone at the time of incarceration. This is relevant because individuals who had been enrolled in methadone treatment before incarceration and were maintained while incarcerated may have continued treatment at a community clinic after release at a higher rate than those initiated in prison like the individuals in this study. In addition, the median dosage of methadone (30mg) administered in this study is considered suboptimal for most patients, while the median buprenorphine dose (12mg) is considered within the range of optimal for most patients (Magura et al., 2009). This may have contributed to the lower rates of continuation of treatment for those in the methadone group, as suboptimal OMT dosing is associated with less successful treatment (Magura et al., 2009). These results suggest that both ease of accessibility to treatment and proper dosages may contribute to continuation of treatment upon release, and that the success of OMT may be related to what type of medication is administered.

Health Outcomes and Risk of Overdose Following Release from Prison

Re-incarceration is not the only risk for individuals following release from prison. Health problems present another barrier to successful reintegration into the community, particularly ongoing substance abuse and mental health related issues. Binswanger et al. (2011) interviewed 29 previously incarcerated individuals between the ages of 22-57 regarding medical issues they faced post-prison release. One of the themes that emerged was difficulty accessing health care, including mental health and addiction care. Many of the participants expressed the wish that they had been referred to a health care provider or community health clinic pre-release so that they could have easily accessed care once they left prison. For some participants, difficulty accessing care meant a delay in treatment for which they suffered complications such as relapse with substances and worsening health. The fear of relapse into substance use and potential overdose were reported, which the participants stated were related to inadequate access to care. These results suggest that access to care post-release may be improved by referrals to health care providers and substance abuse treatment centers prior to release from prison.

Binswanger et al. (2012) explored the experiences that formerly incarcerated individuals reported having with overdose of illicit substances after release from prison. Twenty-nine individuals 18 or older were recruited from community health and addiction clinics and interviewed two months after release from prison. Three of the participants reported having overdosed soon after release from prison, and greater than 50% of the participants reported knowing someone who had experienced an overdose post-release from prison. One major theme reported was difficulty accessing substance abuse care post-prison release, combined with unavoidable exposure to drugs in their environment. The stress of reintegration back into the community, including finding work, shelter, and healthcare was reportedly so intense that returning to substance use was a commonly reported coping mechanism. The perceived sudden lack of structure that many individuals were faced with after living in a highly structured prison

environment was reported to be another stressor. While many of the participants reported remaining clean from illicit substances while incarcerated, the combination of life stressors paired with the high levels of substance use and easy access to substances in their communities made it very difficult to refrain from using substances post-release from prison. Participants also reported that staying “clean” while incarcerated led to a decreased tolerance for substances, which they felt led to an increased risk for overdose. The researchers recommended the use of opioid maintenance treatment both in prison and immediately following release to potentially decrease this risk (Binswanger et al. 2012). A potential benefit of OMT may be that it provides better access to care and greater structure in the every day lives of these individuals (Binswanger et al., 2012).

Increased risk of death related to overdose following release from prison has been clearly identified. Merral et al. (2009) conducted a meta-analysis that included six studies that followed inmates aged 18-35 with substance abuse histories for at least 12 weeks post-incarceration. One thousand thirty three deaths within the first 12 weeks post-prison release were analyzed. Individuals were at a three to eight-fold increased risk of death related to drug overdose within the first two weeks after prison release compared to the next 10 weeks (week two through 12). Seventy-six percent of deaths taking place within the first two weeks post-release were found to be drug-related. The authors speculated that the increase in risk of drug overdose was due to a possible decreased drug tolerance of inmates who were free of illicit drugs or OMT in prison. Increased implementation of OMT both in prison and upon immediate release could potentially decrease risk of post-prison release associated opioid overdose.

Andrews and Kinner (2012) conducted a chart review utilizing the Australian National Coroners Information System to explore causes of death post-prison release. Three hundred and eighty-eight records were reviewed, 45% of which listed accidental substance overdose as cause of death. Eighty-two percent of the deaths were caused by an opioid, and individuals who died of

accidental drug overdose were more likely to have had experienced withdrawal in the six months preceding the incident. The use of multiple substances at one time was described in 72% of the deaths, with benzodiazepines and alcohol being common co-substances implicated in opioid overdoses. Like many other researchers referenced above, Andrews and Kinner (2012) recommend the use of transitional substance abuse treatment programs as well as pre-release educational programs focusing on opioid overdose prevention and the dangers of polysubstance use to decrease the risk of post-prison release opioid overdose.

Despite much research on the effects of prison OMT on inmates and previously incarcerated individuals with regards to relapse, recidivism, and health outcomes, as well as the rates of mental illness and distress in the prison population, little is known about the lived experiences of individuals who are tapered from OMT at the time of incarceration. Quantitative research dominates this area, and the addition of qualitative data may add some important perspectives concerning the ways in which previously incarcerated individuals view these experiences. Studies exploring the lived experiences of this population may also help guide focused research that may lead to more successful interventions to reduce recidivism, increase quality of life during incarceration and post-release, and improve opiate abuse recovery outcomes for individuals in the correctional system.

SCREAMING BEHIND A DOOR:
THE EXPERIENCES OF INDIVIDUALS INCARCERATED WITHOUT OPIOID
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Screaming Behind a Door: The Experiences of Individuals Incarcerated Without Opioid Maintenance Treatment

Background & Purpose: Opioid maintenance therapy (OMT) is an effective method of treating opioid addiction. Of incarcerated individuals in the U.S., 50-85% have a history of substance abuse, and >80% of inmates with opioid addiction history do not receive treatment. The purpose of this study was to explore individuals' experiences after being tapered from OMT upon incarceration. **Methods:** Interpretative phenomenological analysis (IPA) was employed using in-depth interviewing of 10 participants. **Results:** Analysis identified six themes that captured the essence of the participants' experiences. **Implications & Conclusion:** Losing OMT upon incarceration was described as an extremely stressful experience for many individuals, and may create issues for both inmates and facility staff. Further research is needed to discover ways in which to improve addiction treatment in prison.

Keywords: Opioid Maintenance Treatment, Substance Abuse, Mental Health

Introduction

Substance related offenses are responsible for at least half of federal prison sentences. Between 50-85% of incarcerated individuals in the U.S. have a history of substance abuse, with 20% of those reporting intravenous (IV) drug use (Nunn, 2009). Between 9-13% of incarcerated individuals in 2004 reported using heroin on a regular basis pre-incarceration (Mumola & Karberg, 2006), and between 12%-25% of newly arrested individuals tested positive for opioids upon urinalysis (National Institute of Justice, 2004). The availability of illicit substances in prisons has been well documented (United Nations Office on Drugs and Crime, 2010), and associated needle-sharing behaviors in prison settings greatly increase risk for HIV and hepatitis C acquisition during incarceration (United Nations Office on Drugs and Crime, 2010). Opioid maintenance treatment (OMT) with either methadone or buprenorphine is an effective method of decreasing opioid abuse and promoting increased health in community and prison settings (National Institute on Drug Abuse, 2012). Additionally, OMT decreases an individual's involvement with the criminal justice system, risk of HIV/hepatitis C infection (Gordon, Kinlock, Schwartz, O'Grady, 2008), and increases quality of life in the community-dwelling population (Nosyk et al., 2012). While detoxification programs are also utilized for treatment of opioid dependence, they have been found to be less effective than OMT at reducing illicit behaviors, substance use, and needle sharing (Nosyk et al., 2012). The World Health Organization (WHO, 2013) has called for OMT to play a major role in substance abuse programs, including those in prison settings, and the National Institute on Drug Abuse (NIDA, 2012) includes OMT in its principles for addiction treatment of both the general and inmate population.

Opioid maintenance treatment in the prison setting has been found to result in a decrease in opioid use as well as decreased drug injecting and needle sharing (NIDA, 2012). While inmates frequently report accessibility to illicit substances and means to inject drugs in prison, only 55% of U.S. state and federal prisons provide methadone or buprenorphine, and more than

half of those prisons only do so for pregnant women or to treat chronic pain rather than addiction (Nunn 2009). More than 80% of inmates with known addiction histories do not receive treatment while incarcerated (Chandler, Fletcher & Volkow, 2009). Many incarcerated individuals with a history of opioid abuse have been enrolled in an OMT program prior to incarceration (Fiscella, Moore, Engerman, Meldrum, 2004), but subsequent rates of initiation into OMT after release from prison are low, and the risk of overdose is elevated in the period immediately following reintegration back into the community (WHO, 2013). Hendrich et al. (2011) found that six months following release from prison, more than 50% of individuals who were able to receive OMT in prison continued treatment in the community, while only five percent of individuals who did not receive OMT while incarcerated enrolled in a community-based OMT program upon release from prison. Individuals with a history of pre-incarceration heroin addiction typically relapsed within one month of release from prison if they were not enrolled in an OMT program (Gordon, Kinlock, Schwartz, O'Grady, 2008). Reasons for relapse can include anxiety and depression related to "stigma associated with being labeled an ex-offender, the need for housing and legitimate employment, stresses in reunifying with family, and multiple requirements for criminal justice supervision," as well as reintegration into a community where substances are highly available and accessible (Chandler, Fletcher, & Volkow, 2009, p184).

Rates of successful long term, voluntary tapers from OMT in medically supervised community-based treatment centers are generally considered poor. Nosyk et al.'s (2012) population-based, retrospective cohort study found that only 13% of community-dwelling individuals who attempted a medically supervised, voluntary taper from OMT were considered successful, meaning they avoided relapse and/or reentry into OMT. Tapers that were longer than 12 weeks were associated with greater success than those shorter than 12 weeks. Calsyn, Malcy, & Saxon (2006) reported a zero percent success rate following a voluntary, medically supervised (minimum 120 day duration) methadone taper in a community setting, suggesting that voluntary

taper of methadone is difficult without the added stressors associated with incarceration. Because the accessibility of OMT in prison settings is poor, many individuals who are enrolled in an OMT program are involuntarily tapered from methadone or buprenorphine upon incarceration at a rate that is much faster than what is generally considered appropriate within a community-based OMT setting (Fiscella, Moore, Engerman, Meldrum, 2004). Given the stress associated with incarceration, it is important to explore the experiences of individuals who have undergone involuntary discontinuation or taper while serving time in prison. The purpose of this study was to discover, explore, and describe individuals' experiences of incarceration after being tapered from OMT upon incarceration. Implicit within the goal is to discover the essence of their experience during this time and learn about what the experience was like for them.

Methodology

Research Design

Interpretative phenomenological analysis (IPA) (Smith, Flowers, & Larkin 2009) was used to explore, describe, and interpret the experiences of individuals who were involuntarily tapered from opioid maintenance treatment upon incarceration.

Sampling and Recruitment

The institutional review board approved this study prior to any study procedures. Current and former patients at a methadone and buprenorphine outpatient treatment center in northern New England who had been previously incarcerated were the population of interest in this qualitative study. Inclusion criteria included a history of incarceration that involved an involuntary taper from OMT and the ability to remember and verbally share this experience. Participants were 18 or older and English speaking. Exclusion criteria included inability to complete interviews and pregnancy, due to vulnerable population status. Purposive sampling and snowball sampling were utilized. Participants were recruited from the OMT clinic using flyers advertising the study. Counselors at the clinic were also asked to provide clients with information

about the study and the principal investigator's (PI) contact information. All interested individuals contacted the PI directly. Sampling continued until saturation was reached at interview 7 with an additional 2-3 participant interviews to ensure that the multifaceted nature of the phenomena was well captured, and that the data included examples of both "similarity and difference between participants" (Smith, Flowers & Larkin, 2009, p. 51). There were a total of ten participants, who reported being incarcerated at 4 different facilities in New England, with the exception of one participant who had been incarcerated in the Southern US. A \$20 gift card to a grocery store was provided as compensation for participant time and travel.

Study Procedures

Flexible, semi-structured, in-depth interviews were conducted in private rooms at the treatment center that were safe, private, and convenient for the participants and the PI. Interviews included questions that explored the experience of being tapered from OMT, serving a prison sentence without OMT, and reintegration back into the community after release. The first question the PI asked participants was: "Tell me what happened when you were first arrested and incarcerated." Interviews lasted 45-75 minutes, and were conducted solely by the PI. Interviews were audio recorded and then transcribed verbatim. Throughout the study, the PI performed reflexive journaling in order to explore personal biases and preconceptions that may have affected the interviewing process (Polit & Beck, 2011). Journaling was performed after especially emotional interviews, when the PI was disturbed by the participants' descriptions of mistreatment in the prison setting. This practice allowed the PI to remain neutral to avoid bias against facility staff, as well as remaining open to all individual stories of the participants.

Data Analysis

The interviews were transcribed verbatim and cross-checked, then de-identified. The PI was mindful to consider both the transcribed text and the context of the interview by analyzing the words chosen (including slang), the body language, and any emotional displays such as

laughter, weeping, etc. (Ray, 1994). The PI then identified emergent themes from the initial notations. The PI then considered all cases at once to discover thematic “patterns” that fully captured the essence of participants’ experiences (Smith, Flowers & Larkin, 2009, p. 101). To improve the study’s rigor, one participant was contacted for a member-check. The participant validated that the themes reflected her experience.

Results

Demographic information, utilizing pseudonyms to identify participants, is presented in Table 1. Six themes emerged upon analysis of the transcribed interviews: 1) “You’re not getting your meds” (Traumatic taper experiences), 2) “I was crawling out of my skin” (Difficult withdrawal), 3) “Suck it up, it’s not that bad” (Suboptimal medical care), 4) “Trapped and helpless” (Co-occurring mental illness), 5) “More in there than out here” (Access to substances in the facilities), and 6) “I just went looking on the street” (Relapse upon release).

“You’re not getting your meds”

Most of the participants reported that despite what they had heard about the Department of Correction’s policy to taper inmates receiving OMT, they did not receive a taper. Some participants were told immediately upon entering the facility that their OMT would be abruptly discontinued. Bryce shared: “They knew I was on it when I came in and they said it didn’t matter. Kick rocks, pretty much.” Other participants shared that they were not immediately told whether they would be receiving OMT or not. Mason said: “They didn’t give me anything...and nobody told me nothing. And that’s kind of intense, kind of sucks.” One participant, Sierra, stated that she had to make a scene in order to find out if she was going to receive OMT. She angrily recalled this experience: “it took like 3 or 4 nights until I started flipping out...screaming behind a door, like ‘what the fuck is wrong with you people, get someone who does know what’s going on, you fucking moron’you have to get them mad at you, until finally, they’re like ‘she won’t shut up in there’...finally hours later, one the nurses comes down...she’s saying ‘you’re not going to get

your meds.” Participants expressed confusion, anger, and frustration about these policies and wondered why the process couldn’t have been more clear.

All of the participants but one were vehement in their belief that the experience of either abruptly losing or being tapered from OMT was an unquestionably negative experience. Zev shared that the taper experience was not only severely uncomfortable, it also negatively impacted his recovery upon release: “It makes you angry. You kind of stay angry...because you just don’t care anymore. You’re just like, ‘fuck it, I don’t care. I just want to be high.” Lila, a participant who did receive a taper from OMT, reported mixed feelings about this experience:

You know, I’m caught here. Part of me says maybe it was a good thing because it kind of made me realize, yeah, I can do this without it. So I mean...maybe it was a good thing. I don’t know. Part of me says it’s a good thing and part of me says deal with one thing at a time.

Although no other participants expressed the belief that the taper or discontinuation experience may have been positive, many others echoed the sentiment that dealing with incarceration and “detox” at the same time was overwhelming. Sierra wondered how the experience fit in with the goal of rehabilitation, which she believed was the purpose of prison: “All those girls are just going through emotional hell and I can’t see how that could in any way—that experience could help anyone. It’d have to cause more trouble. You know?” In summary, all participants reported that losing OMT, either with a taper or in the case of abrupt discontinuation, was a stressful experience. In addition, some reported that the experience negatively impacted their recovery process after release.

“I was crawling out of my skin”

All participants reported an extremely challenging withdrawal, regardless of whether they had received a taper or abruptly discontinued OMT. Some participants focused on physical withdrawal symptoms. Jeremy shuddered while recalling his experience: “Every single day was just dreadful...like I’d get so hot that I’d sweat...I’d shiver and when I was throwing up I wasn’t throwing up anything. Just foam. Just big, big things of foam and it was nasty.” However, most

stated that withdrawal while incarcerated was both physically and emotionally taxing. For Bryce, memories of the emotional turmoil were more vivid:

I felt like it screwed my head up afterwards for awhile. I didn't feel clear for a long time...I felt like I was nursing my mind and my body back to health slowly...It's a horrible experience. Its really—emotionally its even harder. I can take the sickness, but you know you're in jail and you've lost everything again and you're—I feel like I'm always like—my body is an open wound emotionally...Then I just starting thinking about my kids and its just...it's a dreary place to be.

A few participants reported that even once the acute withdrawal symptoms faded, they had difficulty engaging and integrating themselves into day-to-day prison life. Donna described feeling detached: “I just didn't feel right. Like I was there but I wasn't kind of. I was very spacey...I was seeing and doing everything but I really wasn't in my body doing it...I was just extremely out of it for probably five months.” The withdrawal experience in prison was physically and emotionally challenging for all of the participants, and some reported that after effects associated with withdrawal took months to wear off.

“Suck it up, it's not that bad”

Despite how ill the participants were during their withdrawal periods, none reported receiving comprehensive medical care. While some were given “cocktails” for symptom management (usually including Pepto-Bismol, clonidine, and an anti-histamine) or “vital checks” (facility staff checks vital signs such as blood pressure and pulse in order to monitor withdrawal), others reported feeling ignored by the medical staff. Mason received no medical attention: “The nurses knew about when I was being tapered down, they didn't come and check. Nobody came to check nothing.” Donna stated: “They just sat there and said ‘suck it up, its not that bad.’ The most they would do was give me juice at times because they thought I was going to pass out and they wanted to get some sugar in my system.” Bryce discovered that pretending to be an alcoholic helped him receive treatment for withdrawal: “The medical staff is horrible...their opinion is, you can't die from opiate withdrawal, so suffer. All of us learned to say that we were drinking

heavily—they give you Valium for drinking...I don't drink but I told them that because it was the only way.”

A few participants stated that they had been placed in a “medical unit” to withdraw, which they described as feeling more like solitary confinement or “the hole.” Jeremy stated:

I told them I was going to crash real hard and they said, ‘Well, then, what we need to do is lock you into an empty room’ and gave me a bucket...They didn’t do anything for me, wouldn’t give me any medication [to help with withdrawal symptoms].

These participants reported feeling so lonely and frightened in the medical units that they pretended to be finished withdrawing so that they could join the general prison population. Angel said:

I was in medical for 5 days and then...I pretty much lied and said I wasn’t detoxing anymore...I just didn’t want to be in there. I didn’t want to be in the hole...I just wanted to be in [general] population.

Some participants reported feeling discriminated against by medical staff for having an addiction history. Bonnie reported that her symptoms weren’t taken seriously because they were related to opioid withdrawal:

They didn’t seem to believe me when I said it was a medical issue. They kind of scoffed at that. And they were like ‘Oh, you’ll be alright.’ And I was like ‘Oh, yeah, right.’ And boy, I wasn’t alright. And—yeah, it was a bad experience. Just thinking about it gives me the creeps.

Bryce echoed this sentiment: “The medical staff look at you like you’re a piece of shit...they’re very judgmental, which I don’t think you should be working in a correctional facility.” Many participants stated that they did not feel like medical staff were interested in helping them or improving their health status. Sierra wondered why any nurse would choose to work in the prison system: “I think that maybe I wouldn’t want to go to school to be a nurse and work there, because you can’t help anybody. So you’d either have to be mean or not care and need money really bad.” A lack of perceived comprehensive, compassionate health care in prison was stressed by all of the

participants, and some reported feeling as though the health care providers did not care whether they remained healthy.

“Trapped and helpless”

Many of the participants shared that they struggled with mental illness as well as addiction issues. Two participants stated that their psychotropic medication was withheld, despite having a prescribing practitioner in the community. Zev shared that he had been prescribed multiple medications for depression and anxiety, but it took weeks for his medications to be confirmed with his prescribing physician. Once his medications were confirmed, the correctional facility’s physician decided not to prescribe some of the medications he had been getting before incarceration. He felt that this lapse was detrimental to his mental health:

They’re like ‘Eh, no big deal.’ Like...times when I’ve come down off my regular antidepressants and stuff like...it’s so bad, it can make me want to kill myself or super angry and like it’s just terrible that they can do that...the doctor without talking to you can just decide that he knows better than the doctor you see that knows you...without actually interviewing or talking to you really. They can just be like ‘Yeah, I don’t think you need that.’

Donna had a similar experience: “I have bipolar...and they wouldn’t give me any of my medications. I was on Seroquel. They wouldn’t give me any of that. I was on Klonopin...they wouldn’t give me anything. None of my prescriptions.”

Other participants reported that appointments with mental health counselors and support meetings were hard to come by. Donna was the only participant who reported having access to a case manager to talk to while incarcerated, but she only met with her once because she did not feel comfortable talking with her. She stated that the case manager ignored her concerns and did not take her seriously when she tried to report that guards were sexually assaulting inmates:

I told someone...a person that you were allowed to talk to if you were on drugs and you’d get to see them once a week for half an hour and you’d tell them how you’re doing and stuff like that...she was just like ‘that doesn’t happen,’ just kind of like brushed it off her shoulder like it was no big deal.

Max stated that despite the fact that the majority of the fellow inmates he knew had opioid problems, there were few substance abuse resources: “There were AA meetings...but never any real Narcotics Anonymous meetings...95 percent of the people were in there for like theft or stealing something, selling stolen property, all just to pay for their drugs.” Despite the fact that many of the participants reported a history of mental illness or episodes of depression and anxiety triggered by incarceration, none were able to access mental health care while incarcerated.

“More in there than out here”

All of the participants stated that substances and drug paraphernalia were accessible in prison, although there were varying reports about where the drugs came from. Donna reported that male guards smuggled substances into the facilities in order to bribe inmates that were known to have addiction issues to engage in sexual favors:

They would want me to do a sexual favor and then they would give me whatever...if you're coming off stuff and it looks like you want something, they're going to ask you 'What do you want?' and they would bring us anything that we wanted...whether it was drugs or alcohol or needles to do the drugs with or weed or cigarettes or tobacco whatever.

The trades were sometimes forced: “There was one girl in there that was very young...all the guards wanted her. Two guys at once wanted to take her and they did—for drugs. And even if you said no, sometimes they still did it.” The four other female participants confirmed that they had either witnessed or participated in similar transactions.

Some male participants reported that they had received substances from guards, although they stated that the guards were interested in money rather than sex. Jeremy told a story about a guard who smuggled tobacco into prison for him to sell:

There was this female guard that worked there...I said 'What are you making for money here?' And she said '\$15 an hour.' And I said 'How would you like to make \$500 in an hour?' And she said 'Let's hear it.'

Participants stated that substances were also smuggled in by other inmates, who would then sell or use them. Selling substances in prison was identified as a lucrative business, as many desperate

inmates were willing to pay high prices. According to Mason, “[An 8mg pill of buprenorphine] is at least \$100, probably \$150...it’s like \$20 for one little line...its highway robbery. But because we’re addicts, we’re going to pay whatever.” Many participants reported that individuals worried about withdrawal smuggled medication into the facilities when they were incarcerated to treat their symptoms:

...that’s what most people know now...they know they’re not going to get their medicine so [they smuggle it in]. You’d be crazy not to take care of yourself...If I was ever in trouble again, I would bring [drugs] in because I would never go through that again. It was awful.

So many individuals were reportedly smuggling in substances that it might have been easier for some individuals to find drugs in prison than in the community: “Sometimes there was more in there [prison] than out here. It’s like when everybody knows they’re going to jail, they do whatever they have to do to bring [drugs] in.” Mason reported that substances were so accessible that some inmates became addicted while serving time: “People would get the habit, there was so much down there. They were catching habits in jail. Some guys...they’d never even been on the street to buy [drugs] until they got in there.”

The easy accessibility of substances despite the unavailability of methadone or buprenorphine for regulated treatment in prison led many of the participants to wonder about the futility of the tapers:

It’s a really big deal there because everyone wants their medicine. It’s really stupid because most people—most of the entire [prison] population is going to be back on the medicine when they get out. Most of them aren’t even in there for more than a year...I mean, if you’re going to give it to them and then take it away—what a mess.

Bryce reflected on his belief that the refusal by the facilities to provide addiction treatment is what led to the frequent drug use that they were trying to avoid:

Its silly...they fight so hard to keep [drugs] out of jails...they should just give [OMT] to anybody who wants it...I just think it’s comical that they fight so hard to keep it out when they would solve all their problems if they just prescribed it as a tool for treatment in jail.

Every participant reported either using substances while in prison or being aware that substances were easy to access. Many participants shared that guards smuggled substances into prison, and all of the female participants had either witnessed or participated in a drug trade that involved sex.

“I just went looking on the street”

Every participant either reported using smuggled substances while in prison or relapsing soon after release from prison. Some were able to re-enter treatment programs after release, but even those participants reported a period of time of waiting to re-start treatment in which they were using substances on the street. Sierra reported using drugs right after release: “I got out...and just went looking on the street.” For Donna, memories of her experiences in prison drove her to use drugs upon release:

It was really bad. I mean, I thought I was going to die, I was doing so many drugs [after release]. I really thought I was going to die...[the incarceration experience] was traumatic and I was having nightmares and I couldn't get them to go away so I was trying to use [drugs] to make them go away.

Although no participants reported overdosing after release, a few stated that they knew people who had. Zev stated: “I've heard that a lot of people OD [immediately after release]...[some people] would just want to kill themselves. Because even though you're out, its still shit.” Angel reported a more severe addiction once she was released than before incarceration: “Hell. I got extremely, extremely heavy into dope. I was doing maybe 20 bags a day.” Illicit opioid use upon release was reported by all of the participants, and some stated that their use after incarceration was heavier than their use before. Many participants shared stories of friends or acquaintances who had overdosed when they were released from prison.

Discussion

The purpose of this study was to explore and describe the experiences of individuals who had their opioid maintenance treatment tapered or discontinued abruptly upon incarceration. The

six themes uncovered in the analysis of the interviews reflect the profound isolation from the outside world during incarceration that participants described, especially with regards to the reported disconnect between what is considered appropriate mental health/substance abuse treatment and what is received in prison. The participants shared examples of how the practice of taper or abrupt discontinuation of OMT in the prison setting may have been quite futile and in fact created a host of issues for both inmates and Department of Corrections staff.

Participants experienced feelings of isolation when they were incarcerated, both isolation from the outside world by virtue of being prisoners and from general prison life because of their addiction. Implicit in many of the participants' stories was the feeling of not being listened to or having basic needs met. Participants credited this to both their status as prisoners and as addicts. The participants' accounts of their experiences also point to a disconnect between what is provided in the prison setting and what is regarded as acceptable substance abuse treatment in the addiction treatment field. These findings echo Cropsey et al.'s (2012) research, which found that only 17.4% of 431 facilities offered methadone maintenance treatment. This leaves most facilities without basic substance abuse treatment. While Cropsey et al. found that 72.3% of facilities reported offering "co-occurring mental and substance use disorders counseling," none of the participants in this study reported opportunities for counseling that were offered consistently and felt safe. A combination of OMT and counseling is generally accepted as standard practice for treatment of opioid addiction by experts in the substance abuse treatment field, and is recommended by the National Institute on Drug Abuse (2014).

The participants' reports of relapse upon release are consistent with the findings of Binswanger et al. (2012) and highlight one of the dangers that face inmates once they leave prison. Taken together with the accessibility of substances in prison, the purpose of discontinuing OMT is questionable. If imprisonment is meant to provide rehabilitation or at least discourage individuals from engaging in the behavior that led to their arrest, a policy that results in the

continued use of illicit substances and negatively effects recovery seems futile. The interruptions in OMT treatment that can occur when patients are incarcerated may lead to increased utilization of resources related to re-admission and re-induction at OMT clinics in the community upon release.

These findings could inform changes in practice and policy, as well as further research. Firstly, the loss of OMT upon incarceration, with either a taper or in the case of abrupt discontinuation is a stressful experience for many individuals, which may have detrimental effects on their physical and mental health. In addition, inmates may not feel as though their health needs are adequately addressed by prison medical staff. The general distrust of the medical staff described by the participants may lead to a failure to report serious medical symptoms out of the belief that medical staff will do nothing to help. The unavailability of OMT may lead to increased smuggling of substances into the prison setting, risky use patterns, and potential corruption of staff, as is also suggested by Schwitters (2014). The findings of the present study can be added to the growing body of knowledge that suggests that improvements in the treatment of substance abuse disorders in the prison setting may lead to improved rehabilitation while in prison, outcomes upon release, and more appropriate use of health care resources. Further research in this area, including interviews of prison medical staff, may help illuminate ways in which to improve substance abuse treatment in facilities.

This study had a few limitations. The sample was racially homogenous, with all ten participants identifying as white. In addition, because the study's inclusion criteria required that participants share their experiences in English, the results may not reflect the experiences of non-English speaking populations. All but one participant were enrolled in an OMT program at the time of the study, and the experiences of individuals who do not re-enter treatment after release may differ.

Conclusion

This study adds valuable qualitative data to the body of knowledge concerning substance abuse treatment in prison settings. The participants shared that experiences that reflect less than optimal physical and mental health care, especially with regards to their substance abuse and mental health issues. These stories should prompt further study to explore the current state of substance abuse treatment for incarcerated populations. Further research in this area may help guide efforts to reform policies regarding the substance abuse and mental health care provided in prison settings.

Table 1. Participant Demographics

Pseudonym	Gender	Age	Current OMT Medication	OMT at time of Incarceration & daily dose	Duration of taper
Donna	F	26	100mg Methadone	12mg Suboxone	No taper
Max	M	31	12mg Suboxone	8mg Suboxone	No taper
Mason	M	44	70mg Methadone	24mg Suboxone	A few days without medication, then 1 week taper
Angel	F	32	128mg Methadone	80mg Methadone	No taper
Jeremy	M	31	100mg Methadone	75mg Methadone	5mg decrease/day for 30 days
Bryce	M	41	16mg Suboxone	135mg Methadone	No taper
Sierra	F	39	8mg Suboxone	8mg Suboxone	No taper
Zev	M	36	55mg Methadone	12mg Suboxone	No taper
Bonnie	F	59	“Blind” voluntary taper (does not know dose), Methadone	Was participating in blinded study, did not know dose, Suboxone	No taper
Lila	F	36	No current OMT medication	8mg Suboxone	30 day taper

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