Published in final edited form as:
Int J Drug Policy. 2010 January ; 21(1): 36–42. doi:10.1016/j.drugpo.2008.07.004.

Why don't out-of-treatment individuals enter methadone treatment programs?

James A. Peterson, Ed.D.[*], **Robert P. Schwartz, M.D.**, **Shannon Gwin Mitchell, Ph.D.**, **Heather Schacht Reisinger, Ph.D.**, **Sharon M. Kelly, Ph.D.**, **Kevin E. O'Grady, Ph.D.**, **Barry S. Brown, Ph.D.**, and **Michael H. Agar, Ph.D.**

Abstract

Background—Despite the proven effectiveness of methadone treatment, the majority of heroin-dependent individuals are out-of-treatment.

Methods—Twenty-six opioid-dependent adults who met the criteria for methadone maintenance who were neither seeking methadone treatment at the time of study enrollment, nor had participated in such treatment during the past 12 months, were recruited from the streets of Baltimore, Maryland through targeted sampling. Ethnographic interviews were conducted to ascertain participants' attitudes toward methadone treatment and their reasons for not seeking treatment.

Results—Barriers to treatment entry included: waiting lists, lack of money or health insurance, and requirements to possess a photo identification card. For some participants, beliefs about methadone such as real or rumored side effects, fear of withdrawal from methadone during an incarceration, or disinterest in adhering to the structure of treatment programs kept them from applying. In addition, other participants were not willing to commit to indefinite "maintenance" but would have accepted shorter time-limited methadone treatment.

Conclusion—Barriers to treatment entry could be overcome by an infusion of public financial support to expand treatment access, which would reduce or eliminate waiting lists, waive treatment-related fees, and/or provide health insurance coverage for treatment. Treatment programs could overcome some of the barriers by waiving their photo I.D. requirements, permitting time-limited treatment with the option to extend such treatment upon request, and working with corrections agencies to ensure continued methadone treatment upon incarceration.

Keywords

heroin addicts; methadone treatment; out-of-treatment

The majority of heroin-dependent individuals, both in the US and internationally, remain outside the drug abuse treatment system (Friedman et al., 2004; Guggenbuhl et al., 2000), costing the US an estimated $21.9 billion per year associated with lost productivity, crime, health and social service expenditures (Mark et al., 2001). Despite the proven efficacy of methadone maintenance treatment in reducing heroin use (Mattick et al., 2003) and its ability to reduce HIV transmission (Drucker et al., 1998; Metzger et al., 1998; Moss et al., 1994) and criminal behavior (Ball & Ross, 1991; Campbell et al., 2007), methadone treatment is in short supply (Des Jarlais et al., 1995; Lewis 1999; Schwartz et al., 2007) and even when it is available, may be hard to access (Brown et al., 1989; Schwartz et al., 2006; Zule & Desmond, 2000). Indeed, a recent report indicated that in Baltimore, there was a three-month-long waiting list

*Corresponding Author: james A. Peterson, Ed.D.: Friends Research Institute, Inc., Social Research enter, 1040 Park Avenue, Ste., 103, Baltimore, Maryland USA; tele: (410) 837, 3977 ext. 228; fax: (410) 752-4218; jamespeterson4@comcast.net.

for methadone treatment and that only 27.5% of individuals on the waiting list entered methadone treatment within 10 months (Schwartz et al., 2007).

Prior research has demonstrated that if it were possible to readily access methadone treatment, not all opioid addicts would accept treatment when offered (Booth et al., 2003; Zule & Desmond, 2000). It is likely that reasons for not entering treatment differ by country and include: whether treatment is provided through specialty methadone programs or primary care practitioners, the number of take home doses permitted, the cost of treatment and other local factors. In order to understand and address the difficulty in attracting into treatment those opioid-addicted individuals who remain outside the treatment system, it is important to clarify their views of methadone treatment. Such knowledge could help public policymakers, treatment providers, and public health care system administrators attract a greater percentage of opioid-addicted individuals into treatment.

While there has been research comparing the characteristics of people entering treatment to individuals not entering treatment (Booth et al., 1996; Schwartz et al., 2008; Watters & Cheng 1987; Zule & Desmond, 2000), there is a paucity of research that has examined the concerns regarding treatment entry from the perspectives of drug-addicted individuals (Hanson et al., 1985; Stancliff et al., 2002). Existing studies suggest that some out-of-treatment individuals perceive that methadone: 1) is difficult to discontinue once initiated; 2) interferes with their daily lives; 3) has serious side effects; and 4) has low “status” in the community. Data from these studies were collected between 1982 (Goldsmith et al., 1984; Hunt et al., 1985) and 1992 (Zule & Desmond, 1998); hence, there is a need to determine whether these attitudes continue to be influential.

Purpose of the present study

This ethnographic study was part of a larger investigation conducted in Baltimore, Maryland between November 2004 and November 2007 that examined factors associated with methadone treatment entry and retention (Schwartz et al., 2008). This article focuses on the out-of-treatment sample that met the admission criteria for methadone maintenance treatment in the US, but was neither in-treatment nor was currently or had been seeking-treatment in the 12 months prior to study entry. Its primary purpose was to identify barriers to methadone maintenance and to suggest strategies for lowering those barriers.

Methods

Study Participants

Out-of-treatment participants were recruited using targeted sampling techniques, described in detail elsewhere (Peterson et al., 2008). In summary, 12 areas throughout the city were chosen for recruitment based on: 1) interviews with public health officials and police; 2) a review of the data concerning rates of HIV infection; 3) crime and drug abuse treatment admissions; and 4) street observations. Choosing two areas per month, the recruiters approached individuals in the street, inquired about their interest in participating in the study and screened them for participation.

The inclusion criteria were: 1) 18 years old or over; 2) meeting the criteria for opioid dependence as described in the American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders, IV Edition (APA, 1994), which includes items indicating loss of control, use in spite of adverse consequences and physiological expressions of dependence (e.g., tolerance and withdrawal); 3) meeting U.S. federal requirements for methadone maintenance treatment (i.e., at least one year of opioid dependence); 4) not currently seeking

drug abuse treatment; 5) not having sought drug abuse treatment in the past year; and 6) willingness to provide informed consent.

As part of the larger study and prior to the ethnographic interviews, participants took part in a structured baseline interview assessing demographics, drug use and criminal justice histories, drug treatment experience, and other aspects of psychosocial functioning (Schwartz et al., 2007). The participants were recruited to the ethnographic component of the study within approximately 30 days of the baseline interview. The out of treatment ethnographic cohort was selected based on their willingness to participate in the ethnographic component of the study.

Study Sample—There were 26 out-of-treatment adult opioid dependent participants who were interviewed at baseline. These individuals had a mean age of 44.5 years, 46% were men, 88% were African American, 62% were divorced or had never been married, and just over one-third reported completing less than 12 years of formal education. Twenty-seven percent of the participants had no prior drug abuse treatment experience, 42% reported one prior treatment experience, 19% had two previous treatments and 12% reported 3 or more prior treatments. Forty-two percent of the participants stated that they frequently used both heroin and cocaine, while 58% reported that heroin was their primary drug of choice. Forty-six percent of the participants reported injecting drugs two or more times per day within the past 6 months, on average. In terms of criminal behavior, the sample reported that for the period of 30 days prior to the interview they committed crimes on an average of 18.7 days and earned $931 in illegal income. Five (19.2%) of the participants were on probation or parole. Participants had spent an average of 47 months incarcerated in their lifetime prior to the study entry. Three participants (11.5%) reported having unstable living arrangements and eight (30.8%) reported living with a drug user. Twenty-two (84.6%) reported no employment income in the past month,

Ethnographic Interviews—The majority of the out-of-treatment ethnographic interviews were conducted in locations indigenous to the research participants (e.g., participant's homes, local coffee shops, and porch steps) and at field locations in the general proximity of the neighborhoods where the participants live and congregate. This technique provided a setting familiar to the participant and an opportunity to conduct field observations of the settings in which participants live and spend time.

All ethnographic interviews began with semi-structured questions concerning participants' drug use and treatment histories and attitudes towards methadone, but the participants themselves guided the flow of the interviews. When necessary, the ethnographers asked questions in order to elicit greater detail and to clarify participants' statements. Interviews 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.

Analysis—The ethnographic interviews were recorded, transcribed, reviewed for accuracy and completeness, and entered into Atlas.ti. Analyses were conducted using a modified grounded theory methodology, an approach that permits systematic analysis of data and inductively builds theory (Strauss & Corbin, 1991). The ethnographers coded data in Atlas.ti in two phases. In the open coding phase, two coders looked for descriptions of facilitators and barriers to treatment entry. Codes were compared and discussed by the two coders until consensus was reached. During the second coding phase, the data were selectively coded and categorized to reflect the reasons given by participants for seeking, entering, or not entering treatment. For this paper, focused on the codes pertaining to participants' perspective on not entering treatment.

Findings—Although one of the inclusion criteria for study participation was that opioid-dependent individuals were not seeking nor had been enrolled in drug abuse treatment in the 12 months preceding enrollment, all of the participants had opinions about treatment entry and nearly three-quarters had sought treatment in the past. Based upon these opinions and experiences, several themes emerged from the participant data which are described below.

Barriers to treatment entry

Many of the participants had, at one time or other during their addiction careers, recognized the need for entering drug abuse treatment; however, they reported a variety of barriers that thwarted their efforts. A number of the participants discussed the ubiquitous waiting lists for methadone treatment in Baltimore, which have existed for all the publicly-funded methadone treatment programs for more than a decade. In order to gain treatment entry from the waiting list, participants reported having to call the clinic on a frequent basis, which created a barrier for those who did not have ready access to a telephone.

Once a treatment spot became available on the waiting list (when another patient was discharged from the clinic, permitting a new admission), participants reported facing two additional barriers. First of all, many clinics required applicants to bring a photo ID card prior to admission. The out-of-treatment participants' chaotic lifestyles, poverty, and unstable living arrangements often led them to be without an ID (e.g., driver's license, etc.). Secondly, participants frequently mentioned the lack of insurance or money to pay clinic fees as a major barrier to treatment enrollment. Publicly funded methadone programs charge a weekly fee based on the ability to pay (ranging in Baltimore from $2 to $70 per week). Non–publicly funded programs may charge the same fee to all patients, regardless of ability to pay (a minimum of $70 or more per week). The lack of insurance or ability to pay may not be an important factor in most other countries such as Australia, Canada, France and the United Kingdom which have a public health system which includes coverage for opioid agonist therapy. One participant recalls the experiences from his days of seeking treatment:

> Participant (P): "It seem like every morning. I'm trying hard to get into a treatment you know. I call say I have no insurance. I - Every morning I'm calling somebody to try to get help."

Taking care of business

Some study participants reported not wanting to give up the lifestyle that accompanies opioid addiction. This aspect of addiction was described as "taking care of business" prior to the widespread availability of methadone treatment in the US (Preble & Casey, 1969). The following statement highlights this sentiment.

> P: "I know I can go back again in the Program anytime I want, you know what I mean, that's why I have that crutch, I know that's there! But the streets is here, you know what I mean and I'm so used to being in the streets, I am so used to getting up in the morning, go out and you know, go get the dope. See when I just go get medicated, I ain't do nothing but come home! Go to work and come home, take a bath, eat and you gone to sleep. See when you out chasing heroin, I am out in the street, I'm running into different people, you see what I'm saying, I'm hooking up with this chick, I'm going half with this person or this person gave me something and this and that."

Prefer time-limited treatment

There were those participants who reported not wanting to be on the "program" for long-term maintenance. A 48-year-old White woman expressed her apprehension about maintenance treatment:

> P: "If I was to get into a methadone program I would tell my counselor that I don't want to be drinking this for the rest of my life. And I don't want to go over certain milligrams because it's detrimental to you when they detoxing you. And after they finish with you, you gets real sick. Like I say my girlfriend just come out the hospital and she bad off. And see that's what scares me, that's what scares me, I'm scared."

Some would have preferred a 6 to 12 month-long methadone treatment. However, participants did not feel they were able to advocate for themselves for such time-limited treatment and in fact, methadone detoxification is generally not available in Baltimore as it is viewed by the treatment system as ineffective compared to maintenance therapy, because good patient outcomes are associated with longer retention in opioid agonist therapy (Sees et al., 2000).

Question effectiveness—Others state that they remained outside of treatment because they question methadone treatment's effectiveness, pointing to examples of methadone patients who are seen purchasing and using other drugs such as benzodiazapines and cocaine. It is possible that this is simply a rationalization for not seeking treatment. On the other hand, successful patients may not be as visible to out-of-treatment individuals as compared to those who are enrolled in treatment but who continue to use drugs. This perspective is clearly stated in the following quote:

> P: "I got a girlfriend, she take them pills every now and then. To me she's defeating the purpose because she's on the meth program and now she want to shoot coke. And with her shooting coke she's waking up ill in the morning. And she drinking a hundred and something, a hundred and ten milligrams of meth. And then she go to program doing meth and come home and shoot coke all day. The meth ain't going to work if you doing that much coke and popping pills."

Beliefs about Methadone—Others cited beliefs regarding the physical effects of methadone previously reported among drug users (Zweben & Sorensen, 1988), which may have served as a deterrent for treatment entry. The following exchange between a 53-year-old African American man and the ethnographer reflects some of these beliefs.

> P: Cause Methadone worser than the heroin. You know. Interviewer (I)I: Why do you say that?
>
> P: Because it makes your bones brittle it mess your teeth up and oh man. And all that! And it's a worser habit than heroin.
>
> I: So you don't - you, you --
>
> P: I would rather mess with the dope and the coke than mess with that Methadone. I got a buddy that was on that Methadone, he got 150 milligrams they locked him up, he almost died."

Fear of methadone withdrawal

In some cases, the fear of methadone withdrawal and detoxification may occur for sound reasons. The heroin-addicted individual relinquishes control upon entry into treatment. Should the clinic decide to reduce the patients' dose for any number of reasons, or should the participants become incarcerated, they are subject to methadone withdrawal, which participants believe to be more difficult than withdrawing from heroin.

Enabling

Others chose not to enter treatment because their relatives and/or partners provided various kinds of support that enabled them to continue their drug use without causing them hardship. A 38-year-old African American woman further illustrated the point by reporting:

> P: "Ah, when I get up in the morning I'm thinking about how I'm going to go about getting [on out] and sniffing some dope. Um, ah, using-I probably hit up my own family for a couple of dollars. You know what I mean? If that don't work, I just…I just doing. I just have to tough it out. I don't - you know what I mean, because I don't want to be - I don't put myself out on the street like that, you know what I mean, try to sell myself to get it because I don't believe in all of that. You know what I mean? I just try to, do what I got to do. I'd rather visit those in my family or go to friends. You know what I mean? People that I know. You know what I mean? That would be my last - I mean I'd have to be at my rock bottom for me. I could be like, I don't know where to get nothing from nobody and I would go stand on the corner, I couldn't do it because [chuckles] it's not in me. [chuckles] I can't do it."

Demands upon the Patient

Other participants reported that they did not want to deal with the demand associated with attending the drug treatment program. For example, this 53-year-old African American man said:

> P: "I might not want to get up every morning and go on to the program but you got to go you got to go. Some people go every day some of them go two or three times a week. Some of them go once a week and get medicated for the whole week. But that ain't for me, you know that ain't for me. If I want to stay in the bed half the day you know I can do that."

Self-medication—Some participants preferred attempting personal or alternative methods for "getting clean" or to using a self-prescribed strategy for managing opioid use to the more formal treatment process. In one particular case, a 56-year-old African American woman reported being able to gain access to street acquired methadone.

> P: "But I don't want to be on a program I don't want to be dependent. You know what I'm saying on that. Because that's leaving one - - and that Methadone is worser than the heroin. So what I do is I'll get a bottle not a whole bottle. [Me and a friend of mine we get a bottle on Wednesday or Thursday and I'll put twenty and he'll put twenty. And he drinks a hundred and twenty milligrams. I get half he gets half."

For this participant, who was not willing to enter treatment at the time of the interview, buying street methadone, despite its risks of arrest and overdose, was a viable option. After nearly 30 years of heroin addiction, she believed she had found an alternative formula that allowed her to avoid withdrawal and to participate in the lives of her grandchildren.

Discussion

Heroin-dependent individuals who try to access treatment but are unable to do so represent a lost opportunity to effect beneficial change for both the individuals and the communities of which they are a part, given methadone treatment's proven efficacy in reducing heroin use, HIV transmission and criminal behavior (Ball & Ross, 1991; Mattick et al., 2003; Metzger et al., 1993). While it is possible that, for some number of individuals, reasons given for not seeking treatment are rationalizations reflecting ambivalence about discontinuing heroin use (Rosenblum et al., 1991), the fact that a rationale can be provided for difficulty in accessing treatment makes it important that we address the issues and concerns that are cited.

Some of the reasons given as barriers to treatment entry represent policies or practices that are capable of remediation by individual programs, and/or by the treatment systems within which those programs exist. Other reasons, such as the shortage of treatment slots in the US, are decades-long problems that have had serious impact on public health and safety in terms of

the spread of HIV infection, overdose death and incarceration. Such reasons would be resolved by increased funding for drug treatment or universal insurance coverage with parity for addiction treatment such as is available in many countries throughout the world. Reforms on this front have thus far eluded US policymakers and are outside the control of drug abuse treatment programs.

Difficulties associated with waiting lists for treatment entry were cited by study participants and have been consistently reported in the literature for the last three decades (Brown et al., 1989; Glasscote et al., 1972; Schwartz et al., 2006; Zule & Desmond, 2000). While adequate funding for all treatment forms remains the ultimate solution for increasing treatment capacity and reducing waiting lists, there are actions that can be taken by programs and treatment systems that demand limited or no additional resources. Interim methadone treatment, in which individuals on a waiting list are provided pharmacological treatment only pending program entry, has been found to be efficacious in randomized clinical trials, in that it has been shown to reduce heroin use and increase treatment entry rates (Yancovitz et al., 1991; Schwartz et al., 2006; 2007). Interim treatment with buprenorphine has been proven efficacious in Norway (Krook et al., 2002). Other viable alternatives include referral to buprenorphine treatment through primary care settings, such as in France (Fatseas & Auriacombe, 2007), or inpatient rehabilitation, both of which may have their own limitations on availability. At minimum, individuals needing to be placed on a waiting list can be contacted by phone (if individuals have phone access) or by post card on a weekly basis employing an address provided by the treatment applicant, or the individual can be provided a business card allowing the individual to contact the program and learn his/her status. These latter strategies can, at least, allow individuals to feel they are not getting lost in an overwhelmingly complex system.

Some participants endorsed payment for services as a barrier to treatment entry. Treatment demand can be met to some extent by the growing number of private-for-profit clinics for those able to pay their full fee on an ongoing basis. Even the relatively small co-payment required by some grant-funded programs (which average about $5 per week) may present a barrier to treatment entry for some potential patients. Providing free treatment may increase the rate of treatment entry and retention (Booth et al., 2003; Jackson et al., 1989; Maddux, Prihoda & Desmond, 1994), although this approach too is dependent upon the unlikely prospect of increased funding for such services.

Some participants reported their lack of health insurance as a barrier to entry. This issue reflects the large number of uninsured individuals in the US as well as the lack of health insurance coverage parity for addictive diseases as compared to other illnesses for those who are insured. Furthermore, in the US, Medicaid coverage, the federal health insurance program for the poor, varies from state to state, may not cover drug abuse treatment, and has restrictive eligibility criteria (Deck & Carlson, 2005).

Other barriers to treatment entry include the requirement set by some programs that applicants present a valid ID at the time of admission. Many addicted individuals live chaotic lives and do not have such documents. While the ID requirement is well intentioned, it may pose an unnecessary barrier to treatment initiation. Some programs have reduced this barrier by issuing picture IDs for individuals indicating their affiliation with the program and permitting a continuing check on the individual's right to receive services. Alternatively, treatment systems can permit patients a grace period following admission during which time they provide assistance in obtaining such an ID within a reasonable amount of time after admission.

Some individuals reported wanting to receive methadone for a time-limited episode, such as six to 12 months. This type of time-limited treatment was not available in Baltimore's public methadone programs because of its relative lack of efficacy as compared to maintenance (Sees

et al., 2000). However, there is a concern with such a comparison. The efficacy of long-term detoxification would be more appropriately compared to the efficacy of continuing life on the streets than to methadone maintenance. Individuals who reject a long-term detoxification are not going to opt for maintenance. Their alternative is continuing drug use on the streets with its demonstrated risk of crime, disease and death. The intent of long-term detoxification is not only to provide sufficient time to allow individuals to be exposed to counseling and treatment services, it is to allow individuals time to acclimatize themselves to the role of methadone patient and encourage as long a period of treatment as the patient will accept. In that regard, it should be noted that patients in long-term detoxification can "roll themselves over" for an additional period of treatment after concluding an initial six months or can enter maintenance treatment at any time. Denying individuals who choose to view themselves as being in time-limited methadone treatment rather than maintenance the opportunity to access treatment has the undesirable consequence of relegating those individuals to life on the streets. Arguably, when we should be creating the fullest possible range of treatment options to attract individuals into treatment we are closing off options that have the potential to engage some number of individuals.

Nevertheless, for individuals to make an informed decision about their length of treatment, it would be of some benefit to make available to them a standardized and rigorous summary of the evidence of the effectiveness of drug abuse treatment. While evidence-based reviews are common in the medical field and provide the practitioner reliable information about effectiveness of treatment, there does not appear to be a widely accepted and utilized review for drug-abuse treatment program applicants. Such a summary could provide evidence-based outcome data with various treatment approaches, duration and dose. It would permit patients to have the same information available to practitioners and could form the basis of a more informed discussion about treatment. In this regard, future research could examine social marketing approaches that provide the community-at-large with a more positive view of successful methadone treatment.

There are other active approaches that have proven useful to increase treatment enrollment. Some of these approaches involve structural changes in clinic practices that may alter the mechanism by which clinics admit patients. These approaches include providing rapid intake (Woody et al., 1975), identifying a central intake point for the treatment system (Guydish et al., 2001), and using performance improvement approaches to make rapid changes in the intake process (McCarty et al., 2007). Other approaches, include street outreach (Booth et al., 2003) and providing entry into treatment through syringe exchange programs have been shown to be effective (Riley et al., 2002).

Some participants reported not wanting to deal with the onerous nature of the methadone maintenance treatment structure. At the onset of treatment, patients must attend the clinic daily for methadone administration. Medication hours may be limited and may interfere with patients' work schedules (Bourgois, 2000). Program hours of operation may provide an impediment where individuals have work, child care or other family responsibilities. Programs within a system can provide overlapping, but differing, hours of operation to make certain that patients have a capacity to access programs on a schedule that accords with reasonable needs.

Methadone patients must also attend counseling and provide a urine sample upon request or face possible sanction from their counselor. Thus, the control over access to methadone treatment (unlike their access to heroin) must be ceded to the clinic, leading to the patients' fear of being involuntarily withdrawn from methadone. Programs should recognize the role demands that are placed on treatment patients. In adhering to a schedule, in becoming involved in a counseling relationship, in complying with rules and procedures, the patient is expected to cede to the program a considerable portion of his/her independence. In return for the potential

to limit his/her dependence on opioid drugs, the individual must be willing to become, in substantial measure, the passive respondent to program wishes and demands. In that context the initial period of engagement into treatment can be seen as highly significant, and as a period when the advantages as well as the rigors of the treatment process need to be made clear, in order to limit the risk of unwelcome surprises and resulting dropout.

The fear of detoxification is heightened by the lack of methadone availability in US jails and prisons (Rich et al., 2006). Withdrawing from methadone in jail is a common experience of methadone patients. This day-to-day reality for methadone patients has little to do with treatment per se but rather lies in the inability or unwillingness of many correctional facilities to maintain the continuity of care for addictive disorders generally afforded to other illnesses. Paradoxically, the unintended consequence of arrest (even on a minor charge) is to make methadone treatment undesirable for those individuals who may need it the most. Such a policy is at odds with the goals of both the treatment and the corrections systems and is easily remediable. For example, Rikers Island has provided continued methadone treatment for incarcerated patients since 1987 (Magura et al., 1993; Tomasino et al., 2001) and Baltimore's Detention Center began doing so in January 2008.

Participants raised a number of pharmacological issues, some of which were centered in reality and others in myth. Among the former was the experience that withdrawal from methadone was worse than withdrawal from heroin and that methadone was a crutch, substituting one drug for another. This belief was mentioned in association with involuntary "cold turkey" detoxification in a correctional facility and also with respect to discharge from treatment. This view can be addressed by a deliberate effort to solicit ideas about methadone and methadone treatment as a part of the initial engagement process with an effort to discuss patient beliefs and concerns without criticism of the patient or dismissal of concerns as trivial or silly. By providing continued methadone in jail, slow dose reductions for patients being discharged from treatment, the abolition of using dose reduction as a form of punishment, and low threshold treatment as an alternative to discharge (Calsyn et al., 2003) for patients who desire it, programs could address some of their potential patients' concerns about withdrawal from methadone.

Even patients enrolled in methadone treatment for several years may be poorly informed about their treatment (Stancliff et al., 2002) and myths about methadone such as that it rots your bones and teeth have been persistently reported (Schwartz et al., 2008; Zweben & Sorensen, 1988). The present study confirmed these findings and it supports the need for community and patient education about this widespread treatment modality.

Of course, even if all of the issues above are addressed, not all opioid-dependent individuals will seek treatment. Participants mentioned the allure of the lifestyle and of the drug as keeping them actively using and disinterested in treatment. This allure has not changed since before the widespread availability of methadone treatment (Preble & Casey, 1969). In order to attract and retain individuals in methadone treatment, it might be helpful for programs to develop meaningful employment opportunities or social activities to serve as a counterbalance to those aspects of the drug using lifestyle. The development of effective employment opportunities has proven challenging (Magura et al., 2007; Zanis et al., 2001). A void in the social life of individuals who discontinue compulsive drug or alcohol use is not limited to patients in methadone treatment programs and can be filled by attendance at 12 step meetings (Brown 1985). Unfortunately, patients enrolled in opioid agonist treatment are not always welcome in Narcotics Anonymous meetings and special groups called Methadone Anonymous have been developed to provide recovery support for patients in opioid agonist medications (Gilman et al., 2001; Glickman et al., 2006).

This article has a number of limitations. First, the findings may not generalize to other parts of the world in which the drug treatment system differs considerably from the system in the US. Second, this population was recruited through targeted sampling from the streets and may not reflect those opioid-dependent individuals who are working and who obtain heroin from acquaintances or indoor drug markets.

Efforts to increase the relative percentage of patients in treatment may have a significant impact on overdose death, HIV infection, and crime (Woody & Munoz et al., 2000). Treatment programs, systems of treatment and funders should do what is possible to reduce barriers to treatment entry. More research is needed on approaches to increase the attractiveness of treatment, including linking it to employment or socialization opportunities, the use of social networks to increase drug treatment entry, and ways to improve the knowledge and attitudes of the community-at-large towards drug treatment. These efforts may help reduce the number of out-of-treatment individuals.

Acknowledgments

This study was supported by the National Institute on Drug Abuse (NIDA) DA 0158420 (Dr. Schwartz). The content is solely the responsibility of the authors and does not necessarily represent the official views of NIDA or the National Institutes of Health. We wish to thank the research participants, our intrepid interviewers, Mr. Warren Lee and Terrence Hudson and lastly, Ms. Melissa Harris for her assistance in preparing the manuscript.

References

American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. Vol. 4. Washington, DC: APA Press; 1994.

Ball, JC.; Ross, A. The effectiveness of methadone maintenance treatment: Patients, programs, services, and outcomes. New York: Springer-Verlag; 1991.

Bell J, Caplehorn JR, McNeil DR. The effect of intake procedures on performance in methadone maintenance. Addiction 1994;89(4):463–471. [PubMed: 8025505]

Booth RE, Corsi KF, Mikulich SK. Improving entry to methadone maintenance among out-of-treatment injection drug users. Journal of Substance Abuse Treatment 2003;24:305–311. [PubMed: 12867204]

Booth RE, Crowley TJ, Zhang Y. Substance abuse treatment entry, retention and effectiveness: out-of-treatment opiate injection users. Drug Alcohol Dependence 1996;42:11–20.

Bourgois P. Disciplining addictions: The bio-politics of methadone and heroin in the United States. Culture, Medicines, and Psychiatry 2000;24:165–195.

Brown BS, Hickey JE, Chung AS, Craig RD, Jaffe JH. The functioning of individuals on a drug abuse treatment waiting list. American Journal of Drug Alcohol Abuse 1989;15(3):261–274.

Brown, S. Treating the Alcoholic: A developmental model of recovery. New York, NY: John Wiley and Sons; 1985.

Calsyn DA, DeMarco FJ, Saxon AJ, Sloan KL, Gibbon KE. Evaluation of a minimal services track for noncompliant patients in opioid substitution treatment. American Journal of Public Health 2003;93 (7):1086–1088. [PubMed: 12835190]

Campbell KM, Deck D, Krupski A. Impact of substance abuse treatment on arrests among opiate users in Washington State. American Journal on Addiction 2007;16(6):510–520.

Deck D, Carlson MJ. Retention in publicly funded methadone maintenance treatment in two western states. Journal of Behavioral Health Services Research 2005;32(1):43–60. [PubMed: 15632797]

Des Jarlais DC, Paone D, Friedman SR, Peyser N, Newman RG. Regulating controversial programs for unpopular people: methadone maintenance and syringe exchange programs. American Journal of Public Health 1995;85:1577–1584. [PubMed: 7485676]

Drucker, E.; Lurie, P.; Wodak, A.; Alcabes, P. AIDS. Vol. 12. 1998. Measuring harm reduction: the effects of needle and syringe exchange programs and methadone maintenance on the ecology of HIV; p. S217-S230.

Fatseas M, Auriacombe M. Why buprenorphine is so successful in treating opiate addiction in France. Current Psychiatry Reports 2007;9(5):358–364. [PubMed: 17915074]

Friedman SR, Tempalski B, Perlis T, Keem M, Friedman R, Flom P. Estimating numbers of injecting drugs users in metropolitan areas for structural analyses of community vulnerability and for assessing relative degrees of service provision for injection drug users. Journal of Urban Health 2004;81:377–400. [PubMed: 15273263]

Gilman SM, Galanter M, Dermatis H. Methadone Anonymous: A 12-Step Program for Methadone Maintained Heroin Addicts. Substance Abuse 2006;22(4):247–256. [PubMed: 12466684]

Glasscote, R.; Sussex, JN.; Jaffe, JH.; Ball, J.; Brill, L. The treatment of drug abuse: programs, problems, prospects. Washington, D.C: Joint Information Services. American Psychiatric Association; 1972.

Glickman L, Galanter M, Dermatis H, Dingle S. Recovery and spiritual transformation among peer leaders of a modified methadone anonymous group. Journal of Psychoactive Drugs 2006;38(4):531–533. [PubMed: 17373569]

Goldsmith DS, Hunt DE, Lipton DS, Strug DL. Methadone folklore: beliefs about side effects and their impact on treatment. Human Organization 1984;43:330–340.

Guggenbuhl, L.; Uchtenhagen, A.; Paris, D. Part II Treatment and support needs of drug addicts. Zurich, Switzerland: Addiction Research Institute, A project of the World Health Organization; 2000 December 2000. Adequacy in drug abuse treatment and care in Europe.

Guydish J, Woods WJ, Davis T, Bostrom A, Frazier Y. Does centralized intake improve drug abuse treatment outcomes. Journal Substance Abuse Treatment 2001;20(4):265–73.discussion 275–276

Hanson, B.; Beschner, G.; Walters, JW.; Bovelle, E. Life with Heroin: Voices from the Inner City. Lexington MA: Lexington Books; 1985.

Hunt DE, Lipton DS, Goldsmith DS, Strug DL, Spunt B. “It takes your heart”: the image of methadone maintenance in the addict world and its effect on recruitment into treatment. International Journal of the Addictions 1985;20:1751–1771. [PubMed: 3833809]

Jackson JF, Rotkiewicz G, Quinones MA, Passannante MR. A coupon program drug treatment and AIDS education. International Journal of the Addictions 1989;24:1035–1051. [PubMed: 2628354]

Krook AL, Brørs O, Dahlberg J, Grouff K, Magnus P, Røysamb E, Waal H. A placebo-controlled study of high dose buprenorphine in opiate dependents waiting for medication-assisted rehabilitation in Oslo, Norway. Addiction 2002;97(5):533–42. [PubMed: 12033654]

Lewis DC. Access to narcotic treatment programs and medical care: prospects for the expansion of methadone maintenance treatment. Journal of Addictive Disease 1999;18:5–21.

Maddux JF, Prihoda TJ, Desmond DP. Treatment fees and retention on methadone maintenance. Journal of Drug Issues 1994;24:429–443.

Magura S, Blankertz L, Madison EM, Friedman E, Gomez A. An innovative job placement model for unemployed methadone patients: a randomized clinical trial. Substance Use & Misuse 2007;42(5):811–828. [PubMed: 17613946]

Magura S, Rosenblum A, Lewis C, Joseph H. The effectiveness of in-jail methadone maintenance. Journal of Drug Issues 1993;23:75–99.

Mark TL, Woody GE, Juday T, Kleber HD. The economic costs of heroin addiction in the United States. Drug Alcohol Dependence 2001;61(2):195–206.

Mattick, RP.; Kimber, BC.; Davoli, M. The Cochrane data base of systematic reviews. 2003. Methadone maintenance versus no opioid agonist replacement therapy for opioid dependence. Art. No. CD00209

McCarty D, Gustafson DH, Wisdom JP, Ford J, Choi D, Molfenter T, Capoccia V, Cotter F. The Network for the Improvement of Addiction Treatment: enhancing access and retention. Drug and Alcohol Dependence 2007;88(2–3):138–145. [PubMed: 17129680]

Metzger DS, Navaline H, Woody GE. Drug abuse treatment as AIDS prevention. Public Health Reports 1998;113 (Suppl 1):97–106. [PubMed: 9722815]

Metzger DS, Woody GE, McLellan AT, O’Brien CP, Druley P, Navaline H, et al. Human Immunodeficiency Virus Seroconversion among intravenous drug users in- and out-of-treatment: An 18-month prospective follow-up. Journal of Acquired Immune Deficiency Syndromes 1993;6(9):1049–1056. [PubMed: 8340896]

Moss AR, Varnizan K, Gorter R, Bacchetti P, Watters J, Osmond D. HIV seroconversion in intravenous drug users in San Francisco 1985–1990. AIDS 1994;8:223–231. [PubMed: 8043227]

Peterson J, Reisinger HS, Schwartz RP, Mitchell SG, Brown BS, Agar AH. Targeted Sampling in Drug Abuse Research: A Review and Case Study. Field Methods 2008;20(2):155–170.

Preble E, Casey JJ. Taking care of business: the heroin users' life on the street. The International Journals of the Addictions 1969;4(1):1–24.

Rich JD, Boutwell AE, Shield DC, Key RG, McKenzie M, Clarke JG, Friedmann PD. Attitudes and practices regarding the use of methadone in US state and federal prisons. Journal of Urban Health 2005;82(3):411–419. [PubMed: 15917502]

Riley ED, Safaeian M, Strathdee SA, Brooner RK, Beilenson P, Vlahov D. Drug user treatment referrals and entry among participants of a needle exchange program. Substance Use & Misuse 2002;37(14): 1869–1886. [PubMed: 12511056]

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

Schwartz RP, Highfield DA, Jaffe JH, Brady JV, Butler CA, Rouse CO, et al. A randomized controlled trial of interim methadone maintenance. Archive of General Psychiatry 2006;63:102–109.

Schwartz RP, Highfield DA, Jaffe JH, Callaman JM, O'Grady KE. Arandomized controlled trial of interim methadone maintenance: 10 month-follow-up. Drug and Alcohol Dependence 2007;86:30–36. [PubMed: 16793221]

Schwartz RP, Kelly SM, O'Grady KE, Peterson JA, Reisinger HS, Mitchell SG, et al. In-treatment v. Out-of-treatment Opioid Dependent Adults: Drug Use and Criminal History. American Journal on Drug and Alcohol Abuse 2008;34(1):17–28.

Sees KL, Delucchi KL, Masson C, Rosen A, Clark HW, Robillard H, et al. Methadone maintenance *vs* 180-day psychosocially enriched detoxification for treatment of opioid dependence: a randomized controlled trial. Journal on the American Medical Association 2000;283(10):1303–1310.

Stancliff, S.; Myers, JE.; Steiner, S.; Drucker, E. Beliefs about Methadone in an Inner-City Methadone Clinic Journal of Urban Health: Bulletin of the New York Academy of Medicine. Vol. 79. The New York Academy of Medicine; 2002 December 2002.

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

Tomasino V, Swanson AJ, Nolan J, Shuman HI. The key extended entry program (KEEP): a methadone treatment program for opiate-dependent inmates. Mount Sinai Journal of Medicine 2001;68:14–20. [PubMed: 11135501]

Watters JK, Cheng Y. HIV-1 infection and risk among intravenous drug users in San Francisco: preliminary results and implications. Contemporary Drug Problems 1987;15:397–411.

Woody G, O'Hare K, Mintz J, O'Brien C. Rapid intake: A method for increasing retention rate of heroin addicts seeking methadone treatment. Comprehensive Psychiatry 1975;16(2):165–169. [PubMed: 1120417]

Woody GE, Muñoz A. Efficacy, individual effectiveness, and population effectiveness in substance abuse treatment. Current Psychiatry Reports 2000;2(6):505–7. [PubMed: 11123002]

Yancovitz SR, Des Jarlais DC, Peyser NP, Drew E, Friedman P, Trigg HL, et al. A randomized trial of an interim methadone maintenance clinic. American Journal of Public Health 1991;81:1185–1191. [PubMed: 1659236]

Zanis DA, Coviello D, Alterman AI, Appling SE. A community-based trial of vocational problem-solving to increase employment among methadone patients. Journal of Substance Abuse Treatment 2001;21 (1):19–26. [PubMed: 11516923]

Zule WA, Desmond DP. Factors predicting entry of injecting drug users into substance abuse treatment. American Journal of Drug Alcohol Abuse 2000;26(2):247–61.

Zule WA, Desmond DP. Attitudes toward methadone maintenance: implications for HIV prevention. Journal of Psychoactive Drugs 1998;30:89–97. [PubMed: 9565212]

Zweben JE, Sorensen JL. Misunderstanding about methadone. Journal of Psychoactive Drugs 1988;20 (3):275–281. [PubMed: 3069986]