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Consumer Attitudes about Opioid Addiction Treatment: A focus group study in New York City

Nancy Sohler, PhD, MPH,
Associate Professor, The City College of New York, Sophie Davis School of Biomedical Education, 160 Convent Avenue, Harris Hall Room 400, New York NY 10031, Phone: 212-650-7768; Fax: 212-650-7778

Linda Weiss, PhD,
Director, Center for Evaluation and Applied Research, New York Academy of Medicine

James E. Egan, MPH,
Student, University of Pittsburgh School of Public Health

Carolina Lopez, BS,
Executive Director New York Harm Reduction Educators

Jamie Favaro, LMSW,
Executive Director Washington Heights Corner Project

Robert Cordero, MSW, and
Executive Director CitiWide Harm Reduction

Chinazo Cunningham, MD, MS
Associate Professor, Albert Einstein College of Medicine and Montefiore Medical Center

Nancy Sohler: nsohler@med.cuny.edu

Abstract

Objective—To develop effective programs for people who are opioid-dependent and to impact the opioid epidemic in New York City, it is crucial that we monitor attitudes about opioid addiction treatments among opioid users who have experienced barriers to engagement and retention in addiction treatment.

Design—We conducted a qualitative study using focus groups.

Methods—We conducted six focus groups in three needle exchanges in New York City, which were audio recorded, transcribed, and systematically coded. We report on the main themes related to the study objectives.

Participants—Participants of each needle exchange who were opioid-dependent and had some knowledge of both methadone and buprenorphine were eligible.

Results—There were four main findings. Participants felt: (1) buprenorphine is an appropriate option only for those heroin users who are motivated to stop using; (2) they have less control over

Correspondence to: Nancy Sohler, nsohler@med.cuny.edu.

their addiction treatment with methadone than they would have with buprenorphine; (3) buprenorphine treatment is not accessible to many New York City residents who would benefit from this treatment; and (4) lack of access to buprenorphine treatment is the cause of treatment-related diversion.

Conclusions—Both methadone maintenance and buprenorphine treatment opportunities are necessary to address the diverse treatment needs of opioid-dependent people in New York City. However, the current medical model of buprenorphine treatment may be too restrictive for some opioid-dependent people, and may be contributing to the use of illicit buprenorphine. New models to deliver buprenorphine treatment may address these problems.

Keywords

heroin dependence; buprenorphine; methadone; qualitative research

BACKGROUND

Opioid addiction is a large and growing problem in the U.S.[1–4] The Food and Drug Administration has approved buprenorphine for the treatment of opioid addiction, and federal regulations passed in 2000 allow it to be prescribed in settings outside of substance abuse treatment programs. Prior to this, methadone was the only approved opioid agonist treatment available, and regulations around its use limited access and acceptability of addiction treatment by many drug users.[5] Approval of buprenorphine for use in primary care settings and for community pharmacy dispensing provides opportunities to increase the proportion of people who are opioid-dependent in addiction treatment.

However, utilization of buprenorphine treatment has remained relatively low,[6,7] and therefore its impact in New York City, a center for both heroin and illicit use of prescription opioids, is still uncertain. In 2009, the rate of heroin-related emergency department visits in New York City remained more than twice as high as the nation as a whole (152.5 vs. 69.4 visits per 100,000 population).[2] Nationwide, only a small proportion of providers who received training and licensing to prescribe buprenorphine are actively treating patients.[8] These data indicate that patients may not have adequate access to buprenorphine treatment, even now, 10 years after approval of this treatment option. On the other hand, illicit use of buprenorphine is increasing and several recent studies have raised concern about buprenorphine diversion in the U.S.[9–11]

Further, people who are opioid-dependent who seek buprenorphine treatment are typically from a narrow demographic subgroup of educated, white men and women who are addicted to prescription opioids rather than heroin.[6,12] Their demographic characteristics are in sharp contrast to those of the out-of-care opioid-dependent population in New York City who also may benefit from buprenorphine treatment. This latter population includes a large proportion of un/under employed, black and Hispanic people who are heroin users and have had difficulty engaging in the health care system.[13–16]

To guide development of effective programs for people who are opioid-dependent and to positively impact the opioid epidemic in New York City overall, it is crucial that we monitor

attitudes about opioid addiction treatments, particularly buprenorphine and methadone maintenance treatment, among heroin users who have experienced barriers to engagement or retention in addiction treatment. Additionally, clinicians who prescribe buprenorphine may not be knowledgeable about the treatment expectations and concerns of their patients, particularly because many primary care providers are relative new at treating opioid addiction in general, and new to buprenorphine treatment specifically. They may be unaware of patient objectives regarding abstinence and their experience self-managing the care they receive.[17,18] To help clinicians to elicit information from patients necessary to develop appropriate and effective treatment plans, they should be aware of patient beliefs about buprenorphine and methadone maintenance, both accurate and inaccurate; and patient expectations about treatment outcomes, both realistic and not.

Thus, we conducted a qualitative study to explore attitudes and barriers toward buprenorphine and methadone maintenance treatment for opioid addiction among people who are opioid-dependent.

METHODS

Participants

The study was conducted between April and October 2010 in three needle exchange programs in New York City. We collected data through a series of six focus groups that encouraged discussion on perceptions of relative effectiveness and accessibility of opioid addiction treatment options. Staff at each program recruited participants who were: 1) current or past users of heroin or illicit prescription opioids, 2) knowledgeable about buprenorphine from personal experience or via close friends, 3) at least 18 years old, and 4) fluent in English.

Research assistants met with participants individually, explained the purpose of the focus group, provided details about the study procedure, and obtained written informed consent. Participants were compensated with $10 for their participation in the focus groups, which ranged from 4–10 participants for each group. The Albert Einstein College of Medicine Institutional Review Board approved these study procedures.

Focus Group Procedures

Six focus groups were led by a PhD. epidemiologist with expertise in opioid addiction research and an MD with expertise in both addiction research and treatment. A research assistant took notes. The focus group followed a detailed discussion guide, which was designed to inform the development of a consumer-oriented buprenorphine program and consisted of the following three general topics: 1) differences between methadone and buprenorphine; 2) treatment goals and expectations for methadone and buprenorphine; and 3) positive and negative experiences with methadone and buprenorphine. Groups lasted approximately 60 minutes and were audio recorded.

Data Analysis

Audio recordings were transcribed by a professional transcription service to ensure an accurate account of their comments and to allow for the use verbatim quotations to illustrate study findings. The transcribed files were coded by one of the researchers attending the focus group and two additional researchers who did not attend the focus groups. An initial coding schema was designed, based on the goals of the study. Application of, and revisions to, the coding schema, which included codes derived from the data themselves, was an iterative process among the three coders. The final codes were entered into a database for efficient recovery of data reflecting particular topic areas and quotes.

Two of the coders then independently reviewed these data, identified themes related to the study objectives, and came to consensus about the most consistent themes regarding attitudes and barriers toward addiction treatment that were raised by the respondents. These themes and supporting data were agreed upon by all study authors and are presented here.

RESULTS

The study population reflected the demographic characteristics of the needle exchanges from which it was drawn: 38 study participants were predominantly male (87%) and Hispanic (63%), and the average age was 44 years. Fifty four percent had ever taken buprenorphine (prescribed or illicit), 8% were currently receiving buprenorphine treatment and 58% were currently in methadone treatment. (See table 1)

There were four main findings that inform our understanding of attitudes and access about opioid addiction treatment.

Finding 1: Participants had positive initial attitudes toward buprenorphine treatment relative to methadone treatment, but felt buprenorphine is an appropriate option only for those heroin users who are motivated to stop using and needed treatment to do so

Most participants were knowledgeable about how buprenorphine is taken (e.g., sublingually, daily, or more frequently), the procedures for administration (e.g., patients must not take opioids prior to buprenorphine administration), the potential for buprenorphine to be obtained from primary care and other providers, and the potential to obtain buprenorphine by prescription at a pharmacy.

Initially, the focus group discussions emphasized the benefits of buprenorphine. In fact, some called buprenorphine a “miracle drug.” For example:

> Look, it’s offering me a way out without suffering so much, that’s what I’m interested in. I’m chicken shit, I don’t want to feel the withdrawals, I don’t want to go through all that, and that’s what I’m interested in. And then it can maintain me. So, you know, it’s definitely beneficial for me. To me it’s like a miracle drug.
>
> You feel yourself again, you feel normal. That’s what I’m looking for.

> …And I tried suboxone I felt—I felt energetic. I felt like I haven't ever touched dope. I felt alive. I felt totally different like my mind was free, wasn't cloudy, you know. I was awake. I was energetic. It was like I was a new me.

In many cases buprenorphine was described as being a better treatment alternative for those addicted to opioids than methadone, because methadone was believed to cause negative long-term effects (e.g., "rotting the teeth and bones") and to perpetuate addiction. In addition, methadone made people taking it feel sick:

> See my problem is methadone—I'm tired of methadone because it has my body all out of it. It makes me sweat profusely, and then psychological side effects. I get joint pains. When I wake up in the middle of the night, I have real dry mouth.

> You can't even get off the methadone. I know this person who was doing like 33 milligrams of methadone every day, and he's been on it so long that he actually can't get off of it…like he'll have to stay forever on this shit.

As the discussion progressed, participants tempered their initial enthusiasm for buprenorphine, and it was described as a good treatment "only for people who were ready to stop using drugs" (as opposed to those trying to reduce their drug use). Upon further probing, we were able to elicit stories about participants' personal experiences or observation of others who got very sick after taking buprenorphine. One person described this as an "allergy" to the naloxone that is co-formulated with buprenorphine. Others realized that the sickness occurred only when people initiated buprenorphine while taking other opioids, which precipitated opioid withdrawal, a rapid and intense onset of withdrawal symptoms initiated when an antagonist (or partial antagonist like buprenorphine) is administered to someone who has opioids in his or her system. Participants generally recommended that those who expected to continue to use illicit opioids while receiving opioid agonist treatment should choose methadone treatment as a harm reduction approach, rather than buprenorphine. Thus, participants understood that taking other opioids and buprenorphine simultaneously could have negative consequences.

A minority viewpoint regarding treatment came from those participants who adamantly felt that neither buprenorphine nor methadone were helpful for people who are addicted to opioids, and that people needed to develop an "inner strength" or locate a social support system to overcome their addictions. While either medication might help prevent or alleviate withdrawal symptoms, treatment success depended on an individual's "state of mind" and life circumstances. These life circumstances include having family and friends that are supportive, having a job or other daily activity to occupy time, and having access to support groups. While all focus group participants accepted the view that personal drive and social support are crucial, many participants believed that buprenorphine would offer something new and different that could address reasons for prior treatment failures.

Finding 2: Participants felt they have less control over their addiction treatment with methadone than they would have with buprenorphine, particularly with regard to decisions that would allow patients to eventually become “drug free”

Participants generally felt the current delivery system for opioid addiction treatment was not consumer-friendly. Stories centered around experiences with methadone treatment, and focused on patient control over their treatment. For example, participants lamented the required daily visits to methadone clinics, which left them feeling a lack of autonomy in planning their daily schedules. Comments like the following were common:

> Methadone is like holding me back from doing many things, like work for instance. And there’s many other things that I’d like to do in the day.

Participants also resented their inability to *decrease* methadone dosages that would allow them to taper off the medication and be “drug free.” They felt providers kept patients in methadone treatment longer than needed because of financial incentives. In contrast, participants felt they had too much power over *increases* in methadone dosage, which were liberally allowed and considered by participants to be ultimately detrimental to patients. Participants reported that methadone increases “allowed patients to get high while still being in treatment.” They felt providers could not accurately identify patients who abused methadone while in treatment. As exemplified in the statements below, participants were frustrated by a sense of feeling captive to the methadone system.

> I’m not able to hold a job while I’m [in a methadone] clinic. What I do for a living, I got to be there at 7:00. To enable me to be there at 7:00, I’ve got to leave the house at 5:30. There’s no clinic open at that time. I want to change to the pill because, from what I’ve read and what I’ve heard, once they stabilize you on the pill they give them to you and you take them. The only thing you have to do is take your pill at whatever time you get up in the morning, and go to work.

> Certain methadone clinics, because the money, I see that they want to just keep you on the methadone. I mean I’ve been to a methadone clinic that their whole regimen was to get you off of the methadone, that’s what they wanted to do was to get you off of the methadone. But I’ve also seen these clinics where, they just keep increasing your dosage, increasing your dosage trying to keep you on the methadone.

Participants felt that engagement in buprenorphine treatment would be less problematic with respect to scheduling and dosage, as compared to methadone treatment. For example, they knew that buprenorphine prescriptions provide up to a month of medication without requirements of daily visits to clinics, and this would allow people to hold jobs and take care of other responsibilities. Most patients knew that, unlike methadone, increasing buprenorphine above a certain dosage would have little or no euphoric effect. The negative feelings about methadone providers were not expressed with regards to buprenorphine providers. It was unclear whether this was related to characteristics of the providers or the medication.

Finding 3: Despite participants' beliefs about buprenorphine being appropriate for only a subset of heroin users, they felt buprenorphine treatment is not accessible to many New York City residents who would benefit from this treatment

Participants felt that great availability of buprenorphine might improve the delivery system for opioid addiction treatment, in general. There were two distinct opinions about how buprenorphine expansion should be done. Some people felt there were too many barriers to receiving buprenorphine treatment, including a shortage of providers who would prescribe buprenorphine in New York City and clinical protocols ("rules") that made it difficult to get medication in a timely manner. Exploration of the latter concern revealed that some people were more comfortable working within the system of peer outreach and needle exchange programs than within the clinical system that required appointments, laboratory tests, and other clinical routines. This group felt that buprenorphine treatment should be provided by medical providers in community-based settings, such as the needle exchange programs where the focus groups were held. Other people noted the benefit of locating buprenorphine treatment within the traditional clinic setting. This group felt that people who want to stop using drugs need to have sufficient resolve to locate a physician, make an appointment, keep the appointment, and follow the clinical protocol. They felt that making things "too easy" would engage people in treatment who were not actually ready to abstain from using drugs, and thus, the treatment would fail. Either way, participants saw a clear need for providers to be involved in a successful treatment "program;" they did not advocate for complete self-management of their addiction. This feeling was expressed frequently, such as the following comments:

> PARTICIPANT: I'd rather get [buprenorphine] prescribed. Why? Because I need follow-up care with that.
>
> MODERATOR: You want more than just the drugs?
>
> PARTICIPANT: Yeah, I think if I could like manage my own, I wouldn't need help at all. So it's not just a drug; I need help also with it.
>
> > I've been on [methadone] four or five times, but I think with suboxone I'd be more successful. But the thing with suboxone is that it has to have more of a support group along with it. A lot of people tend to think they're superman or superwoman and they don't need nobody's help. But with this disease you cannot do it alone. You need help. You can't beat this disease alone.

Finding 4: Participants felt that the lack of access to buprenorphine treatment is the cause of treatment-related diversion

There were differences of opinion regarding access to physicians that were accepting new buprenorphine patients, which may reflect physician bias against heroin vs. other type of opioid addiction, as stated by one participant: *All of the providers are really pitching [suboxone] to the higher class. If they felt like you were on heroin, they'd want to send you to a methadone clinic.*

While there was disagreement about the actual availability of buprenorphine-prescribing physicians in New York City, participants agreed that buprenorphine is accessed "on the

street" easily. In fact, participants felt buprenorphine is more easily accessed "on the street" than in treatment settings.

The prevailing opinion was that buprenorphine was commonly obtained on the street to immediately/emergently manage opioid withdrawal symptoms. For people who are not ready to enter treatment or even considering entering treatment, street-purchased buprenorphine was seen as an effective alternative to using other opioids. For people who are ready to enter treatment, street-purchased buprenorphine was a useful emergency measure given the waiting time of initiating buprenorphine treatment in clinics.

However, participants were cautious about buprenorphine diversion behaviors. They typically concluded that street purchase of buprenorphine was not a good "long-term plan" for people who are ready for treatment. Participants consistently noted that in addition to the high cost of illicit buprenorphine and the legal risk associated with having illicitly obtained buprenorphine, the role of an experienced physician is crucial.

> PARTICIPANT: It stops you from withdrawing. I don't want to go through withdrawing, I don't want to go through none of that. Suboxone, it just cured me quick.
>
> MODERATOR: So if you couldn't get a prescription would you buy it on the street?
>
> PARTICIPANT: Yes
>
> MODERATOR: If you can get the stuff on the street, why go to a doctor?
>
> PARTICIPANT: It's safer, safer. It's safer.
>
> MODERATOR: If it's easy to get on the street, why go to a doctor.
>
> PARTICIPANT: You're getting it legally and you're not taking chances of getting caught and doing five years or six years.

DISCUSSION

We conducted six focus groups with people who are opioid dependent and asked questions regarding their attitudes about opioid addiction treatment options and the treatment system. Our aim was to better understand whether buprenorphine has the potential to have an impact on the opioid epidemic in New York City and how best to facilitate increased access to buprenorphine. Participants felt buprenorphine was a positive addition to addiction treatment system in New York City, particularly for people who were ready to stop using both illicit and prescribed opioids. They also felt that access to buprenorphine treatment is insufficient, and indicated that, from their perspectives, this lack of access may be driving the growing problem of buprenorphine diversion.

These findings are informative for providers and policy makers who are responsible for developing substance abuse treatment programs in New York and elsewhere. First, the positive and realistic expectations about buprenorphine treatment should be encouraging to providers who are considering initiating buprenorphine treatment in their practices. Buprenorphine appears to be a superior treatment option to methadone for some patients, particularly those who would benefit from having more control over their treatment and their

daily schedule. This is consistent with prior research that reported positive attitudes toward buprenorphine treatment and few patient-level barriers toward engaging in treatment.[19,20]

Although it is possible that scheduling issues are secondary to other barriers to employment (such as continued drug use), it is logical that daily methadone visits would represent a significant hurdle to continued employment, even for people with a good work history and credentials. For people with erratic work experience, as often the case with drug users, the additional factor of daily treatment visits (and their impact on schedule flexibility) is likely to make employment success even more unlikely.

Furthermore, many participants believed health care providers play a necessary role in the delivery of buprenorphine, as they knew inappropriate use of buprenorphine could lead to negative consequences. While some participants expressed distrust in methadone providers, this sentiment was not expressed with regard to buprenorphine providers. Because trust in providers has been demonstrated repeatedly as important in promoting engagement and retention in the general health care system,[21] as well as in HIV,[22] mental health,[23] and substance abuse treatment,[24] it is important for buprenorphine providers to continue to foster trusting relationships with patients. Developing and maintaining trusting relationships between providers and opioid-dependent patients, and allowing opioid-addicted patients to have some independence in their treatment may be challenging, but these appear to be key issues that shape perceptions about buprenorphine treatment. Trust and independence will be more challenging issues to address in the future, particularly as buprenorphine diversion appears to become more common.[25]

However, a number of participants felt buprenorphine providers are inadequately accessible to those who could benefit from this treatment. Perhaps the current medical model of delivering buprenorphine treatment is too restrictive for those heroin users who can benefit most from this particular treatment, and more immediate access to buprenorphine may be necessary to reach certain subgroups of opioid-dependent people. If further research demonstrates that offering buprenorphine treatment only within the medical setting truly inhibits a large proportion of out-of-treatment heroin users from engaging in care and encourages some people to obtain illicit buprenorphine, exploring the provision of buprenorphine treatment *outside of* the traditional medical setting may be warranted. Such settings might include needle exchange programs and community-based organizations that have onsite (part or full time) health care providers. Similar types of models that deliver health care outside of traditional medical settings have been explored in HIV treatment, which also attempts to engage marginalized populations.[26–28] Additional models were explored with regard to methadone treatment in the 1980's and 1990's,[29,30] but because methadone is so highly regulated, it was not feasible to implement such models on a wide scale. With buprenorphine, there have been a published demonstrations of different delivery models for buprenorphine treatment in the context of HIV care,[31,32] but the potential to develop novel models for delivery of substance abuse treatment with buprenorphine has yet to be fully explored.

It is of great concern that participants indicated to us that the system level barriers to obtaining buprenorphine treatment may be contributing to the growth in illicit exchanges of

buprenorphine. In the U.S. the rise in the illicit use of buprenorphine has raised concern about its potential to negatively impact on the opioid abuse epidemic. To curb this potential, most buprenorphine in the U.S. is prescribed in a co-formulation with naloxone, which reduces its abuse potential. Currently available data indicate that the risk of initiation of opioid misuse with buprenorphine is lower than that of other opioid agonists, and the risk of buprenorphine abuse among opioid-dependent individuals is relatively low.[33] However, data show that diversion of buprenorphine is occurring mainly from prescriptions written for the treatment of addiction.[34] As the discussion about diversion was unexpected in our study, we did not probe for great detail regarding the source of illicit buprenorphine, but it was notable that most references to illicit use indicated that it was primarily to address acute opioid withdrawal symptoms rather than "to get high," which is consist with previous reports from the U.S.[35–39]

Despite the perception in our study that illicit buprenorphine might be more accessible than prescribed buprenorphine, many participants voiced the importance of receiving buprenorphine treatment under the guidance of physicians. Several participants experienced or had knowledge of buprenorphine use without any/sufficient provider oversight that led to negative outcomes. Thus, our findings suggest that increasing access to medically supervised buprenorphine may reduce diversion. While we suggest that developing new models for offering buprenorphine treatment may succeed in improving access to care for some people, this new treatment models will need to be developed and implemented cautiously with the issue of diversion kept in mind.

Our findings should be considered in the context of limitations of our study. This was a volunteer sample that might not be representative of the needle exchange participant population from which it was drawn. Specifically, our English-language based groups excluded participation by Spanish-speaking people who comprise a significant proportion of needle exchange participants in New York City. In fact, it is possible that those who volunteered for the focus group are people with specific interest in learning about or engaging in buprenorphine treatment. Our participants' experiences related to addiction treatment are not likely to be representative of opioid users outside of New York City. Our study was not designed to compare attitudes among groups of patients defined by demographic or substance use characteristics. Exploring differences and similarities among such groups may be important for future research. Furthermore, our focus groups were conducted to assist in the development of new opioid addiction treatment programs, and therefore our script was targeted at issues related to specific topics. Although focus groups allow for open discussion of attitudes and perceptions related to these topics, the reliability of responses is difficult to assess given the multiple factors that may affect group processes. Finally, diversion of buprenorphine was not an a priori topic planned for these discussions; however future research should explore patients' reasons and attitudes about diversion specifically to ensure new treatment programs adequately reduce the potential for diversion.

CONCLUSIONS

Both methadone maintenance and buprenorphine treatment opportunities are necessary to address the diverse treatment needs of opioid-dependent people in New York City.

Buprenorphine, the newer treatment option, provides an opportunity to offer opioid addiction treatment to people who have not been willing or able to engage in methadone treatment. Urban out-of-care opioid-dependent people participating in the focus groups expressed hopefulness regarding their ability to abstain from opioids given the potential benefits that buprenorphine treatment could provide. Further, trust in buprenorphine providers indicates that buprenorphine treatment potentially provides an opportunity to link drug users to the health care system for the long term. However, the current medical model of buprenorphine treatment may be too restrictive for some opioid-dependent people and may be contributing to the use of illicit buprenorphine.. New models to deliver buprenorphine treatment that include partnerships between medical providers and community based programs may facilitate improved access, engagement and positive treatment outcomes for patients with limited access to buprenorphine treatment

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Table 1

Patient Characteristics	N (%)
Race/ethnicity	
Hispanic	24 (63.2)
Non-Hispanic black	9 (23.7)
Other	5 (13.2)
Age (mean years) ± s.d.*	43.8 ± 10.0
Gender	
Male	33 (86.8)
Female	5 (13.2)
Ever taken buprenorphine*	18 (54.5)
Current treatment	
Methadone	22 (57.9)
Buprenorphine	3 (7.9)

N=38,

*data missing for 5 participants