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Different Patterns of Drug Use and Barriers to Continuous HIV Care Post-Incarceration

Holly Swan[1]

Abstract

Individuals with a drug use history often experience drug use relapse when they are released from incarceration. This article explores the processes by which a sample of adults experienced relapse post-incarceration and consequently experienced HIV treatment interruption. Data are from in-depth interviews with 25 formerly incarcerated HIV-positive adults who have a self-reported history of drug use. Findings reveal that each participant relapsed post-incarceration. Some participants relapsed immediately after release; others remained drug free until something "triggered" a relapse. Once a participant relapsed, factors that contributed to HIV treatment interruption included re-incarceration, a lack of concern for HIV care, and the overlap of symptoms between addiction and HIV infection. The relationship between drug use and HIV treatment interruption was exacerbated when the participant reported also having a mental health disorder. Cessation of drug use facilitated HIV treatment engagement for participants. The implications of these findings for policy and practice are discussed.

Keywords

drug use, HIV/AIDS, prisoners, reentry

On any given day in the United States, more than 2 million people are confined in local, state, or federal correctional facilities (Centers for Disease Control and Prevention [CDC], 2012a). The prevalence of HIV/AIDS in the incarcerated population of the United States is estimated to be nearly 4 times that of the general population (Maruschak, 2012). Moreover, the CDC estimates that approximately 14% of people living with HIV pass through a correctional facility each year (CDC, 2012a). Most of the individuals who are incarcerated in the United States will be released from custody and reenter the community at some point (Hughes & Wilson, 2002). The prevalence of infectious disease, particularly HIV, as well as drug use and mental illness in the correctional population have important implications for individuals' health, and the health of the communities to which they return. The parallel risks of incarceration and HIV infection underscore the importance of addressing continuous HIV care with the correctional population to achieve the vision of the National HIV/AIDS strategy as outlined by the Office of National AIDS

[1]Edith Nourse Rogers Memorial Veterans Hospital, Bedford, MA, USA

Corresponding Author:

Holly Swan, Center for Healthcare Organization and Implementation Research, Edith Nourse Rogers Memorial Veterans Hospital, 200 Springs Road (152), Bedford, MA 01730, USA.
Email: holly.swan@va.gov

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Policy under President Obama, and prioritized by the National Institutes of Health (NIH) and the CDC (The White House, 2010).

The existing research on the issue of continuity of HIV care for individuals transitioning from incarceration to the community is simultaneously encouraging (an act as simple as assisting the inmate in filling out their application during discharge planning can significantly improve their chances in treatment continuance) and disheartening (the majority of inmates experience treatment disruption; Baillargeon et al., 2009). However, the question remains: Why is treatment being disrupted at such a high rate among this population? It is fairly well understood that addiction and drug use are prominent barriers to continuous HIV care for this population. However, the majority of the research on drug use and continuous HIV care for individuals returning to the community from secure custody has been quantitative or evaluative. Therefore, less is known about the qualitative nuances of the transition process that lead to HIV treatment interruption for these individuals. In other words, *how* does drug use influence HIV treatment interruption for these individuals at this point in time (i.e., the transition from incarceration to the community)?

The Importance of Continuous HIV Care

Continuity of HIV care, and particularly adherence to antiretroviral (ARV) medication regimens, is essential for keeping individuals healthy and preventing further transmission of the virus (J. Baillargeon et al., 2009; Moir et al., 2010; Volkow & Montaner, 2010). Yet, research has shown that the majority of individuals who are being treated for HIV in correctional facilities experience HIV treatment disruption once they are released into the community (J. Baillargeon et al., 2009; J. G. Baillargeon et al., 2010; Harzke, Ross, & Scott, 2006). The high frequency of treatment interruption (e.g., missing appointments, medication inconsistency) has important negative implications for both the health of the infected individual and the community within which they live. For one, HIV treatment disruption leads to viral resistance to medications of which there are few to begin with. In addition, interruptions in HIV treatment can lead to additional health problems for the infected individual, particularly a greater chance of contracting other infectious diseases (e.g., meningitis, pneumonia, and other sexually transmitted infections; Weeks & Alcamo, 2010). Interrupted HIV treatment also increases the likelihood of HIV transmission to the individuals' sex and/or drug using partners. Finally, there is no cure for HIV at the time of this writing. Thus, linkage to and retention in treatment is essential for controlling the virus within infected individuals and stemming the spread of the epidemic.

Drug Use, Incarceration, and HIV

About one half of prison inmates meet the diagnostic criteria for substance abuse or dependence (Chandler, Fletcher, & Volkow, 2009), and prison inmates are 4 times more likely to have a history of substance abuse than the non-incarcerated population (Taxman & Ressler, 2010). Injection drug users (IDUs) account for 17% of people living with HIV (CDC, 2012b). Moreover, incarcerated IDUs have been shown to have higher rates of infectious diseases than non-incarcerated IDUs (Andia et al., 2005; McBride & Inciardi, 1990).

Despite the high prevalence of incarcerated individuals diagnosed with a substance use disorder, it is likely that most of these individuals are sober during their incarceration (Zack, Grinstead, & Faigeles, 2004). Yet, focus groups from a study with former inmates who had a history of substance abuse revealed that once these individuals returned home, they often met up with old friends who remained active drug users while the individual was incarcerated (Inciardi et al., 2007). Studies have also found that returning to the contexts that fostered drug use and criminal activity prior to their incarceration often tempts individuals to pick up old habits (e.g., drug use and trafficking, sex work), sometimes because they are unaware of other means for survival.

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Many of these individuals experience relapse as a result (Inciardi et al., 2007; Pettus-Davis, Scheyett, Hailey, Golin, & Wohl, 2009). Moreover, to "make up for lost time" individuals tend to engage in higher levels of drug use when they return home than they did prior to incarceration (Inciardi et al., 2007). Also, because the individual has been sober while incarcerated, their drug-tolerance tends to be weakened (Merrall et al., 2010). This combination of factors related to relapse among individuals returning home is potentially lethal. For these reasons, it has been documented that formerly incarcerated individuals with a history of opioid injection are at an elevated risk for death from overdose in the first month back in the community after incarceration (Binswanger et al., 2007; Merrall et al., 2010; Seaman, Brettle, & Gore, 1998).

The frequency and intensity of relapse among individuals returning home from incarceration has important implications for continuation of HIV care that was initiated in the correctional facility. Studies have found that drug users, regardless of their incarcerated status, are less likely to adhere to ARV medication regimens than substance non-users, and that HIV treatment disruption is particularly high in periods of relapse (Malta, Strathdee, Magnanini, & Bastos, 2008). Moreover, psychological and substance use disorders are known to be correlated with unstable living situations (Lanier & Paoline, 2005; Meyer, Chen, & Springer, 2011; Phillips, 2011; Rebholz, Drainoni, & Cabral, 2009). Studies have consistently shown that an unstable living situation is one of the most prominent barriers to continued HIV treatment during the transition home from incarceration (Lanier & Paoline, 2005; Meyer et al., 2011; Nunn et al., 2010; Rich et al., 2001). In sum, a high frequency of drug relapse corresponds with a high frequency of HIV treatment disruption for individuals transitioning back to the community from incarceration.

Given the frequency of drug use relapse after an individual is released from a correctional institution and the shortage of qualitative understanding about the relationship of drug use and HIV treatment continuity, this study utilizes qualitative methods to explore the nuanced ways in which drug use interrupts HIV treatment during the transition from incarceration to the community.

Data and Method

Data for this study come from 25 face-to-face semi-structured interviews with previously incarcerated adults living with HIV in Delaware, each of whom had self-reported current or prior history of drug use. Participants were directly recruited by staff at a community HIV clinic that is the largest HIV service provider in Delaware, the only Ryan White[1]funded agency in the state, and is the agency to which the Delaware Department of Correction (DOC) has been referring its HIV-positive clients since the clinic's inception in the late 1980s.

To be eligible to participate in the study, respondents were required to be HIV positive; have been previously incarcerated in any Delaware correctional institution (prison or work release); have been receiving HIV care from DOC at the time of release, or at least incarcerated long enough to have established HIV care in the facility (i.e., longer than a couple of nights); be older than 21; and be English-speaking. To compensate participants for their time and to thank them for sharing their stories, they were paid a US$50 incentive on completion of the interview. During recruitment, an incentive was mentioned, but the exact amount of the incentive, that it was cash, or that it would be given to them at the time of the interview, was not disclosed. The nature of the incentive was explained during the consent process at the beginning of the interview.

All interviews followed the informed consent process as approved by the University of Delaware's Institutional Review Board. All interviews were voluntary and confidential. The length of the interviews ranged from 33 min to more than 2 hr, with the majority of the interviews lasting an hour to an hour and a half. All participants consented to have their interviews audio recorded. Transcription software (i.e., Transcription Module) was used to assist in transcribing the interviews into Microsoft Word. Each interview participant was given a unique code name

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(for this study, colors were used, such as Red, Teal, and Spruce); this color code, and no other client identification information, appeared on the consent form, demographic sheet, transcript, and interviewer notes. The respondent's name was never linked to their color code. All audio recordings were maintained on a password-protected computer and deleted after transcription. All transcripts are stored electronically on a password-protected computer.

All transcriptions were entered into the qualitative analysis software Atlas.ti for coding and analysis. A grounded theory approach to coding and analysis was used (Corbin & Strauss, 2008). To begin analysis, a list of master codes, or "categories" were created deductively from the main themes of the interview guide and inductively as reoccurring concepts and ideas were found in the interview transcripts. A second phase of analysis involved the creation and use of sub-codes, or "lower-level concepts" (Corbin & Strauss, 2008). These sub-codes allowed for more detailed and nuanced coding within the master codes. Coding and analysis continued until saturation was reached or no new information was being discovered and codes were no longer being developed (Corbin & Strauss, 2008). Although no new themes emerged during analysis of the last few transcripts, each transcript was coded to confirm saturation had been reached. During each stage of analysis analytic reflections and patterns within and across interviews were documented through the use of memos and notes (Friese, 2012). Each analytic tool (i.e., codes, notes, and memos) was then utilized to uncover patterns of interconnectivity within the data to bridge the concepts in the final stage of analysis.

Sample Characteristics

Demographics

A total of 25 people were interviewed for this analysis. A breakdown of the sample characteristics is included in Table 1. The racial and ethnic breakdown of Delaware's HIV-infected population is approximately 66% Black, 28% White, 6% Latino and other; the gender breakdown is approximately 71% men and 29% women (Delaware Department of Health and Social Services, 2012). Consistent with this breakdown, the sample for this study included 6 White respondents: 4 women (one who identified as Latina) and 2 men. Of the 19 Black respondents in the sample, 11 were men and 8 were women. One Black man identified as Latino. The age range for this sample was 30 to 57 with the majority of the respondents falling in the range of 41 to 50 years old. All participants resided in an urban location at the time of the interview.

Health Characteristics

Table 1 also displays the health characteristics of the respondents in this sample. All but one of the study participants were engaged in regular HIV care at the time of the interview. The participant who was not engaged in care was linked to the program's records through a drug treatment satellite of the HIV clinic's program. As such, she was in the pool of potential participants even though she was not receiving any regular HIV care or taking HIV medications at the time of the interview.

In addition to HIV, the majority of respondents also reported receiving treatment (medication and/or counseling) for other health problems, including mental and emotional difficulties (n = 11), alcohol or drug problems (n = 4), and other physical problems (n = 7), such as diabetes, high cholesterol, and so on. Eleven respondents were receiving some form of treatment for HIV and one other type of health concern, four respondents were receiving treatment for HIV and two other types of health concerns, and one respondent reported receiving treatment for all four types of health concerns. These numbers indicate a high degree of co-morbidity between HIV and other health-related issues in this sample.

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Table 1. Sample Characteristics ($N = 25$).

Demographic	*n*
Gender	
Male	13
Female	12
Race	
Black	19
White	6
Ethnicity	
Latino	2
Age	
30-40	4
41-50	17
51-60	4
Residence	
Urban	25
Receiving treatment for . . .	
Mental/emotional issues	11
Alcohol/drugs[a]	4
Other physical problems	7
Two of the above	11
All of the above	1
Length of incarceration	
Less than 30 days	2
30 days to 6 months	7
7 months to 1 year	5
1.5 to 5 years	7
Over 5 years	4
Year of release[b]	
2011	8
2005-2010	12
2000-2004	1
1990s	2

[a]Although only 4 respondents indicated that they were receiving treatment for alcohol or drug problems at the time of the interview, all 25 participants discussed a history of alcohol or drug dependence during their interviews.
[b]Two respondents did not disclose or could not remember their release date, so only 23 respondents are counted in this category.

Incarceration Statistics

Finally, Table 1 displays the characteristics of the respondents' experiences with the criminal justice system. The statistics reported in Table 1 reflect the *most recent* incarceration prior to the interview because many respondents indicated that they had been in and out of prison multiple times in the past. The length of the most recent incarceration ranged from less than 30 days to more than 5 years, with a majority of respondents having spent between 30 days and 6 months behind bars. Approximately one third of the respondents ($n = 8$) were released from their most recent incarceration in the same year as the interview (i.e., 2011). The majority of respondents were released from their most recent incarceration somewhere between 2005 and 2010 ($n = 12$), and a few respondents had not been re-incarcerated since their release in the 1990s. As indicated in Table 1, two respondents were not able to remember their release date, or chose not to report it. Therefore, release dates for only 23 participants are reported.

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Findings

For each of the 25 participants in this study, relapse to drug use after incarceration created an interruption in their HIV care, either in the form of missed appointments with their physician, or missed doses of their medications. However, the relationship between incarceration, HIV infection, and drug use varied in nuanced ways among participants that have important implications for both health and health policy. Some participants began using drugs again immediately after release from custody; others attempted to stay sober for a while but relapsed after they encountered a "trigger." Once an individual was actively using drugs again, a number of factors related to their drug use contributed to HIV treatment interruption, including re-incarceration, a lack of concern for HIV care, and the overlap of symptoms between addiction and HIV infection. The relationship between relapse and HIV treatment interruption was further affected when the participant was also struggling with mental or emotional difficulties. Given the magnitude of drug use as a barrier to HIV treatment, it logically follows that participants reported that cessation of drug use facilitated HIV treatment engagement. Each of these patterns will be discussed in turn.

Pathways to Drug Use Relapse

Immediate relapse post-incarceration. For some respondents who used drugs prior to their incarceration, the urge to use drugs was so powerful that all they were able to think about while they were incarcerated was getting out and getting high. When Red was asked whether being incarcerated led him to stay clean when he was released, he replied, "Well, no, once, when I got incarcerated . . . when you're a month in jail thinking that you're going to come out and get high, that's what you want to do." Likewise, Teal summarized this sentiment well in the following quote about what happened when she got out of prison:

> I get crazy. I get high. I do. And when you in jail, trust me, [when someone] get['s] out [of] jail, they're going to get high. Until that door opens, I'm just thinking, damn, I'm gonna go fuck shit right now, I'm gonna get so fucked. That is how you think. [And that happened] all the time!

In the above exchange, Teal is explaining that her first thought when she was going home, before the door even opened, was that she was going to go get high. Her last statement that it happened "all the time" supports the literature that individuals involved in the criminal justice system often cycle in and out of prison. Thus, addiction can be a reccurring barrier for some individuals as they cycle in and out of the criminal justice system; every time Teal was released from incarceration, she wanted to get high. The power of drug use for interrupting HIV treatment during the transition from incarceration to the community, particularly for individuals who had established HIV care during incarceration, was summarized well by Red when he stated, "'Cause most people, they come in jail, they'll take their [HIV] medicine and come right back out and get high again."

For other individuals, immediate drug use relapse was prompted by the misperception that an HIV diagnosis is a "death sentence." For example, Silver, a young man diagnosed with HIV in 2001, said his lack of education about HIV put him on a "suicide mission":

> Because finding out I was HIV, I was on a suicide mission. I wasn't educated at all. I mean, other than what you hear on TV and, just people dying, or you're going to conventions and you got this big plaque of all these people that are gone. But, it was like a death sentence for me.

Whereas Silver is discussing his reaction to his diagnosis, Pink (who was diagnosed with HIV in prison in the early 2000's) discusses how this perception of HIV as a death sentence led him to start abusing drugs immediately after release from incarceration:

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> That's where my main focus was at that point in time. I left prison, I'm all like "I want to get high as hell. As high as I can get. I'm not worried about nothing. Fuck, I'm going to die anyway. I'm going to die." 'Cause that's the type of thought I had going through my mind.

Because of Pink's perception of HIV as a death sentence and his subsequent relapse to drug use after release from prison, he experienced prolonged interruption in HIV care once he was back in the community.

Triggered relapse. Despite the above theme, most of the respondents who had used substances prior to their incarceration reported that they felt motivated to stay off drugs when they were released from prison, and believed that they would stay off drugs once they were home. However, after some time, usually not long after they were back in the community (as the literature suggests), some event or trigger (in their words, "people, places, or things") occurred that led them to relapse and fall back into drug use. For some people this relapse was triggered by a return to the unhealthy environment from which they came. This relapse trigger is best illustrated by the following story from Spruce who was diagnosed with HIV in the early 1990s but started taking care of her HIV only a couple of weeks before her interview. When asked about the day she left prison, she replied,

> The day I left, wow. I was supposed to go see about something. Housing, I think it was housing. And when I got out, it seemed like people try to bring me down. Like, dealers, drug dealers or whatever. So, I got caught up in getting . . . high again. So it was like, soon as I got out. I didn't run into the right people quick enough. And I tried. It's hard. It's really hard. Drug addiction and incarceration and all that. And I was just like, I was supposed to go to [city], to live in [city]. I signed up and all that, but I never did. So I just was getting high. 'Cause it was like, everybody was just giving it to me . . .. Didn't want to see me do good.

Spruce's quote supports the existing literature that temptations to go back to the lifestyles these individuals had prior to their incarceration begin immediately, as soon as they walk out the door. Moreover, neither she nor the DOC followed through with the transitional housing plan she had signed up for prior to incarceration (i.e., to move to a different city). As a result, she ended up in a housing situation that made it even more difficult for her to stay sober:

> At that time I was staying up on [street] up here. Over my new girlfriend's house. And everybody was in there. That's where I'm staying. Everybody was in there selling drugs and getting high and all that. So I was just, in that house [I] never had to leave because, [sighs]. It's crazy.

When asked whether she was using around the time of the interview, she replied,

> Yeah. I used last week. 'Cause where I'm at right now, I mean my sister, she love me and I love her and that, but, it just like, I need to get out of [her house]. I mean I can't run from drugs. But where I'm at right now, it's easy access.

Spruce's story illustrates the pathway from release to relapse that many of the individuals that participated in this study experienced. However, unlike some of her peers who knew they wanted to get high as soon as they were released, Spruce thought she would be able to maintain the sobriety she achieved while she was incarcerated:

> Interviewer (I): And did you still feel like you wanted [drugs]? Even after the 5 months in jail?
> Respondent (R): Well, no when I was in jail, I was feeling good until I got out! And [the 5-month incarceration is] the longest I've ever been clean. My whole life.

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I: But then it was just so easy when you got out.
R: Yeah! And this, it's my fault too! I'm thinking I can be strong, and I felt I was strong and I would get out [of prison] and not get high. But, yeah.

Whereas Spruce's story illustrates how the environment that individuals return to from incarceration can influence drug use relapse (and therefore interruptions in HIV care), other individuals relapsed because of a single event that occurred in their lives, such as the death of a loved one or a partner's relapse. For instance, Blue explained how when she got out of prison, she started getting high again, but got tired of using drugs so she went into a drug treatment program. However, after being clean for some time, two people in her family died and she relapsed:

> I stayed clean almost a year. And my sister passed away January. I had a year [sober] in December, last year, I believe. Last year. A year [sober]. When my sister passed, I started using again. Then my nephew, I had a nephew got killed. Like a couple days after she died. So it was like, what the fuck?

Blue had been taking care of her HIV infection while she was sober, but once she relapsed after the deaths of her sister and nephew, her treatment was interrupted.

In the case of Magenta, she was doing really well when she got released from prison. She had stopped using drugs, gotten a job, and was living in a house with her husband:

> I got out and, like I said, I went to this . . . transitional house. And that's where I met my husband at. [laughs] We left the program, got a place. I was working. I found a full-time job, I completed probation, [I completed the next phase of drug treatment], I did all that and I stayed clean for 5 years. And he did as well. Basically things went well for that whole 5 years. And then, let me see, December [year], he relapsed. And January [year], New Year's Eve, I relapsed after 5 years of being clean. And, basically from there, everything . . . just went downhill.

Magenta's husband's relapse led to hers, resulting in treatment interruption and ultimately re-incarceration.

Other respondents came home from prison and were still using drugs, but taking care of themselves and their HIV until something happened that caused them to start using drugs even more heavily. For example, Red stated, "Then [my mother] died and . . . I started getting high even more." The increase in drug use after Red's mother passed away contributed to an interruption in his HIV treatment. The death of Red's mother was especially hard for him because she took care of him through his addiction and his incarcerations.

The Relationship Between Drug Use and HIV Treatment Interruption

"Just don't care.". No matter the cause or pathway to relapse, once an individual was using drugs again, they often adopted a "just don't care" attitude about everything. Many respondents who relapsed post-incarceration indicated that all they cared about was getting high; maintaining their addictions topped the list of post-incarceration priorities for these individuals. The following two quotes from Gold and Gray illustrate how addiction trumps other priorities or responsibilities, such as taking care of children and practicing safe sex:

> She shot me up with cocaine. And I just fell in love with it. I was like, "oh my God." I couldn't even talk. And I'm like, "I want to put my baby somewhere." I didn't even want to take care [of my baby]. I didn't even want my baby. I didn't even want to have nothing to do with the baby. I wanted to go get more drugs. (Gold)

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> But when you're doing drugs and alcohol, you don't care about, you're not thinking about a condom. You're not thinking about safe sex. Your mind is not right and your mind's already dealing with alcohol and filled with corruption, how you going to think about some condom or how you going to think about protecting yourself at that point in time? You're not! (Gray)

Significantly, the "just don't care" attitude presents a large barrier to health care, particularly HIV care. Respondents reported that when they were on drugs, they stopped taking their HIV medication or frequently missed doses, and stopped going to appointments, went intermittently, or never started going in the first place because they "just didn't care." For example, Red's relapse completely interrupted his HIV care:

> I started [coming to the HIV clinic] before when I was in rehab [in] [date] to get treatment. But I went back and got high again so. Once I get high, everything don't matter no more. Nothing but the drugs. That's all. If you out getting high, all you going to do is get high. You don't even worry about your HIV, you don't care who gets it, all you want to do is get high.

Likewise, Magenta admitted, "Once I got released and started back using, I didn't follow up on anything." One respondent, Tan, was linked to care but so distracted by drugs that she did not take HIV care seriously:

> I had so much HIV running rampant in my body, using drugs, not taking care of myself. When I came here, they asked me, you sure you got a place to live? And what's going on? And I'd be like, hurry up with this appointment! I got to go! I was just wanting to get high.

Other respondents expressed how relapsing also led them to stop taking their medications. For instance, Green noted,

> Well, about five years ago [I was taking medication]. But I had stopped. I wasn't on no medications, I wasn't thinking about the HIV and stuff. I was just living. Moving around, drinking beers, smoking weed. I was even using [Percocet], Ecstasy and stuff like that. But I stopped with the pills and stuff, but I kept drinking beer and smoking weed and stuff. And sometimes I'd get drunk where I wouldn't even think about nothing. Just having fun and stuff.

Or, as Blue noted, "It would be days I would stay out getting high. So I wouldn't take my medication." The magnitude of drug use as a barrier to caring about anything, including HIV, is effectively summarized by Teal:

> Listen. When you do drugs, it's like you don't have feelings. It's like you're in your own world. You just thinking about make money and get high. Somebody can tell you your mom died and you don't care. 'Cause you high. You just thinking about drugs, drugs, money, and drugs. That's all! You don't care about take a shower. [laughs] Eat. Nothing. You just, drugs.

Symptom attribution. Another theme that emerged regarding the relationship between HIV and drug use was that for a couple of respondents, symptoms of HIV infection were mistaken as symptoms of drug use and thus were not taken as seriously as they would have been had they been attributed to the HIV infection. When discussing her HIV diagnosis, Neon said,

> I never really thought I was HIV positive. I was getting sick, my hair was coming out, falling out. But I didn't think it was the HI[V]. I just thought it was drugs, and me not taking care of myself properly.

Likewise, Navy reported,

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> I seen somebody and I knew him for a long time. They don't look the same. First thing that comes through my mind, something's wrong. I lost all this weight, looking bad. Smoking that crack. At first I think it's that crack but, they think it's the crack, but it's not. It's that disease.

Essentially, these respondents started experiencing symptoms of their HIV infection, but they were so immersed in their drug use that they shrugged the symptoms off as side effects or consequences of the illicit drug use.

Re-incarceration. Once an individual was back in the community after incarceration, drug use also often led to a violation of their probation terms, either because they were out on the streets and missed their curfew, or because they "gave a dirty urine" (i.e., tested positive for drug use). For example, because of her addiction and active involvement in street life, Blue noted,

> They would take me to court, then I would get out [of prison], reinstate my probation, give me a 10 o'clock curfew. I didn't make it in at 10. I violated, they took me back to court, reinstated my probation, put me down to 8 o'clock. I didn't go in at 8! Violated. I was back in jail again. And I had got out, say I got out like [date], I was back in like [a couple days later] . . .. It wasn't long, just a couple days. After I got out I was back in again.

As Blue's quote shows, these violations frequently led to re-incarceration and the cycle of incarceration and HIV treatment interruptions began again.

Gold also ended up getting re-incarcerated shortly after she was released because she relapsed and violated her probation:

> I was in [prison] for 2 ½ years and they let me out on Level 3 probation. I violated in a week! With a dirty urine. And they put me back for 2 ½ more years. I was only out for like a week out of 5 years. And then I got out, and then I started doing heroin. I fell in love with that! And I just started doing that all the time and I start shooting it and, I mean, that led me out to [the streets]. And I just kept getting in trouble, and then I started getting infections, like in my feet, then they would send me to the hospital. It's 'cause my immune system was breaking down. And then I would go back and forth to jail, constantly.

These examples illustrate the "revolving door" phenomenon that is common for individuals involved in the criminal justice system (Travis, 2005; Visher & Travis, 2003).

The Impact of a Co-Occurring Mental Health Disorder on Relapse and HIV Treatment

The relationship between relapse to drug use and HIV treatment interruption was exacerbated when participants also reported having a mental health disorder. One respondent, Gray, was especially affected by mental disorder, specifically depression and bipolar disorder. The feelings associated with his mental illness led him to relapse back to drug use, which in turn led to interruption in his HIV treatment:

> I was hurt, confused, lonely. I didn't have nobody really to talk to, so I started getting high a lot. And, that wasn't no good because I started not remembering the days, get my days confused, and I'm missing a lot of appointments . . . and then, like I said, I started using [drugs] again. I started missing my appointments. I'm admit it, I had a "I didn't care" attitude. I didn't care if I wanted to live or I didn't, if I wanted to die.

The end of the quote illustrates how addiction coupled with an "I don't care attitude" led to further HIV treatment interruption. For Gray, the "I don't care" attitude was more extreme than

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it was for other respondents discussed previously in that the attitude was as deep as clinical depression and suicidal thoughts. In the next quote, he explains how the interplay between mental illness and addiction is so powerful:

> [The clinic staff] get on me all the time about taking my medicine and then using drugs over top of it. But . . . it's [easier] said than done. I just got off probation, maybe about two weeks ago, and I would tell [the nurse], "I'm not trying to give you an excuse or nothing," but, I was smoking a lot of weed, marijuana, and I was doing crack. The crack will make me feel like everything's going to be alright . . .. The weed, the marijuana would make me feel like everything will be alright. Then I stopped doing the crack, and just start smoking marijuana. 'Cause it helped me get with my depression. When I was taking that, it make me feel that I can be accepted around people. People could hear me and listen to me to when I talk. I felt comfortable. And I told [the nurse] that the marijuana make me feel more comfortable than taking that [psychiatric medicine].

Essentially, Gray relapsed to using drugs to cope with his depression. The combination of depression and drug use was detrimental to his HIV care.

Cessation of Drug Use

Given the magnitude of drug use relapse as a barrier to continuous HIV care, it is not surprising that for the majority of study participants, once they stopped using drugs, they became motivated to engage in HIV care. The relationship between the cessation of drug use and HIV care is well illustrated by Blue. Blue experienced many years of HIV treatment interruption due to drug use. At the time of the interview, however, she had stopped using drugs and was motivated to continue her HIV care uninterrupted:

> I want to know where my body is. I want to know if my CD4 count is good, I want to know if my viral load is good, I want to know everything! I want to know about me. Because I'm clean now. I'm clean now. And when I was getting high it really didn't matter. It really didn't matter too much to me. I would miss appointments and stuff. But now [that I'm not using drugs] I come in to my appointments, I'm not missing them.

Likewise, Tan discussed how she had gotten much better at taking care of her HIV infection, including keeping her appointments, when she stopped using drugs, "I haven't been using [drugs]. I got a clear mind. I keep a calendar. Put my [appointment] dates down on there." Again, given the magnitude of relapse as a barrier to continuous HIV care, it logically follows that the cessation of drug use motivated participants in this study to link to HIV care.

Discussion and Recommendations

There is strong evidence in the prisoner reentry literature that on release from custody, people with a history of addiction tend to go back to using drugs. There is also evidence that people living with HIV tend to experience treatment interruption post-incarceration. The present study contributes to this literature by revealing some of the nuances regarding the relationship between reentry to the community, addiction, and continuity of HIV treatment. Although each participant in this study relapsed after release from custody, the pathways to relapse varied. Some participants began using drugs immediately after they were released because using drugs was all they had thought about while they were incarcerated. Other participants had a desire to remain sober post-incarceration, but found they were confronted with "people, places, and things" once they were back in the community that triggered a relapse. Still others began using drugs again to cope with symptoms of a mental health disorder. Regardless of the pathway to relapse, drug use

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post-incarceration interrupted HIV treatment for this study's participants through a variety of ways, including a "just don't care" attitude, incorrect symptom attribution, and re-incarceration.

The results of this analysis yield some important conclusions and recommendations for policy. Since relapse to drug abuse was a major barrier to continued HIV care once the participants were back in the community, it is critical that linkage to drug abuse treatment providers be included in discharge planning for individuals living with HIV. Participants in this study did not report receiving support from DOC for drug treatment pre- or post-release, despite the strong presence of a drug treatment program in the community that has been established for decades. (It could be that DOC did make referrals to these programs and the study participants did not mention it during their interviews.) A few of the participants in this study did disclose that the DOC had provided some discharge planning (such as a transitional housing plan for Storm), but they indicated that this assistance had not been comprehensive nor continued post-release. A recent study has in fact shown that a change in residence after incarceration (from where the individual was living prior to incarceration) facilitates successful reentry to the community and reduces that person's likelihood of being re-incarcerated (Kirk, 2012). Thus, pre- and post-release assistance with housing could also reduce the chances of returning to the "people, places, and things" that foster relapse. Follow-through on such services and support may have prevented Storm and other participants from returning to situations that triggered relapse.

Given the negative impact of drug use on HIV treatment continuity for the participants in this study, it follows that cessation of drug use facilitated continuous HIV treatment. When participants stopped using drugs, they were more motivated to take care of their HIV infections. As such, drug treatment programs are valuable sites for secondary HIV interventions (i.e., educating individuals who are living with HIV about the virus and empowering them to maintain treatment adherence). These findings underscore the importance of pre-release planning and post-release services for both drug abuse and HIV treatment. Moreover, a coordinated system that nests drug abuse and HIV treatment programs in the same facility could facilitate linkage to and retention in HIV care for individuals who initially get linked to one system or the other. In this way, comprehensive discharge planning for incarcerated individuals living with HIV could also be more seamless if referrals and linkages only need to be made to one service location.

Limitations

There are some limitations to these findings. Whenever qualitative methods are used, there is a risk of researcher bias intruding into the analysis and presentation of results (Corbin & Strauss, 2008; Holstein & Gubrium, 2004). Qualitative researchers have devised strategies to manage researcher bias, including reflexivity. Reflexivity refers to the documentation of the researcher's reflections on his or her feelings, experiences, and potential biases that he or she may have introduced at the various stages of their research project (Corbin & Strauss, 2008). For this study, documentation and reflection on the researcher's feelings, experiences, and potential biases that she may have introduced at the various stages of the research project occurred after each interview and during the coding and analysis processes (Corbin & Strauss, 2008; Holstein & Gubrium, 2004). The influence of bias should be lessened as a result of this process of reflexivity. In addition, a conversational style of interviewing was used for this study, which helps reduce researcher bias because it allows the study participant to define what is important (Holstein & Gubrium, 2004).

Statistical generalizability to a population is not a goal of qualitative methods, and qualitative methods are inappropriate for this type of statistical generalizability (Corbin & Strauss, 2008). However, despite the attempt to capture diversity in experiences, there are still some sample limitations of this study with respect to the diversity of knowledge gained about the barriers and facilitators to continuous HIV care for individuals with a history of incarceration. First, at the

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time of the interviews, none of the respondents were incarcerated. As such, participants needed to provide retrospective accounts about their experiences transitioning to and from prison. The period of retrospection ranged from less than a month to 10 to 15 years. Retrospective accounts pose some potential limitations with respect to event recall and reinterpretation. As a result, some information could have been missed, particularly with respect to issues experienced before and during incarceration. Also, participants in this study only resided in urban locations. Thus, differences in experience based on geographic setting (e.g., urban vs. rural) were not captured. Finally, only two Latinos participated in the study, which limited the amount of information that was learned about experiences among this particular demographic group.

Conclusion

In conclusion, while it is disheartening that HIV treatment interruptions occur at such a high frequency due to drug use relapse as people return to the community from incarceration, this study provides encouraging findings regarding several points of opportunity for intervening with these individuals to provide assistance with both drug and HIV treatment.

Author's Note

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Note

1. "The [Federal] Ryan White HIV/AIDS Program provides HIV-related services in the United States for those who do not have sufficient health care coverage or financial resources for coping with HIV disease. The program fills gaps in care not met by other payers" (Health Resources and Services Administration, 2012).

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Author Biography

Holly Swan, PhD, is a health services research and development post-doctoral fellow at the Center for Healthcare Organization and Implementation Research, Edith Nourse Rogers Memorial VA Hospital, Bedford, MA, USA. Her research interests include implementation science and strategies for improving linkage to and continuity of HIV care for underserved and vulnerable populations, with an emphasis on individuals involved with the criminal justice system.

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