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Problems and Service Needs Among Ex-Offenders with HIV Risk Behaviors Entering Sober Living Recovery Homes

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Abstract

There is currently a nationwide effort to decrease the number of persons who are incarcerated in jails and prisons. However, many ex-offenders on probation or parole do not have access to affordable housing and larger proportions have histories of HIV risk as well as substance abuse problems. In California, sober living houses (SLHs) are becoming an increasingly popular housing option for these individuals. Based largely on the principles of Alcoholics Anonymous (AA), SLHs require abstinence from alcohol and drugs and provide peer support for recovery. The current study examined the types of problems experienced among 330 ex-offenders with lifetime risk for HIV during the six months prior to entering SLHs. Nearly three fourths (74%) of all ex-offenders entering the houses had at least one HIV risk. The importance of housing was evident in the finding that housing status and participants' perceptions of their housing situation were associated with a variety of problem areas, including substance use, HIV risk, psychiatric severity, and legal problems. SLHs represent an important housing option for ex-offenders, but many residents may need additional services to address various problems.

Keywords

Sober Living House; Recovery Home; criminal justice housing; probation; parole; ex-offenders

The U.S. Department of Justice has made criminal justice reform a top priority and there is growing bipartisan agreement in congress that such reform is needed (King, Peterson, Elderbroom, & Taxy, 2015). Nearly half of the inmates in federal prisons are incarcerated due to drug offenses and reform efforts have focused on alternative dispositions for these individuals. The United States Sentencing Commission voted in 2014 to reduce sentences for drug related offenses for up to 46,000 people in federal prisons (Sentencing Project, 2016).

The Brennan Center for Justice (2016) noted that states are also making reductions in their incarcerated populations. Over the past 10 years, 27 states reduced their overall incarceration rates. Between 2006 and 2014, incarceration in state prisons dropped 7%. California made prison reductions under the threat of court orders. In 2011, the U.S. Supreme Court ruled that state prisons in California must release nearly 40,000 offenders because the extent of overcrowding in state prisons made it impossible to provide adequate medical and mental health care (Lofstrom & Martin, 2015).

Criminal justice reform efforts in California have included several state ballot propositions and policy initiatives designed to reduce incarceration of drug offenders. In 2000, voters approved proposition 36, which enabled drug offenders to choose probation and mandated treatment for substance abuse problems in lieu of incarceration (Urada, et al., 2009). In 2011, California enacted a new state law, AB109. The law provides for transition of persons in the state prison system to local jurisdictions, often with reduced incarceration periods (Lofstrom & Martin, 2015). In 2014, California voters passed proposition 47, a ballot initiative designed to reduce felony drug offenses to misdemeanors and provide funding for mental health and drug treatment. Eaglin (2015) reported that proposition 47 played an important role in reducing incarceration in prisons and local jails. For example, Los Angeles County, the largest jail system in the country, has seen its jail population decline by 17% since implementation of proposition 47.

Transitioning ex-offenders from incarceration into the community raises a number of challenges. One of the most important is finding appropriate housing (Harding, Morenoff & Herbert, 2013). Petteruti and Walsh (2008) noted that finding affordable housing is often difficult for probationers because they often lose their jobs when they are incarcerated. In addition to affordability, housing for criminal justice populations should ideally be alcohol- and drug-free and provide access to needed services (e.g., medical, mental health, and job training) (Polcin, 2006).

Sober Living Houses

In a variety of papers (e.g., Korcha & Polcin, 2012; Polcin, 2006) researchers suggest that Sober Living Houses (SLHs) could play a prominent role in providing the type of housing needed by ex-offenders. These homes require residents to abstain from alcohol and drugs and they emphasize a social model recovery philosophy focused on peer support (Polcin, Mericle, Howell, Sheridan, & Christensen, 2014). SLHs have a designated house manager who oversees operations (e.g., payment of rent, bills, compliance with house rules, admissions and evictions). The house manager is typically a person in recovery who lives in the home and receives a stipend or reduced rent as compensation for their work. The level of structure is minimal. Residents must attend house meetings and participate in upkeep of the facility and some houses have curfews, especially for new residents. SLHs in California do not provide on-site treatment services but they typically require or encourage involvement in mutual help activities, such as 12-step recovery groups. When professional services are needed (medical, mental health, legal, job training, etc.) they are sought out in the community.

SLHs can be for profit or nonprofit and they vary in terms of their relationships with formal treatment programs. "Freestanding" houses are not associated with any specific treatment program, although they typically receive referrals from residential and outpatient treatment programs as well as from other sources. In addition, they usually accept a mix of voluntary and criminal justice mandated persons. Other SLHs are "program affiliated," where they have a relationship with a specific treatment program and mainly or exclusively serve individuals from the affiliated program. Some of these houses are designated as places to live after individuals complete a specific residential treatment program (stepdown houses)

and others are designated places to live while residents attend a specific outpatient treatment program (outpatient affiliated). Unlike residential treatment or halfway houses, residents of SLHs are free to stay as long as they wish provided they abide house rules (e.g., maintain abstinence from alcohol and drugs, attend regular house meetings, participate in maintenance of the household, and pay rent and fees on time).

In California, the criminal justice system will pay one to six months of rent for selected ex-offenders after which individuals are expected to pick up payments themselves. Because SLHs do not provide treatment services, they are not licensed by states as treatment programs. However, some houses are members of peer-organized associations. In California, over 800 privately run SLHs are members of recovery house associations that monitor health, safety, and operational standards (Wittman & Polcin, 2014). The two predominant organizations are the Sober Living Network (SLN) in Southern California and the California Coalition of Addiction Programs and Professionals (CCAPP) in other parts of the state.

Recovery Home Research

SLHs represent a unique recovery home modality and studies and other types of recovery residences cannot be assumed to generalize to them (Polcin & Borkman, 2008). Residential treatment programs in the community (e.g., therapeutic communities), halfway houses, and Oxford Houses are similar to SLHs in that they provide a substance-free living environment and social support for abstinence. However, these residences have significant differences with SLHs. Unlike SLHs, residential treatment programs offer professional onsite services provided by professional. These include individual and group counseling, case management, and a variety of other therapeutic activities. In addition, there are maximum lengths of time persons can remain in these programs. In SLHs, residents are free to decide for themselves when they are ready to leave.

Like residential treatment programs and unlike SLHs, halfway houses typically have a limit on length of stay. They are also different from SLHs in that they are usually part of larger treatment programs and those organizations oversee house management and operations. Oxford House residences are different from both halfway houses and SLHs in that they use a rotating leadership model that elects residents to leadership positions. These elected residents oversee operation of the houses, which is a clear distinction from other types of recovery residences (Polcin & Borkman, 2008). In addition, Oxford houses are required to be private, nonprofit entities, whereas other types of residences represent a mix of nonprofit and for profit organizations.

Most of the research targeting recovery residences for ex-offenders in the community has been conducted in therapeutic communities (TC's). For example, DeLeon (1988) found that criminal justice referred residents had longer lengths of stay in TC's than voluntary clients and had levels of improvement on outcomes that were similar. Prendergast et al (2004) conducted a randomized trial of 715 prisoners who were randomly assigned to either a TC condition or to a no treatment control group. At 5-year follow-up, the TC group had significantly lower rates of re-incarceration. Martin, Butzin and Inciardi (1995) studied 457 individuals participating in either an in-prison TC, a TC in the community, both types of

TCs, or a no treatment comparison group. Those attending the community-based TC or both types of TC had significantly better outcomes on measures of substance use and re-arrests.

Investigation of ex-offenders in Oxford Houses homes have been limited to a few studies. In a national study of Oxford Houses examining a heterogeneous mix of persons already living in the houses at the time of enrollment, 30% indicated being on probation or parole (Jason, Davis, & Ferrari, 2007). Two Oxford House studies targeted assessment of outcomes specifically for parolees. One assessed 270 parolees who were assigned to one of three conditions: TC, Oxford House, or aftercare as usual (Jason, Olson, & Harvey, 2015). Participants were followed up for 24 months. Longer lengths of stay in the TC and Oxford House conditions were associated with better employment, alcohol, and drug outcomes. Comparison of study conditions showed Oxford Houses had better outcomes than the other two conditions for days worked, income, and continuous abstinence from alcohol. In addition, a cost-benefit analysis showed more favorable ratios for the Oxford House condition.

The other study of Oxford Houses for persons involved in the criminal justice system assessed 200 women recruited primarily from substance abuse treatment and criminal justice programs who had some criminal justice system involvement during the past two years (Jason, Salina, & Ram, 2016). Participants were assigned to an Oxford House or usual aftercare condition. For the Oxford House condition, length of time in the house (6 months or more) was associated with better alcohol and drug use, employment, and self-efficacy outcomes. However, outcomes for those in the OH condition were not significantly different than aftercare as usual.

Studies of ex-offenders in SLH studies have been limited to secondary analyses of ex-offender subgroups. A study by Polcin, Korcha, Bond and Galloway (2010) examined 245 persons entering SLHs and found 29% of the sample was referred through the criminal justice system (Polcin, Korcha, Bond, & Galloway, 2010). A secondary analysis of residents referred from the criminal justice system (N=71) showed they made significant gains on measures of alcohol and drug use that were comparable to other residents and that improvements were maintained at 18-month follow-up (Polcin, Korcha, Wittman, & Troutman, 2010). However, criminal justice referred residents were less involved in 12-step recovery meetings, more likely to be arrested at follow-up time points, and had greater difficulty finding and maintaining employment.

Purpose

The current study represents one of the first to characterize the ex-offender population entering SLHs, including descriptions of their demographics, functioning, problems, and service needs. We sought to enroll ex-offenders with a lifetime risk of HIV because infection and risk behaviors are pervasive among criminal justice populations and there are risks to their sex partners in the community as well as to the ex-offenders themselves (Adams, et al., 2013; Leukefeld, et al., 2009). Studies of HIV infected ex-offenders (e.g., Zaller, et al., 2008) in the community have shown they present a variety of problems and service needs and that many can be helped using case management interventions. However, the role of

housing and perceptions about one's housing situation have been understudied. Moreover, the characteristics of the rapidly increasing number of persons being diverted or released from incarceration in recent years may be different from criminal justice populations studied in the past.

The current study aimed to add to the literature by specifically focusing on how housing status and one's perception of housing stability were associated with a variety of demographic characteristics, HIV risk behaviors, problems, and service needs. To demonstrate the importance of housing for of the criminal justice population, we aimed to assess how housing status and ex-offender perceptions of housing stability during the 6 months prior to entering the SLH were associated with the problems assessed. We hypothesized that homelessness and perceptions that one's housing situation was unstable would be associated with more severe problems.

Methods

Data Collection Sites

All houses recruited for the study were members of the Sober Living Network (SLN) in Southern California. The network has been providing training, technical assistance, administrative services, and advocacy for SLHs since 1995. All houses certified by SLN must meet basic standards for health, safety and management of the facility. There are approximately 500 member houses in Southern California, 300 of which are in Los Angeles County. The current study targeted houses in low- and middle-income neighborhoods.

Recruitment Procedures

Data for the current study were drawn from a larger ongoing project taking place in Los Angeles that includes longitudinal assessment of 330 residents over a 12-month period of time. Analyses reported here focus on the baseline data only. Recruitment of study participants followed a two-step process by first engaging the SLHs and then the residents within those houses. Because we were interested in studying residents who had some type of criminal justice status, we purposively selected houses with larger numbers of these individuals. We also aimed to recruit houses that reflected diversity by gender (men, women, and both genders), affiliation with a treatment program versus freestanding, and different geographical areas of Los Angeles (West Los Angeles, Central Los Angeles, and Long Beach).

When a new resident entered one of the participating houses, they were informed about the study and given contact information about ways to reach the research interviewers. In addition, research interviewers maintained regular contact with house managers and were informed when new residents entered. The goal was to conduct the baseline interview within one month after entering the house. Residents were given \$30 for their time completing the baseline interview, and all study procedures were approved by the local Institutional Review Board.

Inclusion and Exclusion Criteria

Inclusion criteria included having a current criminal justice status (probation, parole, drug court, etc.) and being competent to provide informed consent. In addition, because HIV risk is widespread in the criminal justice system and poses a risk to both ex-offenders and their sexual partners (Adams, et al., 2013; Belenko, 2006; Leukefeld et al., 2009), we included it as an inclusion criteria. Ex-offenders needed to be HIV positive or have a lifetime history of at least one HIV risk behavior, which was broadly defined: men who had sex with men, commercial sex work, and injection drug use. Unprotected sex with two or more partner during the past six months qualified as an HIV risk as well.

Measures

1. Demographic characteristics included standard descriptive items (e.g., gender, age, income, and race) as well as sexual orientation.
2. Housing Status categories were grouped into stable, marginal, and homeless. Stably housed consisted of having one's own space in a home or apartment. Marginally housed consisted of staying in someone else's home, jail/prison, alcohol or drug treatment, rooming house, or group home. Homeless included living on the street or in a shelter.
3. Perceptions of housing asked whether the participant viewed their housing situation before entering the SLH as stable or unstable, regardless of where they were living.
4. Legal measures included assessments of legal status, incarceration, and arrests. *Legal status* was assessed as a dichotomous measure: probation or drug court versus parole. *Six month incarceration* was assessed as percent reporting any incarceration in jail and percent reporting any incarceration in prison. *Lifetime incarceration* was coded as an ordinal variable using the following categories: none, 1-36 months, 37-120 months, 121-299 months, and 300+ months. *Lifetime arrests* were calculated as mean number of times arrested and mean number of times convicted.
5. DSM-IV Checklist was used to assess 6-Month Alcohol and Drug Dependence. Items for this instrument are based on DSM-IV diagnostic criteria (American Psychiatric Association, 2000) and have been used in NIDA Clinical Trial Network studies (Forman, Sivikis, Montoya, & Blaine, 2004).
6. HIV measures drew from selected items on the Risk Assessment Battery (Metzger, Navaline, & Woody, 2001) to assess HIV risk behaviors over the past 6 months, including: a) percent reporting injection drug use, b) percent reporting needle sharing, c) number of sex partners over the past 6 months (coded as none, one, or two or more), d) condom use (coded as no sex, always, less than always, never), e) sex work (coded as percent who provided sex for drugs or money), f) percent of men who had sex with men over the past 6 months and lifetime. Additional HIV measures included percent tested over the past 6 months and percent who tested positive over one's lifetime.

7. Timeline Follow-Back (TLFB) was used to record the participants' self-report of days of alcohol and drug use over the past 6 months (Sobell et al., 1996). For the analyses conducted in this paper we used the TLFB as a 6-month measure of abstinence: any use or no use over the past 6 months versus no use.
8. Five scales from the Addiction Severity Index Lite (ASI) (McLellan et al., 1992) were used to assess alcohol, drug, legal, employment, and psychiatric severity.
9. Days worked is a measure taken from Gerstein et al (1994) and is a simple count of number of days worked over the past six months. Because this variable was not normally distributed we created an ordinal scale with the following categories: no work, worked less than 90 days, and worked more than 90 days.
10. Services Utilization is a modification of a measure from our previous study of SLHs that was used to assess whether participants received a variety of services over the past two months, including, substance abuse, mental health, healthcare, legal, and job training (Hser, Polinsky, Maglione, & Anglin, 1999). These variables were coded as yes (received the services over the past two months) versus no (did not receive the service over the past two months).

Analyses

An important goal of the study was to describe the characteristics of persons on probation or parole entering sober living houses. Toward that end, we used descriptive statistics including means and percentages to characterize demographics, recent problems, and lifetime problems. Because some measures (e.g., ASI scales) were marginally normal in their distributions and some of our measures were ordinal (e.g., categories for number of months incarcerated and number of sex partners), we used Spearman correlations to show how study variables were associated. The purpose of the correlational analyses was to show how demographic and descriptive characteristics of ex-offenders were associated with different problems and how different problems areas were interrelated. Our goal in these analyses were to provide data to corrections professionals and SLH operators that could be used to inform development and coordination of services to subgroups of the population.

Another purpose of the correlational analyses was to inform construction of multivariate regression models assessing housing status and perceptions of one's housing situation as predictors of problems. The problem areas we selected to be assessed in the regression models were chosen on the basis of their having significant correlations with housing status or perceptions of housing stability. The regression models were designed to show relationships between housing variables and problems controlling for the influence of a variety of individual characteristics including gender, age, ethnicity, sexual orientation, income, and lifetime months of incarceration. For dichotomous problem variables (e.g., HIV outcomes) we used logistic regression models and for interval level problem variables (e.g., ASI scales) we use ordinary least squares (OLS) multiple regression. It should be noted that the regression models were based on cross sectional data. Thus, they were designed to show associations among variables, not to establish temporal causality.

Results

Forty nine SLHs were recruited for the study, 25 for men, 9 for women, and 15 for both men and women. Most of the houses were freestanding (69%), which included 227 of the 330 study participants. Stepdown houses (N=13) accounted for the other 103 residents. The average number of beds per house was 20 and cost for residents to live in the homes ranged from \$375 per month to \$1,500 per month. The average cost was \$598.

The mean number of days in the house at the time of the baseline interview was 15.0 (sd=9.2) days, although a limited number of interviews took place 34 to 41 days post entry. We screened a total of 916 persons entering the houses and found 370 met our inclusion/exclusion criteria. The primary reasons persons were screened out were lack of a criminal justice status (i.e. not on probation or parole) (N=335) or lack of lifetime HIV risk (N=133). Among persons with a criminal justice status who were in the house less than one month, nearly three fourths (74%) reported HIV risk. Of the 379 who met the screening criteria, 330 were enrolled.

Descriptive Characteristics

Among the sample of ex-offenders with HIV risk entering SLHs (N=330) nearly a quarter (26%) were women, a majority were nonwhite (53%), and over two-thirds (67%) were never married. Only 36% graduated high school and 85% indicated their past year income was \$12,000 or less. Over half (57%) indicated they did not work over the past six months. Criminal justice status of the sample consisted of 25% on parole and 75% on probation or drug court. The mean number of arrests was 20(sd=28) and lifetime incarceration averaged 94(sd=116) months. Forty-one percent indicated they spent some time in jail over the past 6 months and 20% spent time in prison. Although 47% of the sample considered their housing situation to be stable prior to entering the SLH, only 4% were living on their own in a stably housed situation (e.g., apartment or house) and 78% were marginally housed in temporary living arrangements. The most common living arrangements were being residential treatment (33%) or incarcerated (21%). An additional 18% were homeless or living in a shelter. When we conducted crosstabs between housing status and perceptions of one's housing situation, 13 (22%) of the 60 persons who were homeless before entering the SLH considered their housing situation to be stable.

Addiction Severity Index Scales

ASI scales were used to measure severity of problems during the past 30 days. Because individuals were recruited within the first 30 days of entering the houses, ASI assessments covered a mix of time periods including time before and after entering the houses. Table 1 shows mean scores for Alcohol, Drug, Psychiatric, Legal, and Employment scales. Scores on the ASI range from 0 to 1 and it can be seen that alcohol and drug mean scores were quite low, 0.14(sd=0.19) for alcohol and 0.08(sd=0.10) for drugs. Employment reflected the highest severity level at 0.82.

Services

Prior to entering SLHs, residents received a variety of different services in residential and outpatient programs addressing various problems. Using a measure of services received during the two months prior to entering the SLH we found the most common service was medical care (47%), which included medications for health problems. Other services included counseling (45%), psychiatric medications (42%), and HIV testing or counseling (20%). Relatively less common were services designed to assist persons find or prepare for employment (20%).

Substance Use and Dependence

Large proportions of the sample used substances over the past 6 months (78%) (not tabled), but fewer during the past 30 days (39%). The proportion of residents meeting DSM IV criteria for substance dependence over the past 6 months was substantial, especially considering that a majority of the participants were in controlled environments for at least part of that period of time. Nearly half the sample (49%) met criteria for dependence on two substances. The most common dependencies were methamphetamine (41%) and alcohol (35%) followed by opiates (19%).

HIV Risk

Frequency of HIV risk behavior over the past 6 months can be seen in Table 2. Twenty three percent of the sample reported injecting drugs use and 17% reported having shared needles. However, among needle users, 80% reported using a new needle all of the time or always cleaning them with bleach before use.

Findings for sex risk showed the vast majority (82%) were sexually active over the past 6 months. Approximately 13% reported engaging in sex work over the past 6 months and 16% were men who had sex with men at some point over their lifetimes, a particularly high risk group. Of all participants who were active, 58% reported two or more partners and only 11% reported using condoms all the time. Twenty seven percent reported never using condoms and about a third used condoms less than all of the time. Slightly over 6% of the sample was HIV positive and about half (52%) reported being tested for HIV over the past 6 months. When we asked about concern or worry over contracting HIV, 55% indicated at least some level of concern.

Living Situation and Service Received

Over 43% of the sample reported their primary living situation before enrolling in the study was living in a residential treatment program or in a different SLH. Some of the services these individuals received may have been part of the package of services delivered in the program (residential treatment) or through referrals to community services (SLHs). Comparison of the proportions of services received between participants who resided in stepdown versus freestanding houses showed significant differences. Residents in stepdown houses were more likely to report receipt of counseling ($X^2=5.83$, $p<.05$), HIV testing/counseling ($X^2=10.88$, $p<.01$), and job training/counseling ($X^2=20.69$, $p<.001$). Residents in freestanding houses were more likely to report receipt of psychiatric medications ($X^2=6.61$,

$p < .05$) and legal services ($X^2=5.70$, $p < .05$). There were no differences between the two groups on receipt of medical services.

Association of Problem Areas

In addition to documenting the problems presented by probationers and parolees, we wanted to assess how various problem areas were related. The Spearman correlation matrix below (Table 3) shows that many of the problems presented by ex-offenders were correlated, although the size of most of the correlations were modest. Significant associations were particularly evident for variables that assessed drug problems. Alcohol and drug use (item 1) and ASI drug severity (item 3) had significant positive associations with seven of the nine variables measuring problems, including HIV risk, psychiatric severity, and legal problems. Another variable with a high number of significant correlations was ASI legal severity (item 5), which also had seven significant correlations with different problem areas.

Table 3 also shows how demographic and descriptive characteristics were associated with problems. Variables with strong associations were age and criminal justice status (probation or parole). Younger age and probation as opposed to parole status were consistently associated with higher severity of problems. Significant associations for criminal justice status were all on ASI and substance use variables; none of the associations between criminal justice status and HIV variables were significant.

Housing Status and Perception of Housing Stability

Columns 14 and 15 in Table 3 show associations between housing variables and problems. Column 14 shows correlations for perceptions of whether participants viewed their housing situation as stable, which correlated with five variables measuring problems. Column 15 shows correlations with housing status over the past 6 months, which correlate with six problem areas. Although Housing status and perceptions of housing instability were correlated ($\rho=0.296$, $p < .001$), the strength of the association was medium and there were some differences in how these variables were associated with problems. As perceptions of housing instability increased, participants were increasingly likely to report having 2 or more sexual partners. However, there was no association between number of sex partners and homelessness. Despite that finding, there were significant associations between being homeless and engaging in sex for money or drugs, higher ASI legal severity, and being on probation rather than parole. Perceptions of housing were not associated with these variables.

Table 4 shows that both housing variables predicted a variety of problem areas, including substance use, HIV risk, ASI psychiatric severity, and ASI legal severity. Relative to marginal housing, homelessness was associated with higher severity of problems. Very few ex-offenders had stable housing situations (apartment or house) before entering the SLHs and stable housing was not tested in the housing status models due to the low number ($N=14$). However, a majority of the sample ($N=174$) *perceived* their housing to be stable. In our regression models, the extent to which ex-offenders perceived their housing situation as unstable they reported higher severity of problems. Overall, odds ratios and beta coefficients were stronger for the housing status variable, although the provided sex for drugs or money

variable was significant for perception of housing instability but not for housing status. In our bivariate analyses (Table 3) ASI drug severity showed significant associations with both housing variables. However, when we tested whether housing variables predicted ASI drug severity using multivariate regressions that controlled for individual characteristics we did not find significant relationships (not shown in the table).

Discussion

As criminal justice systems increasingly emphasize alternatives to incarceration for drug offenses, communities will need to consider a variety of questions. Where will ex-offenders live? How do we ensure public safety while they reside in the community? How will ex-offenders achieve financial stability? What types of services are needed to address substance abuse, mental health, HIV risk, and other problems? For example, our sample of 330 ex-offenders entering SLHs had a history of HIV risk behaviors or were HIV positive. How do we reduce the level of HIV risk and harm for them and their sex partners, particularly when some do not know their HIV status? Can SLHs succeed in connecting residents with the services they need? How are the characteristics of ex-offenders in community based recovery settings changing as a result of rapidly increasing diversion and release from incarceration? We posit that SLHs can play an important role for in providing alcohol- and drug-free housing to ex-offenders and that this type housing is necessary for many to successfully engage in services they need and succeed in other aspects of community functioning, such as maintaining work and stable family relationships.

An important step in planning alternative dispositions to incarceration for persons convicted of drug offenses is to assess their characteristics, service needs, and problems. Toward that end, we aimed to document the characteristics and problems of persons on probation or parole who were HIV positive or reported lifetime HIV risk behaviors. We hypothesized that housing status and one's perceptions of the stability of their housing situation would predict various problem areas, including substance use, HIV risk behaviors, severity of legal problems, and severity of psychiatric problems. The discussion below addresses key problem areas identified by study participants, the associations of housing to problems, and service needs.

Criminal Justice Characteristics

The sample indicated they had extensive criminal justice histories, both in terms of number of arrests and average time incarcerated. For many of these individuals, developing a successful, pro-social lifestyle in the community may be difficult given their extensive histories of legal problems, long periods of incarceration, and affiliations with social networks that fuel antisocial behaviors. SLHs can be helpful in providing a long-term alcohol and drug free living environment, peer support for recovery, and pro-social interpersonal networks; places where ex-offenders can develop and practice the necessary skill to avoid re-incarceration and succeed in adapting to the community. However, it is not enough to simply provide affordable housing and monitor residents to ensure they are not using substances. Residents need to access a variety of services and supports to address the

needs they present. It is currently unclear to what extent ex-offenders in SLHs access needed services during their time in the houses.

Employment and Education

Given the extensive criminal justice histories among individuals in our sample, it is not surprising that they evidenced significant educational and employment problems. Over 64% of the sample did not have a high school education and 85% indicated they had an income under \$12,000. On the ASI legal severity scale the average score of 0.82 reflects serious, ongoing concerns about work during the past 30 days. Clearly, many SLH residents face serious challenges in terms of successfully entering the job market. This finding is particularly concerning because most residents entering the houses did not receive job training or assistance finding work. Among the entire sample, less than 20% received any type of job training or placement. The proportion was significantly higher among persons who left residential treatment programs and entered stepdown houses (65%), but clearly not commensurate with the level of need among the population.

Substance Use and Abuse

In addition to measures of lifetime problems, we also assessed problems during the 6 months before residents entered the SLHs. Although 65% of the sample reported their primary living situation the 6 months before entering the SLH was in some type of controlled environment (e.g., residential treatment, incarceration, or a different SLH), there were significant problems with substance abuse. Nearly 45% of the sample met DSM IV criteria for dependence on two or more substances and 69% reported using substances during the 6 months prior to entering the SLH. Apparently, some of these individuals were obtaining substances while living in controlled environments or they resided in controlled environments for only part of the past 6 months and experienced significant substance abuse problems during the time they lived elsewhere.

HIV Risk

In addition to substance use, ex-offenders entering SLHs have significant HIV risk. Among all persons entering the SLHs with a criminal justice status, only about a fourth did not meet our HIV inclusion criteria. These findings were not surprising given high rates of infection and risk behavior in criminal justice systems (Belenko, 2006; Leukefeld et al., 2009). Seventeen percent of the sample reported sharing needles and 4.2% reported needle use without always using bleach to clean needles. High risk sex risk behaviors were also concerning, including a majority who reported they had sex with two or more partners, 13% engaging in sex work, and only 11% reporting they used condoms all the time. These data suggest ex-offenders and their sex partners are at significant risk of contracting HIV.

The findings for HIV risk suggest operators of SLHs and corrections professionals working with ex-offenders entering these houses need to encourage HIV testing and reduction of HIV risk behaviors. Despite the evident HIV risks, only slightly more than half (52%) had been tested for HIV during the past 6 months and only 20% reported receiving HIV testing or counseling during the past 2 months. Even residents entering stepdown houses after

completing residential treatment had low proportions reporting receipt of HIV services during the past two months (31%).

Recent Problems

Some measures assessed problems over shorter time periods, such as the ASI, which assesses problems over the past 30 days. Some of these measures showed lower levels of problem severity because participants could be interviewed at any point during the first 30 days in the SLH. Thus, nearly all were already residing in the SLH for part of the time being assessed. Abstinence was mandatory in all of the houses so it was not surprising that the ASI alcohol and drug scales were relatively low. Because all of the participants in the study were ex-offenders on probation or parole it might be expected that ASI legal severity would be high. However, the mean of 0.18 reflects a mixed picture where many participants were reporting relatively low severity of legal problems. Part of the reason for this finding may have been by the time ex-offenders entered the SLHs and were interviewed for the study they were no longer at risk for being incarcerated if they followed the rules of the house and complied with the terms of their probation or parole. Eighty-two percent of the sample reported they did not receive legal services during the past two months and those who did were more likely to have received these services if they were living in freestanding houses. In stepdown houses, where entering residents recently completed residential treatment funded by the criminal justice system, residents may have correctly viewed themselves as on track to successful resolution of their legal problems.

Psychiatric Problems

ASI psychiatric severity was relatively higher than other ASI scores (mean=0.29, sd= 0.25), the one exception being employment, which has been discussed above. A significant number of residents reported receiving counseling over the past two months to address mental health issues (45%) and nearly a third had received some type of –psychiatric medications. Not surprising, persons entering stepdown houses after completing residential treatment were more likely to report receiving counseling services than persons living in freestanding homes. Overall, the levels of psychiatric symptoms found among incoming ex-offenders supports the importance of SLHs having mechanisms in place to address psychiatric problems, either through contracted on-site services or close coordination with local mental health services.

Associations among Problem Areas

Overall, the correlations between problem areas support a syndemic view (Brennan, et al., 2012) of ex-offenders with HIV infection or a history of risk behaviors. Syndemics emphasizes that an array of problems and circumstances are interconnected in disease processes such as substance abuse and HIV. Study findings showed multiple associations between problem areas, although the size of the associations were small to medium. Measures of substance abuse and legal problems had a particularly high numbers of associations with other problems, including measures of HIV risk and psychiatric severity. An important implication for SLHs serving ex-offenders is they need to do more than provide an abstinent living environment. They need to recognize the potential mix of problems this population is facing and make provisions for them to receive relevant services

onsite or offsite through referrals to community programs. There is a need for research documenting the characteristics of residents who are able access needed services while they reside in a SLH and the characteristics of those who might require a more structured setting that includes on-site services provided by the program.

Role of Housing

Housing was an obvious need for the persons in our sample. Reports of being in stable housing before entering the SLHs were rare (4%) and most (78%) were in temporary, marginal living situations. A significant minority (18%) reported literally being homeless most of the previous 6 months. Housing was also shown to be important because homelessness was associated with measures of substance use, HIV risk, and severity of legal and psychiatric problem.

One of the unique aspects of the study is the examination of housing status along with the person's perception of housing stability. Although these two ways of examining housing were correlated, the size of the correlation was not particularly large ($\rho=0.296$). It was interesting that 22% of persons who were homeless considered their housing situation to be stable and most in temporary living situations considered their housing to be stable. Moreover, both housing status and housing stability predicted a variety of problem areas controlling for demographic factors. These findings support the growing contention in the broader literature on homelessness that consumer perceptions about housing choices should be considered when providing housing assistance (Paquette & Pannella Winn, 2016; Pannella Winn & Paquette, 2016).

Limitations

There are several limitations that should be noted:

1. Our measure of service utilization was dichotomous (received the service of the last two months versus did not). Level of involvement in services was not measured and could be important.
2. Our study documented that 74% of persons on probation or parole who were entering SLHs had some level of HIV risk. However, our study results can only be generalized to those with HIV risk, not the broader population of all ex-offenders in SLHs.
3. The houses studied were all located on one city (Los Angeles) and were not necessarily a representative sample of all SLHs in the geographical area. Ex-offenders in other houses might have different characteristics.
4. The data used in all analyses were cross sectional and were designed to show associations at one time point. Thus, study findings cannot be used to support temporal causality.

Conclusion

For ex-offenders on probation or parole, stable housing is an integral part of successful adaptation to the community. The findings reported here suggest stable housing might be particularly important for those who have a history of HIV risk. Among our sample of ex-offenders with HIV risk who were entering SLHs, very few indicated they had a stable living situation. Although homelessness constituted less than a fifth of the sample, compared to persons in marginal housing situations these individuals had a variety of more severe problems, including substance abuse, HIV risk, psychiatric symptoms, and risk for recurring legal problems.

Criminal justice professionals need to recognize provision of stable housing is important for ex-offenders with HIV risk, but it is not enough for safe and successful functioning in the community. Large numbers engage in HIV risk behaviors that put themselves and their sex partners at risk. Moreover, these individuals present a host of additional problems needing attention. Therefore, when considering housing referrals, criminal justice professionals should assess housing options in terms of access to HIV and other community services and ways the living environment facilitates safe and successful adaptation to the community. In addition to housing status, it is incumbent upon criminal justice professionals to consider ex-offender perceptions about their housing situations because perceptions are associated with a variety of problems and not necessarily dependent upon the housing status alone.

The policy of providing criminal justice funding for ex-offenders to live in SLHs can help them get acclimated to the community for several months. However, criminal justice professionals need to recognize that financial stability is an essential element of long-term residence in a SLH or more independent, stable living in the community. Participants in our sample had extensive criminal justice histories, poor work histories, and inadequate education, which can make finding stable employment difficult. A significant barrier to employment is evident in the finding that nearly two thirds of the sample reported they did not have a high school diploma. There is a clear need for job training and remedial education and one of the challenges for criminal justice professionals is to assess the extent to which SLH providers coordinate receipt of education and job training on- or off-site. However, our results show ex-offenders with HIV risk behaviors in SLHs face multiple problems in addition to finding work. To be effective, criminal justice professionals and SLH operators need to work in tandem to recognize the syndemic mix of problems these individuals present and ensure they are appropriately addressed, either through referral to services in the community or contracting with outside service providers to provide on-site services.

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Table 1
Baseline Characteristics (N=330)

	%
Gender	
Male	74.2
Marital Status	
Never married	67.3
Married/live-in partner	5.8
Div/Sep/Wid	27.0
Age (Mean, sd)	38.7(11.7)
Education	
HS graduate+	35.8
Sexual Orientation	
Heterosexual	84.2
Gay/lesbian/Bisexual/Other	15.8
MSM lifetime	15.5
Race/ethnicity	
White	47.3
African-American	24.2
Hispanic	19.1
Other/mixed	9.4
Income	
\$0-\$12,000	84.5
Over \$12,000	15.5
Usual living situation prior to SLH	
Own home/apartment	4.2
Temporarily housed in another's home	10.9
Rooming house or group home	1.8
Sober Living House	11.2
Residential alcohol/drug treatment	32.7
Jail/Prison	20.9
Homeless/shelter	18.2
Housing Status (3 category based on HUD definition)	
Stable	4.2
Marginally housed	77.6
Literal homelessness	18.2
Perceived housing stability	
Stable	47.3
Unstable	52.7
Legal Status	
Probation (including drug court)	74.2

	%
Parole	25.8
Any time spent in jail (past 6 months)	41.2
Any time spent in prison (past 6 months)	20.0
# of months incarcerated (lifetime)	
None	4.9
1-36 months	45.5
37-120 months	20.6
121-299 months	23.3
300+ months	5.8
Number of days worked (past 6 months)	
None	57.0
90 days or fewer	33.9
91 days or more	9.1
Service Receipt (past 2 months)	
Medical/medication	52.7
Psychological counseling	44.6
Psychiatric medications	32.1
HIV testing/counseling	20.0
Job training/testing/counseling	19.7
	Mean (sd)
Arrest History (lifetime)	
Mean months incarcerated (range 0-720)	93.5 (116.3)
Mean # of arrests (range 1-336)	20.1 (27.9)
Mean # of convictions (range 0-235)	11.6 (18.6)
ASI problem severity (range 0.0-1.0)	
Alcohol	0.14 (0.19)
Drug	0.08 (0.10)
Psychiatric	0.29 (0.25)
Legal	0.18 (0.19)
Employment	0.82 (0.23)

HUD = Housing and Urban Development

Table 2

Baseline HIV risk characteristics (N=330).

	<i>n</i>	%
Any needle use (past 6 months)	76	23.0
Any needle sharing	55	16.7
Needle cleaning frequency		
Never	4	1.2
Less than always	10	3.0
Always	30	9.1
Always use new	28	8.5
Sexual Activity (past 6 months)	<i>n</i>	%
Any sexual activity	269	81.5
# of sexual partners		
None	61	18.5
1 partner	110	33.3
2+ partners	152	47.1
MSM (past 6 months) ~	17	6.9
MSM (Lifetime) ~	41	16.7
Provided sex for drugs or money	42	12.7
Condom use (past 6 months)		
No sex	61	18.6
Always use condoms	30	9.1
LT always use condoms	88	26.8
Never use condoms	149	45.4
HIV Concern and testing		
Any concern/worry of contracting HIV	167	54.6
Tested for HIV(past 6 months) ⁺	142	52.4
HIV positive (lifetime)	20	6.1

⁺Total N = 271

~ percentage based on male residents

Table 3

Correlations among Study Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Any alcohol or drug use, past 6 months	1.000	.300***	.392***	.242***	.323***	.240***	.275***	.304***			-.178***		-.254***	.316***	.445***	
2. ASI Alcohol	1.000	.334***	.347***	.248***									-.247***			
3. ASI Drug	1.000	.309***	.281***	.161**	.225***	.161**	.260***	.260***			-.164**		-.159**	.205***	.239***	
4. ASI Psychiatric	1.000	.302***	.302***							.172**			-.190***	.168**	.216***	
5. ASI Legal	1.000	.148**	.168**	.148**	.174***	.174***	.218***	.218***			-.148**	.163**	-.266***	.244***		
6. 2+ partners, past 6 months	1.000	.274***	.274***	1.000	1.000	1.000	1.000	1.000			-.195***	.147**				
7. Sex for drugs/money, past 6 months	1.000	.158**	.158**	1.000	1.000	1.000	1.000	1.000			.199***			.186***		
8. No condom use, past 6 months	1.000															
9. Any IV drug use	1.000															
10. Gender (female/male)	1.000															
11. Age	1.000															
12. MSM, past 6 months	1.000															
13. Criminal Justice Status (Probation/Parole)	1.000															
14. Perceived housing instability	1.000															
15. Housing status (marginal/homeless)	1.000															
16. Ethnicity (white/non-white)	1.000															
Total significant correlations with outcome measures	7	4	7	4	7	4	5	0	4	2	5	2	5	5	6	2

Note: Problem measures consisted of items 1 through 9.

** p<0.01,

*** p 0.001

Table 4
Associations between housing, alcohol and drug use, and HIV risk behavior

	Any alcohol or drug use		ASI Psychiatric		ASI Legal		2+ Sexual partners		Provided sex for drugs/money		Injection drug use	
	OR	95%CI	Beta	SE	Beta	SE	OR	95%CI	OR	95%CI	OR	95%CI
Perceived housing instability												
Stable (n=174)	--	--	--	--	--	--	--	--	--	--	--	--
Unstable (n=156)	3.1 ^{***}	1.8-5.1	0.07 ^{**}	0.02	0.04 [*]	0.02	1.7 [*]	1.1-2.7	1.9	1.0-3.8	1.9 [*]	1.1-3.3
Housing Status												
Marginal (n=256)	--	--	--	--	--	--	--	--	--	--	--	--
Homeless (n=60)	13.1 ^{***}	3.8-45.3 [‡]	0.10 ^{***}	0.03	0.09 ^{***}	0.02	1.6	0.9-3.0	3.1 ^{**}	1.5-6.4	3.6 ^{****}	1.8-7.1

^ Models control for gender, age, ethnicity, sexual orientation, income, and lifetime months of incarceration

‡ Nearly all homeless used drugs or alcohol (n=57 of 60)

Stable housing was not included in housing status models due to the low number (N=14)

* p<0.05;

** p<0.01 ;

*** p<0.001