Prior Incarceration and Barriers to Receipt of Services among Entrants to Alternative to Incarceration Programs: A Gender-Based Disparity

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ABSTRACT *The high levels of health and psychosocial needs among correctional populations strongly shape the well-being of the urban communities from which a large number of criminal justice-involved individuals come or to which they return. The benefits of providing services to correction-involved individuals and linking them to providers such as with alternative to incarceration (ATI) programs may be limited if they encounter difficulties accessing such services. This study identified the types of barriers that have prevented entrants into ATI programs from receiving health and psychosocial services. We then tested the association between number of prior incarcerations and number of barriers by gender. From a random sample of adults (N=322; 83 women and 239 men) entering ATI programs in New York City, data were collected via structured interviews that elicited self-reported sociodemographics, substance use, prior incarcerations, and barriers that had actually prevented a participant from visiting or returning to a service provider. Participants reported an average of 3.0 barriers that have prevented them from receiving health and psychosocial services. The most prevalent barriers predominantly concerned service providers' inability to accommodate constraints on participants' time availability or flexibility, transportation, and money. Compared to women, men had a significantly different association that was in the adverse direction—i.e., more prior incarcerations was associated with more barriers—between prior incarcerations and encountering service barriers. Findings indicate that ATI program entrants experience many barriers that have prevented them from receiving health and/or psychosocial services. Furthermore, men with more extensive incarceration histories particularly are disadvantaged. ATI programs can improve the public health of urban communities if such programs are prepared and resourced to facilitate the receipt of services among program participants, especially men who have more extensive incarceration histories.*

KEYWORDS *Corrections, Alternative to incarceration, Services, Barriers, Gender disparities*

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BACKGROUND

In the United States, the number of adults under correctional supervision has recently peaked at over 7.2 million individuals, which represents more than a three-fold increase since 1980.¹ Urban, impoverished and/or under-resourced communities represent a large source of individuals entering the correctional system,^{2–5} as well as receiving them postincarceration.^{6–8} The community social disorganization—and concomitant lack of availability and accessibility of health and psychosocial services—which fosters and/or results from criminal justice involvement is problematic for those residing in the community who have passed through the criminal justice system. Their levels of health and psychosocial needs—a spectrum which includes communicable diseases (e.g., HIV and tuberculosis), chronic health conditions (e.g., asthma and diabetes), substance abuse and addiction, mental health disorders (e.g., schizophrenia, major depression, and posttraumatic stress disorder) and social problems (e.g., homelessness and unemployment)—are exceptionally high,^{9–12} exceeding those of the general population.^{9,12–15} However, in contrast to the research on health and psychosocial needs among criminal justice-involved populations, there is a paucity of research on the barriers to receipt of health or psychosocial services among individuals residing in the community who have a history of involvement with the criminal justice system. Furthermore, since some research with correctional populations have found different patterns of need based on gender,^{14,16–22} it would be important to determine whether men and women in the community who have criminal justice histories experience differences in the barriers to receipt of services. The recognition of this has led to the call for the correctional research agenda to address the question of “How does incarceration influence gender disparities?”²³

The importance of elucidating barriers to receipt of services, particularly among individuals residing in the community with a history of criminal justice involvement, is underscored given that the majority (70%) are under some form of community supervision.¹ While parole and probation represent the bulk of these cases, there has been increasing use of alternative to incarceration (ATI) programs. ATI programs divert offenders, typically prior to sentencing or in lieu of serving time, to treatment programs and services. As part of a therapeutic jurisprudence and restorative justice approach, nonresidential ATI programs allow participants to address underlying problems (e.g., addiction) while maintaining or strengthening positive roles they play for their families and communities (e.g., child/elder caretaking and labor force participation). In this study, we obtained a sample of individuals residing in the community with a history of criminal justice involvement by randomly selected participants who are entering nonresidential ATI programs in New York City in order to:

- (1) Identify the types of barriers that have prevented entrants into ATI programs from receiving health and/or psychosocial services;
- (2) Test hypotheses that a more extensive prior incarceration history is associated with experiencing a greater number of barriers that have prevented receipt of services among ATI program entrants; and
- (3) Test the hypothesis that the relationship between prior incarceration and barriers differs as a function of gender as well as infer whether the relationship is more adverse for women or men.

METHODS

Study Sites and Sample

To obtain a random sample of adults entering ATI programs, we selected three prospective study sites among the agencies receiving funding from the New York City Mayor's office to provide nonresidential ATI programming. ATI program participants are predominantly facing B-level felonies, with the large majority charged with drug offenses or robberies. ATI program services include drug treatment and counseling, vocational training and placement services, life skills classes, parenting support, women-specific programs, and crisis intervention in a variety of modalities, though most services are delivered in group settings. Programs also provide evening sessions.

Each week, agency staff reviewed referral/intake records to identify potential study participants based on the following eligibility criteria: (1) s/he was 18 years old or older; (2) s/he was enrolled in the ATI program for 30 days or less; and (3) s/he was able to understand English at a conversational level as operationalized as attending ATI services provided in English; in addition, as part of the funding mechanism, participants must have had a history of illicit substance use. From the weekly list, we attempted to randomly select about one-third of the incoming men and two-thirds of the incoming women using a time-space sampling method successfully implemented in another study.²⁴ Briefly, we used a random number sequence to select one-third and two-thirds of the days of the week—also stratified by morning, afternoon, and evening periods—for recruitment of male and female participants, respectively. We attempted to recruit any of the participants on the list who were attending the program on the randomly selected day and time period. Originally, three sites were selected based on serving the largest number of adults (versus juveniles), but one site was dropped after 2 months when agency intake referral process did not prove to be reliable in identifying eligible participants. Recruitment was conducted from May 2007 to November 2009.

Procedures

The Institutional Review Boards from the investigative team's institution as well as the ATI programs approved all protocols, materials, and information used in this study. Prior to the assessment, participants provided full informed consent for procedures and participation in all study activities.

Recruitment A trained Research Assistant (RA)—who was the same gender as the potential study participant—approached identified ATI program participants (after their ATI intake appointment was completed), introduced the study, answered questions, and solicited interest in participating in the study. Interested participants were scheduled for an assessment interview to be held in a private office at the ATI program, most often in the same day. In the first agency, we attempted to recruit 164 individuals, and one woman and one man refused to participate. In the second agency, we attempted to recruit 146, and one woman and one man refused to participate. In the agency that was dropped from the study after 2 months, we approached 26 individuals and interviewed 25. It became apparent during the interview with 12 of the individuals that they were not eligible due to not being with the program for 30 days or less; those cases were dropped from the study. After dropping ineligible cases and treating all refusals as eligible for the study to be conservative, these data indicate that we achieved a 98% enrollment rate.

Assessment Trained RAs conducted face-to-face, structured interviews in a private office located in the ATI program. RAs were gender-matched to the participant to try to increase reliability and validity of responses to the questionnaire which covered potentially sensitive or gender-sensitive topics (e.g., sexual violence and buying/selling sex).^{25–27} Each structured interview elicited self-reported data on the measures described below. The majority of interviews were completed in 45–60 min. Participants received \$25 for completing the interview.

Measures

Sociodemographic data included self-identified/reported age, race/ethnicity, marital status, education, current employment status, monthly income (over the prior 3 months), and whether the participant currently had health insurance. Participants were also asked to report the number of times they were incarcerated in their lifetime.

Substance use history utilized the Risk Behavior Assessment,²⁸ which elicits self-reported number of days of use for heroin, crack/cocaine, marijuana, and other illicit drug (e.g., nonprescribed pharmaceuticals) as well as alcohol use and binge drinking (operationalized as consuming six or more drinks in a single session). This instrument was modified to focus on substance use during the 30 days prior to the participant's most recent arrest or incarceration.

Barriers to receipt of services were measured using an instrument we developed to assess whether participants reported ever being unable to attend or return to a service provider for up to 17 issues. The specific issues were derived from the Allen Barriers to Treatment Instrument^{29,30} that originally focused on barriers to drug treatment; additional items have been added to include barriers identified during focus groups from a pilot study with ATI participants and inclusive of services beyond drug treatment.

Statistical Analyses

The dependent variable of interest, number of barriers to receipt of services, was calculated as the total number of issues for which a participant responded affirmatively that the issue prevented her/him from attending or returning to a service provider. The main independent variable is number of prior incarcerations. For race/ethnicity, the small number of participants in various categories other than Black/African American or Latino/a prohibited meaningful analyses, so they were all coded as "Other." For similar reasons, we collapsed separated, divorced, and widowed participants into a single category. Multivariate models used $\ln(\text{monthly income} + \$1)$ as widely used in econometrics³¹ as well as to limit the impact of a nonnormal distribution and outliers. For multivariate models, we selected binge drinking and the most frequently reported illicit substances—marijuana, crack/cocaine, and heroin—and coded use of each substance in a binary manner.

Bivariate analyses relied on *t*-tests, ANOVA and Chi-square analyses. Adjusted associations were estimated—separately for women and men—via multiple regression and used a 95% level of confidence as the criterion for significance. To test whether the sign and magnitude of the association between number of prior incarcerations and number of service barriers experienced differed significantly between women and men, a final model was created by adding gender and an interaction term (i.e., number of prior incarcerations $\times$ gender) to the model, with

parameters estimated using the entire sample. We used Stata Version 10.0 (StataCorp, College Station, TX) to perform all statistical analyses.

RESULTS

The sample consisted of 83 women and 239 men. The average age of participants was 29.9 years (SD=11.1). The majority identified as Black/African American (58%), followed by Hispanic/Latino/a (28.3%); among the remaining 44, most ($n=16$) self-identified as multiracial, followed by 13 as White (non-Hispanic). Three-fourths ($n=239$, 74.2%) of the sample were single, never married; 46 (14.3%) were married; and the remaining 37 (11.5%) were separated, divorced, or widowed. Slightly fewer than half ($n=151$, 46.9%) had earned a high school diploma/Graduate Equivalency Diploma (GED). With respect to employment and income, 45 (14%) reported being employed at least part-time, on or off the books, and the self-reported average monthly income was \$810 (SD=1,209). Slightly more than half ($n=180$, 55.9%) of the participants reported having health insurance. Use of an illicit substance during the 30 days prior to their most recent arrest/incarceration was reported by almost three-fourths ($n=233$, 72.4%) of the participants. The most frequently reported illicit substance used was marijuana ($n=197$, 61.2%), followed by crack/cocaine ($n=52$, 16.1%), and heroin ($n=37$, 11.5%). In addition, one-third ($n=109$, 33.9%) of the participants reported at least one episode of binge drinking in the 30 days prior to their most recent arrest/incarceration. Table 1 presents the distribution of the aforementioned characteristics and behaviors separately for women and men.

TABLE 1 Sociodemographic characteristics of a random sample of women and men entering alternative to incarceration programs

	Women ($n=83$)	Men ($n=239$)
Age (years)**	$\bar{x} = 33.5$ (SD=11.3)	$\bar{x} = 28.7$ (SD=10.7)
Race/ethnicity		
Black/African American	$n=41$ (49.4%)	$n=146$ (61.1%)
Latino/a	$n=29$ (34.9%)	$n=62$ (25.9%)
Other	$n=13$ (15.7%)	$n=31$ (13.0%)
Marital status		
Single, never married	$n=57$ (68.7%)	$n=182$ (76.2%)
Married	$n=15$ (18.1%)	$n=31$ (13.0%)
Separated/divorced/widowed	$n=11$ (13.3%)	$n=26$ (10.9%)
Has HS diploma/GED	$n=35$ (42.2%)	$n=116$ (48.5%)
Is employed	$n=10$ (12.0%)	$n=35$ (14.6%)
Income over past 3 months (\$/month)**	$\bar{x} = 418$ (SD=424)	$\bar{x} = 946$ (SD=1,356)
Has health insurance**	$n=63$ (75.9%)	$n=117$ (49.0%)
Substance use		
Binge drinking	$n=27$ (32.5%)	$n=82$ (34.3%)
Marijuana**	$n=40$ (48.2%)	$n=157$ (65.7%)
Crack/cocaine**	$n=27$ (32.5%)	$n=25$ (10.5%)
Heroin**	$n=18$ (21.7%)	$n=19$ (7.9%)

** $P<0.01$ (statistically significant difference between women and men)

The participants in the sample reported being incarcerated an average of 2.3 (SD=4.5) times prior to their most recent entry into the ATI program; although the difference was not statistically significant, the average number of prior incarcerations among men ($\bar{x}$ = 2.4, SD=4.5) was higher than the average reported by women ($\bar{x}$ = 1.7, SD=2.1).

Barriers to Receipt of Services

Two-thirds of the sample (n =215, 66.8%) reported at least one experience whereby a barrier prevented her/him from seeing or returning to a service provider; 63 (75.9%) of the women and 152 (63.6%) of the men reported experiencing at least one barrier. On average, participants reported experiencing 3.0 (SD=3.4) types of barriers that have prevented them from seeing or returning to a service provider; women reported a slightly higher number of barriers on average compared to men— $\bar{x}$ = 3.4 (SD=3.5) versus $\bar{x}$ = 2.9 (SD=3.4), respectively—but the difference was not statistically significant. The inability of a service provider to accommodate a participant’s other responsibilities/obligations (e.g., work/school schedule and family responsibilities) was noted by the most number of participants (n =102, 31.7%) as a reason why s/he could not see or return to a service provider. At least a quarter of the participants reported experiencing the following barriers: inability to access the service via public transportation (n =99, 30.7%), inability of the provider to offset transportation costs (n =89, 27.6%) and the time an appointment/visit takes (n =84, 26.1%). Table 2 presents the reported prevalence of barriers to receipt of services, separated by gender.

TABLE 2 Barriers to receipt of services encountered among women and men entering alternative to incarceration programs

Issue	Women (n =83)	Men (n =239)
Provider’s ability to accommodate your other responsibilities/ obligations	29 (34.9%)	73 (30.5%)
Ability to use public transportation to travel to the provider	25 (30.1%)	74 (31.0%)
Ability of the program to cover/offset travel costs	24 (28.9%)	65 (27.2%)
Time an appointment/visit takes	16 (19.3%)	68 (28.5%)
Distance to the service provider	23 (27.7%)	56 (23.4%)
Time to get appointment or actually see the service provider	21 (25.3%)	56 (23.4%)
Trust that the provider is acting in your best interest*	24 (28.9%)	52 (21.8%)
Cost/charges associated with a service	17 (20.5%)	52 (21.8%)
Unfair treatment/discrimination due to criminal justice history	19 (22.9%)	37 (15.5%)
Unfair treatment/discrimination for reasons other than criminal justice history	19 (22.9%)	31 (13.0%)
Number or extent of a programs rules/requirements (e.g., having certain documentation)	15 (18.1%)	31 (13.0%)
Ability of the program to providers services in language with which you are most comfortable	14 (16.9%)	25 (10.5%)
Provider’s sensitivity, awareness and knowledge of your culture	11 (13.3%)	22 (9.2%)
Safety of the neighborhood where services are provided	7 (8.4%)	25 (10.5%)
Ability of the program to provide childcare*	8 (9.6%)	8 (3.3%)
Ability of the program to work with undocumented immigrants	5 (6.0%)	8 (3.3%)
What others might think if they knew you used certain services	3 (3.6%)	9 (3.8%)

* P <0.05 (statistical significance)

Sociodemographic and drug use variables presented in Table 1 that had significant correlations (in the positive direction) with the number of barriers experienced were the following: age, having a HS diploma/GED, and using heroin during the 30 days prior to the most recent arrest/incarceration.

Prior Incarcerations and Experiencing Barriers to Services

We tested hypotheses regarding an association between prior incarceration and experiencing service barriers. Among the entire sample, a greater number of prior incarcerations were significantly associated with a greater number of barriers that prevented receipt of or return to a service provider. However, when separated by gender and controlling for sociodemographic and substance use indicators (Table 3), the relationship between a greater number of prior incarcerations and greater number of service barriers experienced remained significant only for men. Among women, there was actually an inverse relationship overall with an association that was suggestive, albeit not reaching a 95% level of confidence.

Prior Incarcerations and Barriers to Services: Are Women and Men Affected Differently?

Using the parameters from the statistical models, Figure 1 depicts the putative relationship between the number of barriers experienced as a function of number of

TABLE 3 Correlates to the number of barriers to receipt of services experienced among women and men entering alternative to incarceration programs

	Among women <i>B</i> (SE)	Among men <i>B</i> (SE)
Number of prior incarcerations	−0.34 [†] (0.19)	0.13 ^{**} (0.05)
Age (years)	0.01 (0.04)	0.01 (0.03)
Race/ethnicity		
Black/African American	(Reference)	(Reference)
Latino/a	0.23 (0.88)	−0.27 (0.54)
Other	2.42 [*] (1.05)	−0.36 (0.69)
Marital status		
Single, never married	(Reference)	(Reference)
Married	0.44 (0.97)	0.21 (0.71)
Separated/divorced/widowed	−1.63 (1.12)	0.20 (0.82)
Has HS diploma/GED	1.98 [*] (0.77)	1.31 ^{**} (0.46)
Is employed	1.59 (1.13)	0.32 (0.65)
ln(monthly income + \$1)	0.18 (0.26)	−0.11 (0.16)
Has health insurance	−0.55 (0.927)	0.18 (0.46)
Substance use		
Binge drinking	0.30 (0.82)	0.33 (0.48)
Marijuana	0.88 (0.79)	0.13 (0.49)
Crack/cocaine	0.71 (0.93)	−0.98 (0.82)
Heroin	1.66 (1.03)	1.02 (0.93)

[†]*P*<0.10 (statistical significance of difference from zero)

^{*}*P*<0.05 (statistical significance of difference from zero)

^{**}*P*<0.01 (statistical significance of difference from zero)

FIGURE 1. Relationship between experiencing barriers to receiving services and prior incarceration history among alternative to incarceration program participants by gender.

prior incarcerations for women and men in the sample. Including the number of prior incarcerations $\times$ gender interaction term in a final regression model with the entire sample, with covariance adjustment using sociodemographic and substance use variables, allows one to test whether the sign and magnitude of the slopes in Figure 1 differed significantly (i.e., specifically testing the hypothesis that the relationship is significantly different for women compared to men) while controlling for the main effects of sociodemographic and substance use. For the interaction term, $B=0.49$ ($SE=0.19$, $P=0.010$), indicating that the relationship was significantly larger in the more positive direction for men compared to women; the significance remains even after Bonferroni adjustment for multiple comparisons. That is, men experienced significantly more barriers than women as the number of prior incarcerations increases. In the same model, significant associations were observed for having a high school diploma/GED ($B=1.48$, $SE=0.39$, $P=0.001$) and using heroin in the 30 days prior to the most recent arrest/incarceration ($B=1.57$, $SE=0.68$, $P=0.022$).

Sensitivity analyses indicate that, overall, the findings and inference from hypothesis testing remained remarkably consistent when control variables were operationalized in different ways (e.g., quintiles or rectifying potential outliers for income and substance use frequencies instead of dichotomized versions). Point estimates never changed by more than a small fraction of standard errors presented earlier, and patterns of significance did not change, lending confidence in the validity and robustness of findings regarding the relationship between number of prior incarcerations and number of barriers to receipt of services experienced as well as this relationship being significantly stronger and positively correlated among men compared to women in the sample. When models were run separately by study site (for the two largest sites), the coefficient for the incarcerations $\times$ gender interaction term was no longer significant in one model. However, since the sign and magnitude were similar to earlier estimates, we posit that the lack of significance for that subsample is due to the decrease in power stemming from the smaller sample size rather than a fundamental change in relationships among variables for participants at that site.

DISCUSSION

To our knowledge, this is the first study to examine barriers to receipt of health and psychosocial services among a random sample of men and women entering ATI programs. We demonstrated that a large majority—almost two out of three men and three out of four women—encountered barriers that prevented them from attending or returning to a service provider. The most frequently reported barriers involved limited resources such as time, transportation and money. Experiences of discrimination and/or lack of trust in a service provider's beneficence were also reported by 13–22% of the sample. More than half of the sample reported encountering multiple barriers. The identification of these barriers is important because if left unaddressed, they would undermine the success of the efforts and calls to action for providing increased and better healthcare and psychosocial services to criminal justice-involved populations as a strategic health approach.^{32,33}

The second research question focused on testing for a relationship between incarceration history and experiencing service barriers. Among women in the sample, we could not rule out the null hypothesis. However, for men, findings indicated a significant relationship whereby a larger number of prior incarcerations were associated with a greater number of barriers that prevented receipt of services. Although the proportion of women under correctional supervision has been increasing, the large majority (82%) of the correctional population were male in 2009.¹ Racial/ethnic minorities in the United States have borne the disproportionate brunt of the war on drugs that has driven a large part of the growth in incarceration rates over the past three decades;³ incarceration rates among Black/African American and Latino males were 6.4 and 2.4 times higher, respectively, than their White, non-Latino counterparts in 2009.³⁴ Thus, overcoming the barriers that prevent formerly incarcerated men from receiving services should facilitate the success of such services in treating and preventing health and social problems, particularly among men of color, ultimately underscoring the strategic importance of such endeavors in reducing prominent health disparities in the United States.

We also found support for a gender disparity that adversely affects men. Specifically, compared to women, a greater number of barriers were observed for a unit change in number of prior incarcerations for men; this differential impact remained significant even after controlling for sociodemographics and substance use. Thus, findings are consistent with a gender-based disparity whereby involvement with the criminal justice system adversely impacts men more than women in the ability to receive health and/or psychosocial services. This reinforces a larger need to redress criminal justice legislation, sentencing mandates, and policies as a matter of social justice.^{2,3}

Several limitations are worth noting. With respect to generalizability, the study sites did offer ATI programming specifically in Spanish to a small number of individuals; thus, findings should not be generalized to beyond English-speaking individuals and/or ATI programs. Combining White, multiracial, and other self-identified race/ethnicities into a single "Other" group also prohibits meaningful interpretation of results with respect to that category. With respect to methodology, the cross-sectional design and use of retrospective measures prohibits delineation of temporal sequencing and, hence, causal inference of periods of incarceration and experiencing barriers to receiving services. Further research is needed to identify the explanatory mechanisms underlying the observed association as well as other predictors of experiencing barriers. For example, having a high school diploma/GED

was associated with a greater number of barriers; preliminary examination with individual barriers indicates that the largest and most significant correlation was with trust that the provider is acting in the best interest of the individual. This suggests that psychological or cognitive processes (e.g., awareness or recognition) may play a key role in preventing receipt of services among entering ATI program participants.

The clearest implication from this study's findings is that ATI programs should be better prepared and able to facilitate the receipt of services among program participants, especially men who have more extensive incarceration histories. If resources and support are given to ATI programs such that they can provide additional health and psychosocial services, the most prevalent barriers will have been eliminated, since on-site services would obviate issues of time, transportation and availability as participants are already attending the ATI services. Less fragmentation of the service system in areas marked by high levels of incarceration and/or closer integration of community-based services with the criminal justice system should also facilitate greater accessibility and use of services.

Considering that the focal variable of interest is related to involvement with the corrections system and the use of a sample that is under community supervision, it is noteworthy that a commonality among the most frequently reported barriers reported suggest that those with limited resources, self-determination, and/or flexibility may have the most difficulty receiving health and psychosocial services in the community. Thus, retributive approaches to criminal justice that rely on physical, psychological, or social control may exacerbate or be inconsistent with reducing disease, illness, and psychosocial problems among correctional populations as a public health strategy.

If criminal justice involvement leads to greater difficulty in receipt of services, the continued unmet need may explain, in part, the concentrated health and/or psychosocial problems among individuals with histories of incarceration. Alternatively, if persisting, unmet needs lead to law-breaking behavior (e.g., use or sale of drugs), reducing barriers to receiving services can reduce recidivism. Regardless of the exact nature of the relationship explaining the link between prior incarceration(s) and increased barriers to services, funding, policies, and programming that strengthen ATI programs and reduce fragmentation of service delivery systems within communities impacted by incarceration can reduce recidivism and/or reduce health and psychosocial problems among men. These would be valuable gains in the effort to ameliorate health disparities, especially among men of color.

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