Comparison of Health and Social Characteristics of People Leaving New York City Jails by Age, Gender, and Race/Ethnicity: Implications for Public Health Interventions

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SYNOPSIS

Objectives. We compared health and social needs by gender, age, and race/ethnicity of people leaving New York City jails and assessed the implication of these differences for the development of jail reentry programs.

Methods. Surveys were completed with 1,946 individuals (536 men, 704 women, and 706 adolescent males) between 1997 and 2004. Structured questionnaires captured data on demographic, criminal justice, substance use, and health characteristics. Bivariate comparisons were performed to determine variations between men and women, men and male adolescents, and non-Latino black and Hispanic/Latino respondents.

Results. The majority of participants were black and Hispanic/Latino, reported high levels of substance use, had high rates of recidivism, and experienced difficult living circumstances. Compared with men, women were more likely to be homeless, use illicit drugs, report drug charges at index arrest, have health problems, and be parents. Adolescent males were more likely than men to rely on illegal activities for income and to have used marijuana and alcohol recently, and were less likely to report homelessness or health problems. Ethnic/racial differences between black and Hispanic/Latino respondents within gender and age groups were smaller than differences among these groups.

Conclusions. Jails concentrate individuals with multifaceted health and social problems, providing opportunities to engage at-risk populations in comprehensive reentry programs. Gender, age, and ethnic/racial differences among incarcerated populations require that interventions be tailored to the specific needs of these different groups.

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In 2004, U.S. jails admitted an estimated 12.6 million people, representing 9 million unique individuals, about 10 times the number admitted to prisons, the correctional facilities for those sentenced for more than one year.[1] Jails, on the other hand, incarcerate people awaiting trial or transfer to state prisons, serving sentences of less than a year, or serving time for parole or probation violations. Current criminal justice policies have resulted in a jail population that has substantially higher rates of substance abuse, infectious and chronic diseases, and mental illness than comparable nonincarcerated populations,[2–6] making jails an important setting for public health interventions.

In this article, we describe and compare by gender, age, and race/ethnicity the demographic, health, and social characteristics of a sample of 1,946 adult men and women and male adolescents enrolled in voluntary community reentry programs in New York City (NYC) jails. Our ultimate goal is to inform the development of tailored and targeted reentry interventions that can improve the health of people leaving jail and the communities to which they return.

Although jails provide a setting in which to reach the vulnerable populations that have been at the center of several recent urban epidemics, few of those incarcerated in jail receive services for the health and social problems that contributed to incarceration.[7–10] As a result, many return to their communities with unresolved health and behavioral problems that jeopardize their own, their partners', and their families' well-being, as well as community health and public safety. Some evidence suggests that current criminal justice policies may contribute to socioeconomic and racial/ethnic disparities in health by widening the gaps between populations with higher and lower incarceration rates.[3,11,12]

Since 1983, the U.S. jail population has increased by 257%.[13] Most people serve only a few days or weeks in jail and return to their communities within a few weeks of arrest, although almost half are re-incarcerated within a year. Low-income and black and Latino communities send and receive back a disproportionate burden of the jail population. Compared with prisons, jails put more people behind bars, incarcerate higher proportions of the populations of low-income urban neighborhoods, have more visits from family members, disrupt more lives, and may therefore have a more significant impact on public health. In recent years, law enforcement, public health, and elected officials have called attention to the importance of reentry from jail and prison and have developed a variety of interventions to facilitate transition from correctional facility to home in ways that promote individual and community well-being.[14–18] Proponents of reentry policies and programs argue that by shifting resources from incarceration to successful transition, it may be possible to improve public safety, promote population health, and reduce the high costs of current correctional policies.[7,14–16]

Development of successful transitional programs will require a fuller understanding of the unique needs of various populations leaving jail. Studies suggest that gender, age, and race/ethnicity have a significant influence on the outcome of the transition from jail to community.[17,19–21] While researchers have studied the impact of transitional programs on people with specific diagnoses such as human immunodeficiency virus (HIV) infection,[9,22,23] tuberculosis,[24–26] mental illness,[27,28] or addiction disorders,[2] few studies have looked at the experiences of a more general jail population. In addition, few studies have systematically compared large populations of people in jail by age, gender, and race/ethnicity.

In this article, we present data describing differences in criminal justice experiences, health, substance use, and sexual behavior among men, women, and male adolescents and between non-Hispanic blacks and Hispanic/Latino respondents leaving a large urban jail system.

METHODS

Setting

Study participants were recruited at the Rikers Island Detention Center, NYC's main jail and one of the largest jail complexes in the world. In 2001 (the mid-point of the interval during which participants were recruited), NYC admitted 120,157 people to its 16 jails.[29] The average length of stay was 41 days for unsentenced detainees (70% of the jail population) and 35 days for sentenced inmates (18% of the population). Those incarcerated in NYC jails are disproportionately black and Hispanic/Latino. While white individuals make up 39% of NYC's general population, they constitute only 9% of the jail population. Black people constitute 26% of the population, yet almost three-fifths (58%) of jail inmates, and Hispanic/Latino people make up 27% of the general population and 30% of the jail population. In 2001, the average age of inmates was 31.3 years and 7% were adolescents (ages 16–18). (In New York State, those who are ≥16 years of age enter the adult criminal justice system.)

In 2001, 9% of NYC inmates participated in drug treatment programs in the jail and 4% were "secured in a drug treatment program after their release"; one-third participated in jail-based work assignments; and 2% par-

ticipated in vocational skills training programs. In 2000, 61% of sentenced inmates had prior admissions to the Department of Correction and 50% of those released returned to jail within the year.[29] In 1998, the last year for which data are available, anonymous serosurveys showed that the HIV infection rate among NYC jail inmates was 7.6% for males, 18.1% for females, and 0.3% for adolescent males, rates higher than among comparable nonincarcerated city residents.[30]

Data sources

Data for this report originate from intake interviews for two randomized trials of a case management and social support intervention designed to reduce drug use, sexual risk behaviors, and re-incarceration rates among incarcerated populations in NYC jails. The first trial enrolled adult women and male adolescents.[31] The second trial, designed as a replication of the first, included only adult males.[32] A total of 704 women, 706 adolescent males, and 536 men completed intake questionnaires in NYC jails between 1997 and 2004. The details of the intake procedures have been described elsewhere.[17,31,32]

Recruitment and eligibility

Participants in both trials were recruited in the jail through presentations at jail orientation sessions, voluntary open group meetings, referrals through correctional staff and other service providers in the jail, and word of mouth among inmates. Eligibility criteria for the studies included age (adult males and females, ≥18 years; adolescent males, 16–18 years), release date (eligible for release within 12 months of enrollment), and borough of residence (participants had to plan to return to Manhattan or the Bronx). Because 18-year-olds can be found in both adolescent and adult facilities, these participants are included in the age group based on the facility in which they were recruited. Individuals with mental health conditions that precluded participation in a group intervention were excluded from participation. To be eligible for enrollment, participants had to provide two valid contacts in the community for postrelease contacts and attend at least one group meeting held in the jail, a criterion that excluded most individuals with jail stays of less than seven days. Overall, the population recruited was approximately similar in age, criminal justice charges, and race/ethnicity to the larger sample of people leaving NYC jails in that time period.[29]

Intake interviews

After completing an informed consent process approved by the institutional review boards of the New York City Department of Health and Mental Hygiene and Hunter College, participants were enrolled in the study and asked to complete an extensive intake interview. During this interview, structured questionnaires that used questions designed for this study and those modified from existing instruments[17] elicited information on the following topics: demographic characteristics, criminal justice history, formal and informal employment, education, lifetime and recent use of alcohol and several illicit drugs, health and social risk indicators, sexual behaviors, HIV/acquired immunodeficiency syndrome (AIDS)-related information, and priority needs.

Statistical methods

Data from intake interviews were coded and entered into computerized databases from which descriptions of baseline characteristics of three distinct incarcerated populations—adult men, adult women, and male adolescents—were generated. We examined how health, substance use, and related characteristics among these three populations differed by age, gender, and race/ethnicity. Using SPSS for Windows Version 12.0[33] and EpiInfo Version 3.3.2,[34] we performed bivariate comparisons to determine whether there were statistically significant differences in baseline characteristics between adult men and women (gender comparison), adult men and male adolescents (age comparison), and between participants who identified themselves as non-Latino black and Hispanic/Latino (race/ethnicity comparison). Because of racial/ethnic disparities in criminal justice involvement, our sample size did not include a sufficient number of white respondents to include in our racial/ethnic comparisons; each age and gender group had fewer than 10% of participants who identified as "white" or "other."

RESULTS

We compared adult men (referred to as "men") with women, then adult men with adolescent males, and finally black respondents with non-black Hispanic/Latino respondents.

Demographic characteristics of target populations

Table 1 shows key demographic characteristics, criminal justice indicators, and self-reported health issues for the three populations. The three populations share certain characteristics. Black respondents constitute the majority; single, unmarried people are the largest category; most individuals live in their own home or with family and friends; fewer than half were working at the time of their arrest; and illegal activities consti-

tuted a significant part of each group's income in the last year. In the criminal justice arena, few participants were first-time offenders. All three populations had on average at least two prior arrests, and for all three groups, drug possession or sales was the most common current charge.

Table 1 also shows that men differ from women in several ways. They are significantly less likely to be married or living as married, to have children (although almost two-thirds of the men do report having children), to have been homeless in the last year, or to have dropped out of high school. Men are more likely to have been employed at the time of arrest and less likely to receive public benefits or report illegal activity as a source of income in the year prior to arrest. In general, prior to arrest, women in jail were living in more vulnerable circumstances than men.

Compared with women, men have more extensive criminal justice histories, with more than twice as many prior arrests on average and a significantly higher rate of prior incarceration. Men are less likely to be under court supervision at the time of arrest or to have criminal charges related to drug use or sales or violations of parole or probation. Men are more likely than women to have charges related to property crimes, violence, or weapons. Women report significantly higher prevalence for all health problems except high blood pressure and diabetes, where the trends do not reach significance. Perhaps as a result, women also report significantly higher rates of emergency room visits and hospitalizations.

For the most part, the demographic differences between adult and adolescent males reflect their different developmental stages and the adolescents' shorter exposure to difficult life circumstances. Thus, the adults are more likely to be married and have children; to be working at the time of arrest; and to have been homeless in the last year. The adolescents, however, were more likely to get income from illegal activities and much more likely to depend on families and friends for income.

As a result of their younger age, adolescents had fewer prior arrests than the men (median 2 vs. 10) and thus a lower prior incarceration rate. Adolescents were more than 1.5 times more likely to be arrested on drug or property charges than men and also more likely to be on probation. As would be expected, adolescents had lower rates of most health problems than men. Surprisingly, however, their rates of emergency room use and hospitalization were similar to the adult rates.

Substance use and drug treatment

Table 2 presents the results of reported substance use and drug treatment for the three populations. While all three populations report relatively high levels of drug and alcohol use, patterns of use and problems associated with it vary considerably by age and gender.

Compared with men, women reported significantly higher levels of lifetime and recent use of most illicit drugs, including crack, cocaine, heroin, and methadone, a drug that is both prescribed and illicit. Women also reported almost twice the level of daily use of alcohol, but similar levels of recent use of marijuana as men. Women reported more than three times the rate of recent injection needle use as men. Women reported about twice the level of most social problems related to drug use, including family problems, financial problems, homelessness, fighting, and rejection by friends. On average, women reported 3.3 social problems related to drug use, compared with 1.5 problems for men (difference not significant).

Women also reported higher levels of involvement in drug treatment; they were almost twice as likely to have received treatment for drug or alcohol use in the year prior to arrest and more than twice as likely to have received drug treatment while in jail. For the most part, the types of drug treatment received by women and men did not differ significantly except that women were more likely to have enrolled in methadone or harm-reduction programs than men (data not shown).

Compared with men, male adolescents had about twice the rate of recent marijuana use and daily alcohol use but dramatically lower rates of crack, cocaine, heroin, and methadone use. This may reflect both developmental and historical differences in patterns of drug use. Despite lower reported use of harder drugs, however, male adolescents reported similar rates of drug-related family problems and higher rates of fighting with others than did men, reflecting their differing living circumstances and developmental stages. On the other hand, the men reported higher levels of drug-related financial problems, homelessness, and emergency room visits. Men were more than twice as likely as adolescents to have participated in drug or alcohol treatment in the last year and almost four times more likely to have received substance abuse treatment while in jail.

Sexual behavior and orientation and HIV/AIDS-related characteristics

Table 3 reports sexual orientation, sexual behavior, and HIV characteristics in the three populations. In the intake interviews, nearly all men and male adolescents

Table 1. Demographic characteristics of target populations

	Adult females (n=704) Percent (number)	*Adult males (n=536) Percent (number)*	*Adolescent males (n=706) Percent (number)*
Demographic characteristics			
Race/ethnicity			
Black	63.2 (447)	66.6 (355)	50.7 (358)[a]
Hispanic	27.6 (195)	29.3 (156)	43.1 (304)[a]
Other	9.2 (65)[a]	4.1 (22)	6.2 (44)
Age at intake			
Mean	34.9 (7.35)	35.2 (8.9)	17.3 (.79)
Range	18–56	18–68.4	16–18
Marital/relationship status			
Married/living as married	31.6 (222)[a]	18.1 (97)	5.4 (38)[a]
Separated/divorced/widowed	19.1 (134)[b]	12.9 (69)	1.3 (9)[a]
Single	49.1 (347)[a]	69.0 (370)	93.3 (656)[a]
Any biological or adopted children			
Yes	83.2 (583)[a]	65.0 (346)	17.1 (121)[a]
Living situation			
Own home or with friends/family	78.9 (556)	83.6 (444)	96.9 (683)[a]
City shelter	3.3 (23)	5.1 (27)	0.3 (2)[a]
Single room occupancy	3.8 (27)	2.8 (15)	0.0 (0)[a]
Supportive housing	0.9 (6)[c]	2.7 (14)	0.9 (6)[c]
On the streets	11.2 (79)[a]	3.2 (17)	0.9 (6)[b]
Homeless/shelter in last 12 months	35.7 (242)[a]	25.7 (136)	8.2 (57)[a]
Employment			
Working at the time of arrest	18.6 (131)[a]	44.0 (235)	32.8 (229)[a]
Sources of income[d]			
Job	29.1 (202)[a]	57.0 (305)	30.8 (216)[a]
Illegal activities	49.7 (345)[b]	41.1 (220)	63.0 (440)[a]
Government support	47.8 (321)[a]	28.9 (153)	31.5 (216)
From family/friend/partner	54.3 (373)[a]	14.5 (77)	78.8 (549)[a]
Education			
Less than high school	63.2 (436)[a]	46.2 (247)	96.0 (678)[a]
High school or GED	18.1 (125)[a]	26.7 (143)	3.7 (26)[a]
Any college/technical school	18.7 (129)[a]	27.1 (145)	0.3 (2)[a]
Criminal justice indicators			
Number of prior arrests[e]			
Median	4.0 (15.75)	10.0 (20.1)	2.0 (3.08)
Range	0–99	0–200	0–30
Prior incarceration	77.1 (545)[a]	91.3 (454)	38.8 (274)[a]
On parole at index arrest	27.3 (193)[a]	10.5 (53)	3.8 (27)[a]
On probation at index arrest	9.1 (64)[b]	5.6 (28)	23.1 (163)[a]
Current charges[f]			
Drug possession or sales	59.5 (418)[a]	32.5 (165)	54.2 (383)[a]
Property crimes	17.8 (125)[a]	28.1 (143)	39.2 (277)[a]
Violence and/or weapons	6.5 (46)[a]	15.6 (79)	11.5 (81)
Status violations[g]	31.5 (222)[a]	8.3 (42)	21.2 (150)[a]
Health indicators in 12 months prior to arrest			
Dental problem	41.5 (235)[a]	23.1 (123)	17.0 (99)[a]
Depression	26.5 (185)[b]	19.4 (104)	11.9 (83)[a]
Asthma disorder	41.2 (289)[a]	17.7 (95)	21.2 (149)
High blood pressure	12.4 (87)	9.5 (51)	3.6 (25)[a]
Anxiety disorder	13.8 (95)[b]	8.2 (44)	4.5 (31)[b]
Diabetes	3.6 (25)	2.8 (15)	0.1 (1)[a]
Visited emergency room	41.7 (295)[a]	26.3 (137)	24.4 (172)
Admitted to the hospital	26.6 (188)[a]	11.6 (60)	9.3 (66)

NOTE: Percent (number) does not apply to age at intake.

[a] $p<0.001$ (referent group: adult males)

[b] $p<0.01$ (referent group: adult males)

[c] $p<0.05$ (referent group: adult males)

[d] May add up to more than 100% due to multiple sources of income

[e] This information does not include incident incarceration.

[f] Sum may be >100% because of multiple charges.

[g] Includes probation and parole violations and behaviors that are law violations only if committed by a person of juvenile status.

GED = General Educational Development

Table 2. Self-reported substance use and drug treatment by age and gender[a]

Self-reported substance use and drug treatment		*Adult females (n=704) Percent (number)*	*Adult males (n=536) Percent (number)*	*Adolescent males (n=706) Percent (number)*
Alcohol	Daily	29.7 (210)[b]	16.4 (88)	34.2 (241)[b]
Marijuana or hash	Ever	86.4 (608)[c]	82.0 (438)	93.3 (659)[b]
	Recently	39.6 (280)	44.4 (238)	81.9 (578)[b]
Crack, freebase	Ever	80.7 (567)[b]	40.7 (218)	3.0 (21)[b]
	Recently	62.9 (445)[b]	25.4 (136)	2.5 (18)[b]
Cocaine	Ever	77.7 (546)[b]	54.3 (291)	12.6 (88)[b]
	Recently	37.6 (266)[b]	21.3 (114)	6.8 (48)[b]
Heroin	Ever	49.6 (348)[b]	27.9 (149)	2.4 (17)[b]
	Recently	33.2 (235)[b]	15.5 (83)	1.8 (13)[b]
Methadone	Ever	36.4 (255)[b]	9.3 (50)	1.3 (9)[b]
	Recently	22.8 (161)[b]	3.9 (21)	0.6 (4)[b]
Used a needle to inject a drug	Ever	26.5 (176)[b]	8.3 (43)	1.4 (9)[b]
	Recently	12.6 (89)[b]	4.1 (22)	0.8 (6)[b]
Social problems resulting from substance use[a]				
Problems in your family		53.3 (377)[b]	25.4 (133)	23.9 (169)
Financial problems		56.7 (401)[b]	25.2 (132)	15.9 (112)[b]
Homelessness		32.1 (227)[b]	15.5 (81)	2.7 (19)[b]
Fighting with others		29.4 (208)[b]	13.8 (72)	20.1 (142)[d]
Rejected by friends		25.0 (177)[b]	12.6 (66)	4.5 (32)[b]
Missing work		12.0 (85)	10.1 (53)	3.8 (27)[b]
Emergency room visits		19.8 (123)[b]	6.5 (34)	2.6 (16)[b]
Missing school		3.8 (27)[c]	1.7 (9)	24.8 (175)[b]
Mean number of problems		3.3	1.5	1.5
Receiving treatment for drug or alcohol use in last 12 months		47.7 (334)b	27.1 (145)	11.1 (78)[b]
Treatment for a substance abuse problem while in jail[e]				
Yes		42.3 (294)[b]	17.1 (91)	4.3 (30)[b]

[a]Self-reported recent drug use is 30 days prior to arrest for adult men and six months prior to arrest for adult females and adolescent males.

[b]$p<0.001$ (referent group: adult males)

[c]$p<0.05$ (referent group: adult males)

[d]$p<0.01$ (referent group: adult males)

[e]Service received during this incarceration

identified as heterosexual. The women reported more diversity in sexual orientation, with more than a third identifying as bisexual (22.2%) or lesbian (14.5%).

For all three populations, the majority reported being sexually active in the last year, most frequently with one partner, though about a third of each group reported two or more partners. All three groups reported a mean of more than two sexual partners in the last year. Men were significantly more likely than women to report always using a condom and less likely to report never using one in the 30 days prior to arrest. Men also reported higher rates of HIV testing, although lower rates of HIV positivity, a reflection of a higher prevalence of HIV infection among women in NYC jails.[30]

Compared with male adolescents, men reported almost twice the rate of never using condoms, although rates of consistent use were similar. Men were about four times more likely than male adolescents to report HIV testing and had significantly higher rates of HIV infection.

Self-reported priority needs upon release

Table 4 shows the top three problems participants expected to face after release, identified at the time of the intake interview in jail. Once again, the results show considerable variation in identification of priority problems; the three groups differed significantly in their assessment of the priority of eight of the 10 most frequently listed problems, agreeing only that child care ranked low on the priority list and that despite their current incarceration, legal problems were on the priority list of relatively few people in each group.

No single problem fell on the top three priorities

Table 3. Self-reported sexual behavior and HIV/AIDS-related characteristics by age and gender

Self-reported sexual risk indicators and HIV/AIDS-related data	*Adult females (n=704) Percent (number)*	*Adult males (n=536) Percent (number)*	*Adolescent males (n=706) Percent (number)*
Number of partners (male and female) in last year			
Two or more	31.1 (120)	34.0 (180)	38.4 (232)
Mean	2.4	2.26	2.2
Condom use[a]			
Always	26.8 (119)[b]	36.8 (209)	44.3 (247)
Sometimes	23.9 (106)	23.4 (133)	34.0 (190)
Never	49.3 (219)[b]	39.8 (226)	21.7 (121)[b]
Ever been tested for HIV[c]			
Yes	55.9 (395)[b]	84.1 (451)	22.1 (156)[b]
HIV test positive (of those tested)			
Yes	9.8 (69)[b]	7.3 (39)	0.0 (0)[b]
Sexual orientation at time of arrest			
Heterosexual	65.3 (459)[b]	95.3 (510)	99.8 (652)[b]
Gay/lesbian/homosexual	14.5 (102)[b]	3.0 (16)	0.0 (0)[b]
Bisexual	22.2 (156)[b]	1.1 (6)	1.7 (11)
Transgender	0.0 (0)	0.6 (3)	0.0 (0)[d]

[a]This reflects reported condom use with regular partners and occasional partners 30 days prior to incarceration.

[b]$p<0.001$ (referent group: adult males)

[c]This reflects information on participants who gave consent for confidential HIV-related information to be released.

[d]$p<0.05$ (referent group: adult males)

HIV = human immunodeficiency virus

AIDS = acquired immunodeficiency syndrome

of all three groups, although men and women shared one priority problem (housing), women and male adolescents shared one problem (financial problems), and men and male adolescents shared two problems (unemployment and education). Male adolescents had greater consensus on their priority problems than the adult groups; more than 80% agreed that unemployment and education were priority needs and no other problem was rated a priority by more than 30%. More than 30% of the women, on the other hand, rated four

Table 4. Top three problems upon release by age and gender

Most difficult release problems reported	*Adult females (n=704) Percent (number)*	*Adult males (n=536) Percent (number)*	*Adolescent males (n=706) Percent (number)*
Unemployment	38.1 (268)[a]	**79.8 (419)**	**86.0 (607)[a]**
Education[b]	26.1 (184)[a]	**76.2 (342)**	**81.9 (578)[a]**
Housing	**71.9 (506)**	**72.4 (376)**	18.0 (127)[a]
Financial support	**60.8 (428)[c]**	67.8 (356)	**25.9 (183)[a]**
Substance abuse	**69.2 (487)[a]**	39.3 (206)	22.0 (155)[a]
Medical or health	25.1 (178)[a]	37.5 (191)	3.3 (23)[a]
Family	29.5 (208)[a]	14.8 (76)	9.0 (64)[d]
Legal issues	11.8 (83)	13.1 (67)	10.6 (75)
Child care	9.1 (64)	12.0 (62)	7.6 (54)
Mental health	6.7 (47)	8.4 (43)	3.8 (27)[d]

NOTE: Bold indicates top three.

[a]$p<0.001$ (referent group: adult males)

[b]Includes vocational training

[c]$p<0.05$ (referent group: adult males)

[d]$p<0.01$ (referent group: adult males)

problems on their priority list and more than 30% of the men so rated six problems. These differences demonstrate the need for age- and gender-specific reentry programs. Of interest, although violence is pervasive in the lives of people in jail, few participants ranked reducing violence as a priority problem.

Racial/ethnic comparison

Although age and gender differences in the three populations were generally more pronounced than racial/ethnic ones, within each age and gender group, black respondents differed from Hispanic/Latino respondents in a number of ways (data not shown).

Compared with Hispanic/Latino men, black men were more likely to report having had high blood pressure in the past 12 months (11.6% vs. 6.4%) and to consume alcohol daily (19.4% vs. 10.3%). Hispanic/Latino men were more likely than black men to report recent use of heroin (24.4% vs. 11.5%) or methadone (6.4% vs. 2.5%), recent injection drug use (8.3% vs. 2.2%), and family problems as a priority (20.9% vs. 11.4%).

Compared with Hispanic/Latina women, black women were more likely to be living on the streets at the time of arrest (12.1% vs. 7.2%); more likely to have missed work as a result of drug use (4.9% vs. 2.1%); more likely to have used a therapeutic community for drug treatment (12.8% vs. 8.2%); and more likely to report that they were HIV positive (13.2% vs. 8.2%). It is noteworthy that although black women were less likely to report injection drug use, they had higher rates of HIV infection, suggesting sexual routes of transmission.

On the other hand, Hispanic/Latina women were more likely to report other conditions related to their differing patterns of drug use: some form of hepatitis in the last year (9.3% vs. 3.8%); recent use of heroin (48.7% vs. 24.8%) or legal or illicit methadone (33.8% vs. 15.7%); recent injection drug use (24.1% vs. 5.2%); and participation in methadone treatment (23.1% vs. 10.7%) or harm-reduction (10.8% vs. 1.6%) programs. Sexual orientation also differed by race/ethnicity among the women in the sample. Black women were more likely to report they were lesbian than Hispanic/Latina women (17.2% vs. 10.3%), while Hispanic women were more likely to report they were bisexual (26.2% vs. 17.5%). These previously unreported racial/ethnic differences in sexual orientation warrant further investigation. In addition, Hispanic/Latina women were more likely than black women to identify medical or health problems (other than HIV/AIDS) as a priority problem (23.1% vs. 13.0%).

Finally, compared with black male adolescents, Hispanic/Latino teens were more likely to be married or living as married (8.9% vs. 2.0%); have children (23.4% vs. 11.2%); have been employed at the time of arrest (22.5% vs. 15.1%); report depression (15.8% vs. 7.9%) or anxiety (7.0% vs. 1.7%) in the year prior to arrest; have ever used cocaine (20.6% vs. 4.8%), heroin (4.7% vs. 0.3%), or methadone (2.3% vs. 0.0%); have injected drugs (2.0% vs. 0.3%); or have missed work as a result of drug use (6.6% vs. 1.7%). Hispanic/Latino male adolescents were also more likely than their black counterparts to report never using condoms in the year prior to arrest (28.4% vs. 13.6%) and to identify child care as a priority problem (10.2% vs. 4.7%).

DISCUSSION

This study has several limitations. The three samples volunteered to participate, limiting generalizations to the full jail population. In addition, all data on drug use and criminal activity are self-reported, with the potential for measurement error and social desirability effects. Finally, results are based on data collected at a single point in time while participants were in jail, precluding assessment of the persistence of the problems reported.

The gender and age comparisons of people leaving NYC jails highlight the similarities and differences among the three populations. Current criminal justice policies select for populations that are poor, black, or Hispanic; are involved in substance use; and are facing multiple life challenges. These characteristics make jails an important site for public health intervention as these are also the populations at highest risk for most health problems, and experiencing the highest burden of health disparities.[7,35,36] Previous studies have shown that a significant percentage of individuals with certain infectious diseases, substance use problems, victims and perpetrators of violence, and mental illness pass through correctional facilities, providing an opportunity to reach groups often not reached by the health and social service systems.[2,4,37] Some observers have suggested that improving public health and reentry services for incarcerated populations may help reduce the disparities in health observed in communities with high incarceration rates.[3,11,12]

At the same time, serving jail populations can be extraordinarily difficult. The jail itself can provide a hostile environment for providers of care, people returning from jail may relapse into drug use, difficult postrelease life circumstances may overwhelm motivation for change, and public policies can discourage those who were recently released from jail from choosing healthier, less destructive behavioral options.[17,38,39]

Developing effective reentry interventions will require careful consideration of the needs of the various populations in jail and of the contextual factors that complicate successful transition to the community.

Correctional and health officials understandably seek simple and economical programs—a pressure that sometimes makes tailoring programs for subpopulations difficult. However, our findings show that despite the common background and difficult life circumstances of people in jail, gender and age differences structure the experience of incarceration differently for men, women, and male adolescents. Compared with women and male adolescents, for example, men were more likely to be working at the time of arrest, more likely to be charged with property and violent crimes, and less likely to be living with their children (data not shown), factors that can influence reentry outcomes.

While previous reports acknowledge the importance of addressing gender issues for women,[40] our findings suggest that men also have gender-related needs. Assisting men in jail to define masculinity in ways that provide healthier options for parenting, relationships, violence, and substance use may contribute to improved male health, community health, and public safety.[41–43] For example, only 15% of men reported family issues as a priority need after release, yet the criminal justice literature suggests that stable intimate relationships are an important protection against recidivism for men.[44,45]

Because other reports suggest that the proportion of men who identify as gay or report same-sex behavior in correctional facilities may be more common than reported here,[46–49] it appears that compared with women, men seem less willing to discuss sexual orientation with staff of jail-based programs. While this reluctance is understandable given the stigma of same-sex behavior[47] and the legal and institutional sanctions within correctional facilities, it makes it more difficult for jail health programs to address health issues for gay and bisexual men directly. Correctional officials can address this problem by developing training programs to decrease this stigma in jails so as to encourage safe disclosure, and by creating health messages that are equally understandable and acceptable to men involved in heterosexual and same-sex behavior and to men who have sex with men whether or not they identify themselves as gay.

Our findings show that relatively few people leaving jail rank health as a top priority, suggesting that to attract and retain inmates' interest, reentry programs may need to offer a package of services that address more highly ranked problems such as housing and employment assistance, education, and assistance in getting benefits. In the last few years, several jail systems have created such reentry services,[50,51] although few yet reach enough individuals leaving any jail system to have an impact on population health. Expanding these programs and evaluating their impact on individual and community health is an urgent priority.

Although differences by age and gender were more pronounced than by racial/ethnic group, the differences between black and Hispanic/Latino men suggest the need for addressing cultural/ethnic differences as well. Different patterns of drug use, health problems, and priority needs (e.g., more Hispanic/Latino men rate family problems and education as priority needs than do black men) require different intervention priorities.

Our findings support previous reports that compared with men, women in jail experience higher levels of vulnerability.[19,40] Women are more likely to have been homeless prior to arrest; have depended on illegal activities for income; have dropped out of high school; have drug charges; and have reported HIV infection, chronic conditions, or mental health problems. They are also more likely to indicate substance use as a priority problem. Given that many health and reentry programs for women in jail are still developed by men for a male model of needs,[19,40] the problems women in this study experienced suggest the need for more women-specific programs. The high prevalence of same-sex experience that women in this sample report also demonstrates the need for addressing the health and reentry needs of lesbian and bisexual women. In addition, lower rates of prior HIV testing for women compared with men suggest the need for gender-specific HIV testing programs.

Black and Hispanic/Latina women reported different patterns of drug use, with black women reporting higher levels of crack cocaine use and Hispanic/Latina women reporting higher levels of heroin and injection drug use. Of note, Hispanic/Latina women were more likely to report use of harm-reduction programs than black women. Like Hispanic/Latino men, Hispanic/Latina women were more likely to report education as a priority problem, perhaps because of lower levels of pre-incarceration schooling.

For male adolescents, perhaps the most salient finding is the opportunity for prevention. Compared with men, adolescents report lower levels of hard drug use and HIV infection. Their priority needs—work and school—reflect the concerns that mainstream society expects, providing a bridge to pathways to healthier adulthood. But high levels of marijuana and alcohol use, reliance on illegal activities for income, and low

levels of employment and school achievement put many of these young men on the same trajectory as the adult men in jail. To avoid this future—costly to individuals, families, communities, and taxpayers—targeted and intensive health and reentry initiatives will need to help young men in jail find paths to healthier adulthood.

A comparison of differences between Hispanic/Latino and black male adolescents shows that Hispanic/Latino adolescent males are more likely to have taken on adult gender roles such as marriage, parenthood, and work as well as higher levels of use of "adult" drugs such as heroin and cocaine. They are also more likely to be depressed or anxious. These findings merit further exploration to inform culturally specific interventions for each group.

CONCLUSION

In recent years, criminal justice, public health, and other officials and advocates have called for more emphasis on reentry from incarceration. To date, much of this work has focused on prisons, but jails provide significant public health opportunities. Jail interventions may also offer significant cost benefits: one study found that the full cost of incarceration in a NYC jail in 2002 was $92,500,[52] suggesting that even modest reductions in recidivism or postrelease emergency room visits could save municipalities money.[53] By more fully understanding the unique needs of various jail populations and by tailoring interventions to better meet this range of needs, public health officials can contribute to better population health in our most disadvantaged communities.

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