

Gun Carrying and Drug Selling Among Young Incarcerated Men and Women

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ABSTRACT *This paper examines the relationship between illegal drug economy involvement, gun-related victimization, and recent gun carrying among young men and women incarcerated in a state prison in the United States. Interviews were conducted with 18- to 25-year old incarcerated men (n = 135) and women (n = 69) between July 1999 and October 2000. Forty-five percent of men and 16% of women reported carrying a gun in the year prior to incarceration. Respondents who sold crack cocaine or other drugs were more likely to have carried guns than those not selling drugs. However, hard drug use was not associated with gun carrying among men. All ten women who carried guns had used hard drugs. Sixty-seven percent of men and 28% of women had been shot at. Respondents who sold crack cocaine were at elevated risk of being shot at. Among men, selling crack (OR = 10.2, 95% CI = 2.5, 42.1) and ever being shot at (OR = 4.6, 95% CI = 1.7, 12.2), were associated with carrying guns. These findings provide further evidence of a link between crack selling (but not necessarily drug using) and gun carrying.*

KEYWORDS *Crack cocaine, Drug use, Drug selling, Gun carrying, Prison, Victimization, Violence, Weapon carrying, Young adults.*

INTRODUCTION

Firearm-related homicide was the second leading cause of death among 15- to 24-year olds in the United States in 1999.¹ Between 1985 and the early 1990s, homicide victimization rates for 15- to 24-year olds increased rapidly and then fell.² Both the increase and decrease were driven by changes in gun-related homicides, rather than by homicides due to other causes.²

According to some criminologists, the growth of crack cocaine markets in major cities in the late 1980s led to an increased use of guns, which in turn led to the increase in homicides among adolescents.² Adolescents and young adults involved in the illegal drug industry armed themselves to protect their money, their business, and themselves and to settle disagreements.^{3,4} Gun use had a “contagion” effect,^{5,6} in which peers in the schools and neighborhoods of armed, drug selling adolescents in turn began to arm themselves for self-protection and increased social status.²

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Participation in illegal drug markets as a drug seller has been linked to gun carrying⁷⁻¹¹ and gun ownership.¹² However, only a few studies¹⁰ exploring the connections between drug selling and gun carrying have examined the diverse aspects of drug economy participation, such as the type of drug(s) sold, the duration of drug selling, or selling versus using drugs.

Much of what is known about predictors of youth gun carrying comes from studies of adolescents,¹³ primarily samples of high school students^{12,14} or adolescents in detention facilities.^{10,15-17} Most of these studies focus on males. A primary factor associated with adolescent male gun carrying is the need for self protection;¹⁸ risk factors include gun-related victimization¹⁹⁻²¹ and residing in unsafe neighborhoods.²²

We examine the association between participation in the illegal drug economy, gun-related victimization and gun carrying among young incarcerated men and women. These individuals are likely to be underrepresented in general population and school surveys of gun carrying. The relationship between crack cocaine selling and gun carrying also has not been examined in this population.

MATERIALS AND METHODS

Sample

Data for this analysis were drawn from the Social Determinants of Incarceration and HIV Risk Study, a survey of men ($n = 135$) and women ($n = 69$) incarcerated at the Rhode Island Adult Correctional Institution (ACI). The ACI is Rhode Island's only adult correctional facility and holds all persons sentenced or awaiting trial in the state. Eligible subjects were between the ages of 18-25 with proficiency in spoken English. Men and women in protective custody or in mental health units were not included in the sample. The sampling frame for this study was the list of 18- to 25-year old men and women incarcerated on Tuesdays between July 1999 and October 2000. Each week the research team attempted to approach a random sample of men and all the women incarcerated on Tuesdays between July 1999 and October 2000. These men and women were awaiting trial or recently sentenced and awaiting classification to one of three security levels.

Three trained interviewers conducted structured, face-to-face interviews with an average administration time of 90 minutes. All interviewers were women with no affiliation with the criminal justice system. All interviews were conducted in private settings with only the interviewer and the respondent present. To ensure anonymity, no identifying information was collected in the interview. All study procedures were reviewed and approved by the Human Subjects Committee at the Harvard School of Public Health and the Rhode Island Department of Corrections.

Ascertainment of Gun Carrying and Gun-Related Victimization

To determine gun carrying status, we asked respondents, "In the year before you were incarcerated this time, how often did you carry a gun? Never, sometimes, often, always?" This variable was dichotomized into never versus ever.

We also asked participants, "In your whole life, have you ever been shot at?" Those answering "yes" were asked, "Did you ever receive a gunshot wound?" Respondents were also asked if they owned a handgun.

Ascertainment of Participation in Illegal Drug Economy

Participation in the drug economy was described in four ways: “hard drug use” and three aspects of drug selling: selling crack cocaine in the year prior to incarceration, duration of selling illegal drugs, and reliance on the sale of illegal drugs as a primary source of income. To determine drug use, interviewers read a list of illegal drugs to respondents, who then indicated if they ever used each drug prior to incarceration. “Hard drugs” were defined as crack, freebase or powder cocaine, heroin, or a mixture of these drugs in any form.

Crack Selling Interviewers asked respondents whether they had sold each of the following drugs in the year prior to the current incarceration: cocaine, crack, heroin, marijuana, speed, acid, steroids, ecstasy, and “other” drugs. Respondents were classified into four categories: in the year prior to incarceration (1) those who sold crack, (2) those who sold other drugs but not crack, (3) those who sold no drugs but had sold drugs at other times, and (4) those who had never sold drugs.

Duration of Drug Selling Interviewers asked all participants who had ever sold drugs “About how many years in your life did you sell drugs? Five or more years or less than 5 years?”

Interviewers read respondents a list of income sources (full time job, part time job, occasional job, other legal income, received money for sex, sold drugs, other illegal work) and asked which one of these options was their primary source of income in the year prior to incarceration.

Demographic factors examined in this study were age and race/ethnicity.

Data Analysis

Descriptive analyses used chi-square tests to compare gun carrying by drug economy participation. Separate analyses were conducted for men and women. Three men and five women with missing responses were excluded from the analyses. Logistic regression was used to calculate crude odds ratios and 95% confidence intervals. Among men, multiple logistic regression was used to control for potential confounding by age, and race/ethnicity. Due to the correlation between crack selling, drug selling duration, and selling drugs as a primary income source, each of these variables was examined in three separate models. All data were analyzed using SAS statistical analysis software.

RESULTS

Among 257 women and men approached, 233 (91%) were eligible to participate in the study. Among the 24 ineligible participants, 16 did not speak English (all of whom were Spanish speaking), and eight were incarcerated in segregation or protective custody units. Of the 233 eligible women and men, 204 (87.5%) participated, and 29 (12.5%) declined participation. Participation rates were the same for women (69/79) and men (135/154). Participants and refusals did not differ by gender.

The 135 men and 69 women who participated in this study were similar to each other with respect to age and educational attainment (Table 1). Less than half of women (49%) and men (47%) had graduated from high school or received a GED (data not shown). Almost half the women were white (49%) compared to 28% of the men. Over 90% of the women and men had used drugs.

TABLE 1. Sample characteristics by gender

	Men (<i>n</i> = 135) %	Women (<i>n</i> = 69) %
Drug selling		
Type of drug sold*		
Crack, any	31	28
Other drugs, not crack	38	18
Sold drugs, but not in year before incarceration	12	6
Did not sell drugs	19	48
Duration selling drugs		
≥5 years	49	26
<5 years	32	26
Never	19	48
Primary income source*		
Sold drugs	39	16
Other source	61	84
Drug use		
Hard drug use [†]		
Used hard drugs, ever	43	69
Used other drugs, not hard drugs, ever	50	21
Never used hard or other drugs	7	10
Gun-related factors		
Gun carrying*		
Always	11	2
Often	14	2
Sometimes	21	13
Never	55	84
Gun-related victimization, ever		
Shot at, wounded	16	6
Shot at, not wounded	50	22
None	34	72
Owned a handgun		
Yes	55	16
No	45	84
Demographic characteristics		
Age		
18–19	22	25
20–22	47	35
23–25	31	40
Race/ethnicity		
White	28	49
Black/African American/Cape Verdean	24	19
Hispanic	22	12
Multi-racial/ethnic	10	10
Other (Includes Asian, Native American)	16	10

*In the year prior to current incarceration.

[†]Hard drugs include crack, freebase or powder cocaine, heroin, or a mixture of heroin and cocaine.

Gun Carrying and Gun-Related Victimization

Gun carrying, possession, and gun-related victimization were more prevalent among men than women (Table 1). Nearly half of the men (45%) and 16% of the women reported carrying a gun in the year prior to incarceration ($p = 0.0001$).

Two-thirds (66%) of the men had been shot at, and 16% had sustained a gunshot wound in their lifetime. Over a quarter of women respondents (28%) had been shot at, and 6% had been wounded.

Drug Selling

Over three quarters of men (81%) and half of women (52%) had sold drugs in their lifetimes, yet similar proportions had sold crack cocaine during the year prior to incarceration (31% and 28%, respectively). Nearly half of all men in the sample had sold drugs for at least 5 years, and over a third of men had relied on drug selling as their primary source of income in the year prior to incarceration (Table 1). Both men and women began selling drugs at very early ages (median age: 15- and 16-years old, respectively) (not shown).

Drug Selling and Gun Carrying

Respondents who sold drugs were more likely to carry guns than respondents who did not sell drugs (Table 2). Men who sold crack in the year prior to incarceration

TABLE 2. Prevalence of gun carrying in year before incarceration, by gender, illegal drug economy involvement, and gun-related factors

	Men			Women		
	<i>n</i>	Percent carrying guns	Unadjusted OR (95% CI)	<i>n</i>	Percent carrying guns	Unadjusted OR (95% CI)
Drug selling						
Type of drug sold*						
Crack, any	40	65	10.7 (3.1, 37.1)	18	22	8.6 (0.9, 83.9)
Other drugs, not crack	49	49	5.5 (1.7, 18.3)	11	27	11.2 (1.0, 123.2)
Sold drugs, but not in year before incarceration	16	38	3.5 (0.8, 14.9)	4	50	29.9 (1.8, 490.6)
Did not sell drugs	25	16	1.0	29	3	1.0
Duration selling drugs						
≥5 years	62	65	9.5 (2.9, 31.3)	17	41	20.3 (2.2, 185.9)
<5 years	43	37	3.1 (0.9, 10.7)	17	12	3.9 (0.3, 46.2)
Never	25	16	1.0	30	3	1.0
Primary income source*						
Sold drugs	48	60	2.8 (1.3, 5.8)	11	18	1.2 (0.2, 6.6)
Other source	79	35	1.0	51	16	1.0
Drug use						
Used hard drugs, ever [†]						
Yes	59	47	1.2 (0.6, 2.3)	43	23	— [‡]
No	73	44	1.0	21	0	
Gun-related factors						
Gun-related victimization, ever						
Yes	88	58	5.4 (2.3, 12.5)	18	44	17.6 (3.2, 95.8)
No	44	20	1.0	46	4	1.0

OR = Odds ratio, CI = confidence interval.

*In the year prior to current incarceration.

[†]“Hard drugs”=cocaine or heroin in any form.

[‡]The odds ratio is infinite with an exact 95% confidence interval lower bound of 1.2.

TABLE 3. Multiple logistic regression analysis of correlates of gun carrying in year before incarceration, among men*

Characteristic	Adjusted OR (95% CI)	<i>p</i>
Type of drug sold [†]		
Crack, any	10.2 (2.5, 42.1)	0.001
Other drugs, not crack	7.6 (1.8, 32.2)	0.006
Sold drugs, but not in year before incarceration	2.1 (0.4, 12.0)	0.41
Did not sell drugs	1.0	
Gun-related victimization, ever		
Yes	4.6 (1.7, 12.2)	0.002
No	1.0	

OR Odds ratio, CI confidence interval.

*Analyses adjust for age, race/ethnicity and all variables in table.

[†]In the year prior to current incarceration.

and sold drugs for five or more years had elevated odds of carrying a gun compared to respondents who never sold drugs. Similarly, men whose primary source of income was selling drugs were at higher risk of carrying guns.

Men who used hard drugs were no more likely than those who did not use hard drugs to carry guns. All ten women who carried guns used hard drugs.

Men who sold crack in the year prior to incarceration were 2.8 times more likely to have been shot at (95% CI = 1.0, 7.9), compared to men who never sold drugs (not shown). Men who sold drugs for five or more years (OR = 3.8, 95% CI = 1.4, 10.5) or sold drugs as a primary source of income (OR = 2.6, 95% CI = 1.1, 5.9) were also more likely to have been shot at than men who had never sold drugs (not shown). Men and women who reported ever being shot at were more likely to carry guns (Table 2).

Multivariate analyses of men revealed that selling crack and ever being shot at were associated with carrying guns in the year prior to incarceration, controlling for age and race/ethnicity (Table 3).

DISCUSSION

This study explored the relationship between drug selling, drug use, and gun carrying among young incarcerated men and women. Forty-five percent of men and 16% of women had carried a gun in the year prior to incarceration. These proportions are consistent with estimates from samples of adolescents and young adults involved in the criminal justice system^{7,9} and exceed those found in samples of US high school adolescents²³ and adults in the general population.²⁴

Male respondents in this sample who sold crack or other drugs were more likely to have carried guns prior to incarceration than those who did not sell drugs. About two thirds of crack sellers and about half of sellers of other drugs had carried guns; only 16% of incarcerated men who did not sell drugs had carried a gun. Men who sold drugs for longer periods of time were also more likely to carry guns. Lizotte et al.¹⁰ found that selling high dollar amounts of drugs dramatically increased the odds of gun carrying. The authors suggested that these men were likely to be professional dealers.

In our study, two thirds of men and a quarter of women had been shot at in their lifetimes, a finding consistent with other studies of juvenile and adult

arrestees.⁷ Men and women who sold crack cocaine were at higher risk of being shot at, relative to their counterparts who did not sell drugs (not shown).

The small number of women participating in this study limited our ability to explore gender differences in predictors of gun carrying. However, many findings were suggestive. For example, we found that all ten of the women who carried guns had used cocaine or heroin, whereas for men there were no differences in gun carrying by drug use. It is possible that women who use heroin or cocaine are more likely than nonusers to be victims of violence from intimate partners, pimps, or sex work clients.^{25,26} Such women may carry guns for self-protection. The few studies of women's gun carrying have linked participation in gangs, drug involvement, and fear of being shot to gun carrying among girls.^{8,13} More research is needed to document the factors influencing gun carrying in larger samples of females.

In our study, men who used hard drugs were no more likely to carry guns than men who did not use hard drugs. Although it has been suggested that drug users may carry guns for protection in the process of purchasing drugs or while committing crimes to obtain money for drugs,¹⁰ our study did not find such an association. Our results are consistent with those from a 1995 study that found a higher prevalence of gun carrying among arrestees who sold drugs but failed to find a relationship between testing positive for drug use and gun carrying.⁷ Previous studies of adolescent boys have also found a higher prevalence of gun carrying⁹ and weapon carrying²⁷ among drug-selling adolescents compared to drug using adolescents.

Our study has several limitations. All data were self-reported, which may have led to under-reporting of gun carrying and drug selling, since the interview was conducted in prison. Nonetheless, 80% of men in the study admitted to illegally selling drugs before their incarceration. We did not elicit information on participants' age of onset of gun carrying, or duration of carrying or owning guns; it is thus not possible to ascertain whether gun carrying occurred prior to or as a result of involvement in illegal drug selling or use. Information about the crimes the individual was charged with was not collected due to concerns about anonymity. The small sample size limited our ability to detect differences and conduct subgroup analyses, especially among the women; due to limited power, estimates of women's gun carrying by different drug selling characteristics should be interpreted with caution. The fact that the study included only incarcerated young men and women limits its generalizability. In addition, since the study was conducted in a prison in a small northeastern state, the findings may not be generalizable to other metropolitan areas in other parts of the U.S. For example, incarcerated individuals in this sample were more likely to be white and less likely to be black than those in national samples of prison and jail inmates.²⁸

Nonetheless, this study demonstrates the strong association between drug selling—and particularly the selling of crack cocaine—and gun carrying among young incarcerated men. For men, use of hard drugs was not a risk factor for gun carrying but selling drugs was. Violence prevention programs that target young adults within prison settings or upon release should address gun carrying in the context of drug selling as well as in the context of protection or possible planned aggression. Given that many participants in this study began selling drugs at young ages, future research should examine whether interventions to prevent the early onset of drug selling may also reduce gun carrying among young adults.

The argument for a strong crack–gun association runs like this: Compared to other hard drugs, the price per transaction of crack cocaine is relatively low, which

attracts more low-income customers who can buy it in small quantities.² Purchases are frequent and often made in public places. In addition, because it is relatively easy to produce crack, the influx into the crack market of small-scale entrepreneurial dealers who are independent of established drug organizations may lead to territorial disputes and the use of guns.²⁹ The desire to avoid the severe penalties imposed by the adult criminal justice system leads adult drug dealers to recruit teenagers to work for them. Teenage drug sellers, many of whom live in areas of concentrated poverty with few employment opportunities are willing to work for less money but need guns to protect themselves and their turf from both rivals and customers.² Our findings offer evidence to support the hypothesis of a strong connection between crack selling, gun carrying, and gun-related victimization among adolescents and young adults.

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