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Medical Care Solicitation by Criminals with Gunshot Wound Injuries: A Survey of Washington, DC, Jail Detainees

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Background: **The best estimates of nonfatal gunshot wounds in the United States come from hospital emergency room data and may miss, among other things, wounded individuals who do not seek medical treatment. Criminals may be those least likely to rely on professional care for their wounds. This study provides evidence of whether medical care is solicited by criminals after gunshot wounds. In addition, the circumstances of the injury events are described.**

Methods: **A case series of 79 detainees at a Washington, DC, jail who had previously been shot in 93 separate incidents were interviewed using a standardized questionnaire. Data were obtained concerning the age and race of the victim, the location of the wound, and the length of hospital stay.**

Results: **In 92% of the incidents, respondents reported going to the hospital; one-third of those shot were hospitalized for more than 1 week. More than half (54%) had been hit in the head or torso, and 40% had a current disability attributable to the wound.**

Conclusion: **Among these "criminals," the vast majority reported that they obtained professional care for their gunshot wounds. Such evidence suggests that individuals previously thought unlikely to enter the medical care system after a firearm injury usually do so. Statistics on medically treated nonfatal gunshot wounds probably do not substantially underestimate the actual number of nonfatal shootings.**

Data on the number of people killed each year in the United States with firearms have been available for many years from death certificates and are considered to be quite accurate. By contrast, national data on the number of nonfatal woundings are only rough estimates. Probably the best current information comes from 3 years of study (1992–1995) using the National Electronic Injury Surveillance System (NEISS).[1,2] The NEISS system comprises 91 hospitals that constitute a stratified probability sample of all hospitals in the United States that have at least six beds and provide 24-hour emergency service.

NEISS has several limitations. One is that it only collects data on firearm-related injuries treated in hospital emergency departments, so "patients with nonfatal firearm-related injuries who are untreated or treated in other types of medical care systems will be missed through this system."[1]

A criminologist has suggested that collecting data only on medically treated gunshot wounds causes NEISS to severely underestimate the number of actual gunshot wounds.[3] He argues that most gunshot wounds are survivable without medical treatment, that most gunshot wound victims are criminals, and that because most doctors are required to report treatment of gunshot wounds to the police, criminals do not seek licensed professional treatment. Kleck concludes, without empirical evidence, that "while there may be only about 100,000–150,000 medically treated nonfatal gunshot woundings each year, there could easily be an equal or greater number that were not treated and therefore not counted by either medical or police agencies."[3]

Jail detainees, individuals held in custody awaiting adjudication on criminal charges, frequently have extensive criminal records and previous experiences as victims of penetrating trauma. Previous surveys of inmates in correctional facilities have found that many have sustained gun-related injuries.[4–7] A study of adult male arrestees in 11 cities in 1995 found that 21% had been previously shot.[4] In Chicago, 26% of the men entering jail during a study period in 1994 were found to have been shot at least one time.[5]

The object of this study is to describe the patterns of medical care solicitation among jail detainees who have been previously shot, the type of injury sustained, and the circumstances in which they were wounded. A goal is to provide information to help determine the size of the NEISS underestimate of gunshot injuries attributable to its exclusive focus on professional medical care.

SUBJECTS AND METHODS

Every male detainee entering the city jail in Washington, DC, from March through June 1997 was screened for a history of gunshot wounds. Twenty-four percent had previously been shot. Given resource limitations, and to ensure interrater reliability, a single interviewer was used. Many detainees were released within a few days of admission, so it was not possible to interview them all. We conducted extensive interviews with every third male detainee who reported a previous gunshot wound within the preceding 5 years, until 79 men had responded. No one refused to be interviewed. The

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detainees reported 93 previous incidents of gunshot wounds in the preceding 5 years. Information was collected on each event.

A standardized questionnaire was administered in a face-to-face interview. For each incident, the detainee was asked approximately 40 questions concerning the circumstances leading to the incident, the events immediately after the injury, and any long-term consequences of the injury. Included in the middle of the survey was the question, "When you were shot, did you go to the hospital?" Each respondent was also asked about his length of stay in the hospital, the number of bullets that hit him, the location of wound(s), whether bullets were still in his body, and whether the wound(s) caused any continuing disability.

Other questions requested information about the type of gun used, where the shooting occurred, whether the respondent was carrying a gun at the time of the shooting, whether the respondent had been drinking, whether he had been on drugs, and whether a police report was filed. From their descriptions of the events, we categorized the circumstances into seven mutually exclusive and completely inclusive categories: robbery, crossfire, assault, retaliation, argument, unintentional, and shot by police.

Each respondent was also asked his age, education, whether he had ever been employed, and whether anyone in his family had died from a gunshot wound. Not all respondents answered all questions about each incident. Percentages in the table exclude missing responses.

TABLE 1. **Incidents in which detainees were shot***

Went to hospital for treatment	92%
Days in hospital	
Did not go to hospital	8%
<1 day (treated and released)	43%
1–7 days	14%
>7 days	34%
Hit by more than one bullet	35%
HIt in head or torso	54%
Bullet(s) still in body	34%
Current disability as a result of wound	40%
Incident involved handgun	97%
Shot while in a home	8%
Shot in street/car/bar/store	92%
Respondent carrying gun	9%
Respondent drinking before incident	28%
Respondent high on drugs during incident	28%
Police report filed	70%
Type of incident (with respondent as victim)	
Robbery	24%
Crossfire	21%
Assault	21%
Retaliation	18%
Argument	6%
Unintentional	6%
Police	4%

N = 93; results exclude missing data for each category. Mean number of missing values = 5, with highs of 17 for type of gun shot with, 9 for whether a police report was filed, and 5 for the number of bullets that hit the victim; all other categories had 4 or fewer missing responses.

RESULTS

Of the 79 detainees, the median age was 24 years. All were African Americans (>95% of the jail population is African American). Forty-one percent had completed at least the equivalent of a high school education, and 75% reported being employed at some time in their lives. Forty-six percent had had a family member die (most often a cousin) from a gunshot wound.

For 3 of the 93 incidents of previous gunshot wounds, respondents did not respond to the question about whether or not they had gone to the hospital. In 92% of the other incidents, the men reported going to the hospital for their wounds (Table 1).

In only 7 of 90 incidents did the respondent report not going to the hospital. Complete information was available about six of these seven incidents. Two individuals were shot during assaults of unclear motives, two were shot in the crossfire of shootings, one was shot by the police as he was running, and one shot himself unintentionally as a gun he carried in his pocket fired. One wound was a superficial grazing, and one was a through-and-through extremity injury. Two detainees extracted the bullets themselves and applied pressure dressings, and two were too intoxicated at the time of the shooting to realize that they had been hit until later.

Of the 90 incidents for which we have information about medical care, in 48% the respondent stayed at least overnight in a hospital, and in 34% he stayed longer than 1 week. In 56% of the incidents, the respondent was hit in the head or torso. One-third of respondents still had a bullet from the event in their bodies, and 40% reported a continuing disability as a result of their wounds, such as a persistent motor deficits or paralysis, chronic pain, amputation, altered gastrointestinal tracts, reduced lung capacity, or altered sight.

Ninety-two percent of the incidents occurred outside anyone's home. Respondents almost all reported that they were the victims (24% were victims of robbery, 21% were shot in a crossfire, 21% were shot during assaults, 18% were shot in retaliation for previous incidents, 6% were shot during arguments, 6% were shot in unintentional shootings, and 4% were shot by police). In only 9% of the incidents did these men have a gun in their possession when shot. Twenty-eight percent admitted to being high on drugs during the incident, and 28% had been drinking.

DISCUSSION

Criminals are probably among the least likely individuals to seek professional treatment for gunshot wounds. That more than 90% of the detainees (mostly "criminals") in our study reported going to the hospital emergency room when shot suggests that examining only medical care data to estimate gunshot wounds may miss only a small percentage of individuals who are shot.

The fact that our study concerns only one entirely urban area—Washington, DC—with gunshot wound victims who are exclusively young male African Americans limits the generalizability of our results. However, it is not unusual that most urban gunshot wound victims are young men. The

Massachusetts Weapon-Related Injury Surveillance System, for example, found that in 1994 74% of individuals seeking treatment for gunshot wounds in Boston were aged 25 years or younger.[8]

Probably a more important limitation is that our results depend entirely on self-report. However, there is little reason for most of these men to have lied about seeking medical care.

We did not ask about whether the shooting incidents had anything to do with the reasons they were currently being detained. But from the descriptions of the events and the number of years since they occurred, few events appeared to have been related to the charges against them.

The men were interviewed by a medical person rather than by criminal justice personnel. No questions were asked about the month, location, or the names of others in the incident. It was an oral questionnaire, but the detainees could skip any questions they wished. Almost no one should have had any reason to think that telling the truth about whether or not they went to the hospital could hurt them in any way.

Respondents typically described the circumstances leading to the shooting in great detail, as well as the exact disability caused by the gunshot wound, and half of those who reported going to the hospital remembered specific advice given by the nurse or doctor. Many were not afraid to admit being "high on drugs" during the shooting. Although validity studies do not seem to have been conducted for jail detainees, other studies have accepted as reasonably valid prisoners' answers to questions about previous criminal acts, about which respondents might certainly have some reason to mislead.[9–11] In this study, the questions dealt only with previous incidents in which the respondent was the one shot.

Much additional information should be collected to further determine the accuracy of national nonfatal gunshot wound estimates. The general public should be surveyed concerning whether they seek medical treatment for gunshot wounds; it may be that individuals in remote rural areas are less likely to seek professional care for minor wounds. For criminals, a larger multicenter study of prisoners should be undertaken to determine, for example, whether criminals in nonurban settings behave differently than those in the inner city. Attempts should be made to validate self-report claims from all surveys. The results of our self-report survey suggest that the vast majority of criminals probably seek professional care when they are shot.

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