

## The inner city and drug use: initial findings from an epidemiological study

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### Abstract

Although scientific and policy statements regarding drugs often suggest that there are grave problems of drug use within America's inner cities, the evidence that supports these statements is often based on anecdotal or incomplete data. This study of African-American adults from the Woodlawn study followed longitudinally partially fills that gap, at least for learning more about those who spend some or all of their childhood within an inner city neighborhood. We found few differences between the lifetime prevalence of drug use and a national representative sample of adults of the same age range. Furthermore, a national household survey of African-Americans of similar age living in six central cities also reported low lifetime rates of illicit drug use. Nevertheless, those from the Woodlawn cohort had higher rates of use of illicit drugs in the past year than the national sample, especially those still living in areas with high rates of poverty. Additionally, reports of heavy drug trafficking were much greater in the inner city areas than in the suburbs. © 1997 Elsevier Science Ireland Ltd.

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### 1. Introduction

Policy makers and qualitative studies describe grave problems of drug use within America's inner cities. For example, Musto (1988), an historian concerned with drugs, warned of the emergence of a drug culture within the inner cities. Writing in the *New England Journal of Medicine*, Kleber (1994) linked drug abuse to both urban decay and homelessness. Peterson and Harrell (1992) described a trend in which drug use has declined among middle class populations but increased among minority youth. They suggest that certain inner city neighborhoods are much more likely to be 'zoned' for drug use and crime. Anderson (1991) observed that the context in inner city neighborhoods includes high rates of crack addiction. Yet none of these descriptions are based on the quantitative type of data that generally have been used to indicate drug use within the

United States, i.e., national or community surveys (Jencks, 1991).

Data from the Drug Use Forecasting (DUF) program have often been cited as evidence of the increasing drug problem within cities. DUF tests the urine of arrested persons for the presence of 10 drugs. These are persons in custody who submit to voluntary testing. In most cities, more than 50% of those tested were found to have used drugs recently (US Department of Justice, 1992).

Based on the social disorganization perspective, social scientists might also expect that inner city residents would have high rates of drug addiction. This social science perspective implies that deteriorated neighborhoods are beset with a number of ills—inadequate family life, poverty, ineffective education, social isolation (Shaw and McKay, 1969). These conditions lead to a number of social problems within those neighborhoods such as crime and delinquency, family instability, and drug addiction. Inciardi et al. (1996) following this

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tradition state “there is little argument that the highest concentrations of narcotics addiction and other social problems are to be found in the deteriorated ‘inner cities’”. They base this conclusion on high correlations between rates of addiction and other social problems.

Surprisingly, several studies of the very poor have failed to show high rates of drug use. The results of these studies have met with scepticism. For example, in reporting results of a study that showed drug use among welfare recipients comparable to those that did not receive welfare (Grant and Dawson, 1996), the Center for Substance Abuse Research (1996) cautions that the results were based on self reports and suggests they “could be misleading if welfare recipients are less likely than others to admit substance use and symptoms of dependence. Research utilizing both self report and urinalysis or hair analysis results has found high rates of underreporting among disadvantaged populations”. This conclusion was based on research from two studies, one of the homeless and one on persons in transient housing. Neither study compared self reports of disadvantaged with the non-disadvantaged. Among the homeless, about one-third of those who tested positive by hair assays for cocaine did not self report using cocaine within the last 30 days, even though 70% had reported lifetime use of crack cocaine within the same survey (Alemagno et al., 1996). We question whether these findings are reason to suggest that those who are disadvantaged are more likely to give erroneous self reports of drug use than others who are not disadvantaged. Based on their own self reports, homeless adults are a population known for their drug abuse problems (Breakey et al., 1989; Gelberg and Linn, 1989), they are usually interviewed in shelters (rather than in households), and they are by definition less likely to be a household member than others who are not homeless—factors that may affect either their use of drugs or their reporting of drug use.

In this paper we ask the question of whether the drug experience of children originally recruited from a disadvantaged urban neighborhood is any different from what we might expect for their age cohort generally. The drug information has been obtained using a standardized drug assessment instrument. The comparison samples came from two national surveys: one chosen to represent the drug experience of a ‘nationally representative’ sample of the same age cohort as the Woodlawn population and one chosen to be very similar to the Woodlawn population not only in age, but in ethnicity and urban residence.

The purpose of these comparisons is to better understand the drug use ramifications of having started school in a neighborhood that has been considered high risk for deviant outcomes, such as drug use, because of its high rates of poverty, crime, single-parent families, and unemployment. In order to better understand the

relationship of inner city residence to drug use, we examine how drug use varies within the Woodlawn population by their current adult residence and by the poverty level of the census tracts where the cohort members live.

In summary, the key research question for this study concerns a fundamental epidemiological question about African-Americans who grew up in an inner city community: was their experience with controlled drugs like cocaine and marijuana much different from Americans growing up in the United States generally. We address this fundamental research question by using assessment methods that have been used to study national samples and by comparing lifetime and past year prevalence estimates from the inner city sample with estimates from the national surveys.

## 2. Methods

### 2.1. Population sample under study

The data used in this report come from a cohort of young African-American adults who, as children, started school in Woodlawn, an inner city neighborhood of Chicago, Illinois. Originally designated at the time of entry into first grade in 1966–67, this epidemiological cohort from Woodlawn has been assessed on two occasions since then, once during adolescence and most recently by means of a personal and confidential interview in 1992–94 when the cohort members were 31–34 years old. The population includes all the first graders who attended the nine public and three parochial schools in the Woodlawn community on the southside of Chicago. There was enthusiasm for the study in the Woodlawn community; the Community Advisory Board and other community residents spoke to potential participants with the result that only 13 families (1%) refused to participate in the initial family interview that occurred in first grade (see Kellam et al., 1975, for a more thorough description of this process). Consequently, the resulting population of 1242 first graders and their families represents virtually all the first graders attending the Woodlawn schools for that year.

When this study began in 1966, Woodlawn was one of the most socially disadvantaged communities in Chicago. In 1970, among the 76 community areas in Chicago, Woodlawn had the eighth highest percentage of families living below the poverty level, the fifth highest percentage of families receiving public aid, and the highest rate of male juvenile delinquency (Council for Community Services in Metropolitan Chicago, 1975). Over the past 30 years, Woodlawn residents have struggled with social problems that have plagued residents in many inner city neighborhoods—high rates of

violence, joblessness, and families led by only one adult, usually the mother. In this paper, we stress the diversity of ways this population has matured to adulthood, including variation in their drug use experience.

During their first grade year in school in 1966–67, the 1242 members of the total epidemiological cohort were rated by teachers, mothers, and psychological examiners. Many of these youths, and their mothers, were re-assessed in 1975–77 when they were 15–17 years old, in a follow-up of all cohort members who had remained in the Chicago area (Kellam and Ensminger, 1980; Ensminger and Slusarcick, 1992). Drug use was first assessed in the 1976–77 follow-up. Answering questions on their experience with specific drugs, 80% of the adolescents reported use of beer or wine, 43% had used other alcoholic beverages, and 60% had used marijuana (Kellam et al., 1980). Less than 5% of the adolescents reported use of any other substances. These values are generally comparable to those reported in the Monitoring the Future survey of a nationally representative sample of high school seniors in the mid-1970s (Johnston et al., 1992).

This study's estimates of drug use are derived from interviews with the 953 African-Americans who were successfully traced, located, and assessed in 1992–94. The 289 individuals not interviewed in 1992–94 included 43 (3.5%) who had died, three (0.2%) too incapacitated to give either informed consent or information for the interview, 39 (3.1%) who refused to be interviewed, and 204 (16.4%) who could not be located in time for the 1992–94 interviews despite an intensive search and tracing effort. Thus, 25 years after the inception of this study and 15 years after the latest contact with cohort members, it was possible to locate 84% of the cohort members, and to interview 96% of those who were located and found to be alive.

Of those subjects who were interviewed in 1992–93, 9% were found to be living in the Woodlawn neighborhood, while 65% were located elsewhere within Chicago; 10% were in a Chicago suburb. About 16% had moved outside the Chicago area to other parts of the United States. Most of the Woodlawn cohort members were living in households at the time of the interview; about 4% were interviewed in a jail or prison. Almost 80% reported having completed high school, and about 16% had earned a college degree. About 63% were employed at the time of the interview. Sixty percent of the interviewees reported annual household income between \$10 000 and \$50 000; about 30% reported a household income of less than \$10 000, and about 10% reported an income of above \$50 000. These indicate a range of educational, economic, and household circumstances for the cohort members in young adulthood.

The tracing effort for the adult follow-up was guided by a protocol that took advantage of data from the

1966–67 and 1975–77 assessments concerning both the respondents and their family members. It also made use of many other sources including information from the Chicago Board of Education records made available to our research team in 1982, from arrest records compiled by the Chicago Police Department in 1985 and again in 1992, and from arrest records compiled by the Federal Bureau of Investigation. We also sought to trace and locate the cohort members using voter lists, motor vehicle records, the National Death Index, neighborhood informants, a centralized computer database listing of telephone numbers and addresses, newspaper and radio advertisements, and announcements in church bulletins and other community organizations. The study's Community Advisory Board, made up of community leaders, was active in soliciting support from cohort members as well as others in the community.

The fieldwork portion of the tracing effort and the 1992–94 interviewing were carried out with the assistance of the supervisors and staff of the National Opinion Research Center (NORC). The NORC supervisors recruited and helped train qualified tracers and interviewers. Most of the interviewers lived in the Chicago area; all were African-American. In addition to prior training and experience as survey interviewers, they received a minimum of 48 hours of training for the interviewing and assessment tasks required for our study. Standard supervision and quality control checks were in place throughout the survey fieldwork.

## 2.2. Assessment procedures

The 1992–94 interview was conducted in a private location, typically the respondent's household, during a 90–270-min session that started with completion of informed consent procedures. The privacy of the study participants and the confidentiality of the study data are protected by a federal Certificate of Confidentiality issued by the US Department of Health and Human Services. The assessment included a fixed sequence of standardized self report interview questions and assessments on a range of topics covering family, educational experience, work, criminal activity, experiences with discrimination, health, neighborhood characteristics, social support, psychiatric disturbances, such as major depression, as well as self reports on past and recent use of alcohol and other psychoactive drugs.

The alcohol and other drug assessments were modeled after the substance abuse modules developed at the University of Michigan for the National Comorbidity Survey's (NCS), Composite International Diagnostic Interview (Kessler et al., 1994), described in detail by Anthony et al. (1994). These substance abuse modules include standardized questions to assess syndromes of alcohol and other drug dependence and abuse accord-

ing to the criteria of the Diagnostic and Statistical Manual of Mental Disorders, Revised Third Edition (DSM-III-R) (American Psychiatric Association, 1987).

Our interview questions to assess dependence on drugs like marijuana, cocaine, heroin, and alcohol were essentially identical to those of the NCS, starting with an assessment of extra-medical drug use and proceeding to detailed questions on the signs and symptoms of the dependence syndromes. As in the NCS, each respondent's answers to these interview questions were evaluated by computer scoring of the responses in relation to DSM-III-R criteria (Anthony et al., 1994; Kessler et al., 1994).

### 2.3. *Data analysis procedures*

In this study we compare the drug experience of this same Woodlawn cohort at ages 31–34, with prevalence data from a sample representative of the United States (those aged 31–34) and with prevalence data of African-Americans age 31–34 interviewed as part of a national survey in 1992. The comparison data come from the National Comorbidity Survey (NCS), completed in 1990–92, based on a nationally representative sample of household residents (Anthony et al., 1994), and from the National Household Survey on Drug Abuse (NHSDA) completed in 1992 and also based on a nationally representative population (Substance Abuse and Mental Health Services Administration, 1993). The NCS data allow us to compare the Woodlawn population to a population of 31–34-year-old adults chosen to be representative of the United States. We have chosen not to control for ethnicity or urban residence because our research question concerns how the Woodlawn cohort compares with a nationally representative sample of 31–34-year-old adults.

The NHSDA allows us to compare the Woodlawn reports with 31–34-year-old adults who are African-American. A design feature of the NHSDA was its oversampling of six metropolitan statistical areas (MSA) including Chicago, Denver, Los Angeles, Miami, New York, and Washington, DC. We report prevalence rates of drug use by African-Americans, age 31–34, living in the central cities (rather than the entire MSA). We do not have specific information about the areas where these respondents lived; however, we know that one in seven census tracts in the major cities in the US are at least 40% poor, that the proportion of metropolitan blacks who live in ghetto areas (40% poor or more) was 45% in 1990, and that, increasingly, those who can afford to leave the central city settle outside the political jurisdiction of the central city (Jargowsky, 1994; Wilson, 1997). In sum, these trends suggest that many of the NHSDA respondents would include those living in areas of concentrated poverty. This sample is similar to the Woodlawn population in terms of age, ethnicity, and urban residence.

The interview questions to assess drugs in the NHSDA were not identical to the questions used in the NCS or Woodlawn interviews. However, we would expect there to be a high correspondence in answers by the same individuals to the two sets of questions. For example, in the NHSDA, an initial question concerning marijuana use asks, "About how old were you the first time you actually used marijuana or hash even once?" Questions then proceed to ask about frequency and recency. In the NCS and Woodlawn interviews, the initial marijuana question is "Have you ever used marijuana or hashish, even once?" Questions regarding age of first use, frequency, and recency come after the initial question.

We compared the drug experience of the 31–34-year-old Woodlawn cohort members to the experience of the comparable age segment of the NCS sample, namely, the 31–34-year-old adults and to the African-Americans, age 31–34, living in six US cities obtained from the NHSDA data tapes. For the Woodlawn cohort members interviewed in 1992–94, the lifetime history of alcohol and other drug involvement has been shown as lifetime prevalence and annual prevalence of drug use up to the time of the interview session, as was done in the NCS. In neither the NCS nor NHSDA study was there any correction of the survey estimates for individuals who had died, were admitted to drug treatment facilities, or who suffered other drug-related experiences that prevented their representation in the national survey sample (Anthony et al., 1994). Hence, we also have not made adjustments to correct for these factors in the Woodlawn sample. Since the NCS and NHSDA did not interview incarcerated persons, we have analyzed separately the 36 individuals who were interviewed while they were in prison or jail.

The Woodlawn cohort members not interviewed in 1992–94 might have had a different drug experience than those who were interviewed, and perhaps might have been lost to follow-up because of drug-related deaths, mental incapacitation, or for other drug-related reasons (e.g., using false identification or avoiding contact with unknown persons). This aspect of our study does not invalidate our direct comparison with the NCS and the NHSDA findings, which were both based on a sample consisting entirely of residents living in households, all of whom had to consent to complete the survey interview and also were affected by these same sources of sample attrition.

Finally, given our interest in the drug experience of individuals who grow up and live in the inner cities of America, we also use our interview data to compare and contrast the occurrence of past and recent drug use for Woodlawn cohort members who were living in Woodlawn at the time of the 1992–94 follow-up compared to those who had moved to other parts of Chicago, to Chicago suburbs, or elsewhere in the United States.

## 2.4. Potential threats to validity

Because longitudinal studies are subject to bias from attrition (loss to follow-up) and self reports of drug use may be subject to under-reporting, we also consider sample attrition and interview response tendencies as potential sources of methodological error in this study.

### 2.4.1. Attrition

One concern in longitudinal studies is whether those not followed in successive waves might bias the results of the study. Specifically, our concern was whether those lost to follow-up might be more likely to be heavy users of alcohol or other drugs. For this reason, we compared the characteristics of located and interviewed cohort members with those lost to follow-up, focusing attention on those characteristics that might indicate that those members of the cohort who were more disadvantaged in the beginning of the study or those whose early behavior assessments showed them to be at risk for later drug use would be found less often. Specifically, in terms of early disadvantage we examined poverty, family type, mother's education, welfare status, number of residential moves, and age of mother at birth of her first child. In terms of the individual behaviors we examined teachers' ratings of first grade behavior (cognitive achievement, aggressive behavior, shy behavior and concentration), first grade reading and math grades, and self reports of drug use made during adolescence. Early ratings of aggressive behavior and adolescent drug use have been shown in other studies to relate to later drug use and for that reason are of special interest (Hawkins et al., 1985; Kandel et al., 1992; Brook et al., 1995). These measures are described in detail elsewhere (Kellam and Ensminger, 1980; Kellam et al., 1980, 1975).

Those whose families had been living below the poverty line in 1966–67 were less likely to be interviewed. We interviewed 81% of those whose families had been above the poverty line when they were in first grade compared to 74% of those who had been below the poverty line (Pearson  $\chi^2 = 7.86$ ;  $p \leq 0.005$ ). We were not able to locate 19% of those with incomes below the poverty level, as compared to 13% of those with incomes above the poverty line. Those interviewed as young adults were slightly more likely to have been living with both parents in first grade as compared to those who were not interviewed (Pearson  $\chi^2 = 21.9$ ;  $p < 0.001$ ). We interviewed 83% of those from mother–father families compared to 73% of those from mother-alone families. None of the other family background measures (mother's education, welfare status, residential mobility, age of mother at first birth) were related to interview status. Nor were any of the first grade teachers' behavior ratings or grades. Moreover, the self reports of drug use during adolescence were not related to interview status as a young adult.

Since early poverty and family type were related to who we followed as adults, we compared the drug use of those we interviewed as adults in relation to early poverty status and early family type. We found no differences: that is, among those interviewed in 1992–93 those respondents who were poor in first grade did not differ in their drug use from those who were above the official poverty level. For example, about 28 of those whose families were above the official poverty level had used cocaine compared to 23% of those below the poverty level (a nonsignificant difference in the counter intuitive direction). Family type in first grade was also not significantly related to adult drug use.

### 2.4.2. Self reports of drug use

Methodological criticisms of national surveys of drug use data have largely focused on the reliability and validity of self report data (Mensch and Kandel, 1988), the populations excluded from school-based or community data (Bachman et al., 1991; Wallace and Bachman, 1991) or the possible under-reporting of deviant activities by members of minority groups (Mensch and Kandel, 1988).

One potential source of error in self report surveys of drug use and drug problems is that some respondents may be unwilling to disclose illegal or sensitive behaviors, even when special efforts are made to develop trust and rapport before asking about these behaviors, and even when special protections are in place, such as the federal Certificate of Confidentiality. In order to investigate this potential problem, we constructed an index of self disclosure based upon 53 items in the Woodlawn interview, most of which concerned antisocial, criminal, and other socially undesirable behaviors. Each of these items represents an aspect of behavior or a personal characteristic that might embarrass the respondent, be regarded as deviant, or be illegal. We then examined the distribution of scores on this index of self disclosure in relation to whether the Woodlawn cohort members reported illicit drug use. Of particular interest in this contrast is whether respondents who did not report illicit drug use also failed to disclose other antisocial, criminal, or otherwise socially undesirable behaviors.

While reports of illicit drug use are associated with higher scores on our index of self disclosure, very few of the respondents scored at the lowest level of our self disclosure index. Among those who reported alcohol or tobacco use but no illicit drug use, about 36% reported three or more of the socially undesirable behaviors. This compares to 54% of those who reported using marijuana and 86% of those who reported using cocaine. Clearly, use of cocaine is related to the participation in other deviant behaviors, but the main point is that a considerable percentage of those who reported no use of illicit substances did report participation in

Table 1

Comparison of drug use: lifetime prevalence (1992/94, Woodlawn prospective study; 1990/92, National comorbidity survey (NCS); 1992 National Household Survey Drug Abuse (NHSDA))

Drug category	Woodlawn <sup>a</sup> (n = 917)	NCS <sup>b</sup> (n = 1050)	NHSDA <sup>c</sup> (n = 286)	Woodlawn incarcerated <sup>a</sup> (n = 36)
Lifetime prevalence of alcohol and drug use (%)				
Alcohol	91.2	95.2	76.6	97.2
Illicit drug				
Heroin	4.5	2.2	1.7	27.8
Cocaine/crack	24.3	25.7	11.9	47.2
Marijuana	56.5	60.0	39.9	80.6
Hallucinogen/LSD	8.2	15.4	2.8	27.8
Past year prevalence of alcohol and drug use (%) <sup>d</sup>				
Alcohol	53.1	70.5	67.5	
Illicit drug				
Heroin	1.5	0	0.6	
Cocaine/crack	9.9	1.8	4.5	
Marijuana	20.0	10.0	12.5	
Hallucinogen/LSD	0.6	0.2	0.4	
Lifetime prevalence of alcohol and drug dependence (%)				
Alcohol	9.1	15.9		
Illicit drug	9.7	9.3		

<sup>a</sup>Age 31–34, interviewed in 1992–94.

<sup>b</sup>Age 31–34, interviewed in 1990–92.

<sup>c</sup>Age 31–34, interviewed in 1992, African-Americans from six metropolitan center cities.

<sup>d</sup>Past year prevalence not shown for incarcerated population.

other deviant behaviors. This evidence suggests that respondents who reported no drug use were not reluctant to report socially undesirable behaviors in general.

We also compared respondents self reports of criminal activity with their criminal justice records from the Chicago police and from the FBI (McCord and Ensminger, 1995). These data showed that 86.8% of the males who had official arrest records for violence reported committing violent crimes, as did 71.2% of the men not arrested for violence. Among the women, 76.9% of those who had official arrest records for violence reported committing violent crimes as did 52.7% of the remainder. While there is not perfect agreement between the official arrest records and the self reports, the findings show a willingness among most respondents to disclose illegal behaviors.

### 3. Results

#### 3.1. Comparison with National Comorbidity Survey (NCS) and the National Household Survey (NHSDA) estimates

Table 1 compares the drug use data reported for the Woodlawn household interviewees with corresponding data for the 31–34-year-old Americans in the NCS nationally representative sample of households and with the 31–34-year-old urban African-Americans from the NHSDA. The lifetime prevalence rates of Wood-

lawn respondents are slightly lower than the corresponding NCS rates for most substances. Compared to NCS 31–34-year-old adults, those from the Woodlawn cohort were slightly less likely to have ever used marijuana, cocaine, and/or psychedelic drugs. However, they were about two times more likely to have tried heroin (4.5%) than those interviewed in the NCS (2.2%). Overall, the lowest rates of drug use were reported by the African-Americans from the NHSDA. The 36 Woodlawn respondents who were interviewed while in jail or prison had considerably higher rates of drug use than any of the other populations; for example, 28% reported lifetime use of heroin, and 47% lifetime use of cocaine/crack.

A different picture emerges, however, when we compare the rates of use within the past year (we do not show the past year rates for those who were incarcerated). With the exception of alcohol, the Woodlawn respondents had the highest use of all the drugs compared. They reported twice as much marijuana use and over five times as much use of cocaine/crack compared to the NCS population and over twice as much of both drugs as the NHSDA population (See Table 1).

In comparing the lifetime prevalence of drug dependence for the Woodlawn respondents with those of the NCS (drug dependence was not assessed in the National Household Survey), the Woodlawn cohort showed a lower estimate of alcohol dependence and a very similar rate of drug dependence, including any other illicit drug (see Table 1).

Table 2  
Drug use by residence at age 32–33 (excluding incarcerated individuals)

	Woodland ( <i>n</i> = 89) (%)	Chicago, not Woodlawn ( <i>n</i> = 601) (%)	Chicago suburbs ( <i>n</i> = 91) (%)	Other US locations ( <i>n</i> = 136) (%)	<i>p</i> value*
Lifetime prevalence of drug use					
Alcohol	89.9	93.5	93.4	94.1	<0.61
Marijuana	60.7	55.1	54.9	61.0	<0.44
Cocaine	27.0	24.5	24.2	22.1	<0.87
Prevalence of drug use in the past year					
Alcohol	57.3	52.1	46.2	58.1	<0.28
Marijuana	27.0	20.5	12.1	18.4	<0.09
Cocaine	14.6	11.5	4.4	3.7	<0.005
Percent of those living in census tracts > 40% poverty	36.9	22.2	3.1	10.3	

\*Pearson  $\chi^2$ .

### 3.2. Location of residence in 1992–94 in relation to drug use

Those who were living in Woodlawn in 1992–94 were no more likely to have tried marijuana or cocaine (lifetime prevalence), as compared to those who had moved to other areas within Chicago, to the Chicago suburbs, or to outside the Chicago area (see Table 2). Among those who had lived in Woodlawn as children and who were living in Woodlawn at age 32–33 (*n* = 89), the proportion who had used alcohol was 90%, the proportion who had tried marijuana was 61%, and the proportion who had tried cocaine was 27%. These values do not differ from those in the Woodlawn cohort who were living in other parts of Chicago, the Chicago suburbs, or outside the Chicago area. (This between-residence comparison could not be made for heroin or the other drugs because there were too few users for meaningful analyses.)

Focusing the analysis on the proportion who reported using marijuana or cocaine in the year prior to interview, we found that those who had moved to the Chicago suburbs were less likely to have used alcohol, marijuana, or cocaine during the year prior to interview, and those who were living outside the Chicago area were less likely to have used cocaine. Those who were living in Woodlawn or in the city of Chicago were two to three times more likely to have used cocaine recently, as compared to the others (see Table 2). Further, these residential areas differed by the concentration of poverty (as shown in Table 2); about 36% of those who lived in Woodlawn lived in census tracts with 40% or more of the residents at or below the poverty level compared to 22% of those living in other areas of Chicago, 3% of those living in the Chicago suburbs, and 10% of those living outside the Chicago area.

Reports of drug trafficking also differed according to residential area. We asked respondents to rate the level

of drug trafficking in their neighborhood. Only 9% of the respondents reported that there was no drug trafficking in their neighborhoods, while almost 62% reported there was moderate or heavy drug trafficking. This varied greatly by residence, with 61% of those living in Woodlawn reporting heavy drug trafficking, as compared to 13% of those living in the Chicago suburbs (Table 3).

### 3.3. Indicators of drug concern

Finally, there was evidence in the interview that drug use was a concern of the Woodlawn respondents. We asked respondents: “Is there something about being African-American that you would like to teach your children or other young people?” This was an open-ended question that did not suggest precoded options to the respondents. Staying off drugs was spontaneously mentioned by 24% of the respondents. This was the third most frequent response, following responses that were coded as pride in self or race, as well as answers coded as communicating a sense of history to young people.

## 4. Discussion

We would like to draw attention to a major finding of this study—namely, a majority of the Woodlawn cohort who grew up within an inner city community did *not* go on to become drug dependent. Moreover, the estimated proportions who have become dependent on controlled substances are similar to the corresponding estimates obtained in the National Comorbidity Survey. This finding about the drug experience of persons growing up in the inner city should be kept in mind when discussing the problems of inner city America.

Table 3  
Drug trafficking in neighborhood (data from Woodlawn Young Adult Interview (excluding incarcerated))

	Woodlawn (n = 83) (%)	Chicago, not Woodlawn (n = 554) (%)	Chicago suburbs (n = 71) (%)	Outside (n = 127) (%)
Drug trafficking rated by respondents at age 32–33				
None/Light	14.5	29.6	74.6	72.4
Moderate	24.1	26.5	12.7	15.0
Heavy	61.4	43.9	12.7	12.6

Percentages sum to 100 ± 0.1% due to rounding errors.

Although the lifetime prevalence of drug use did not differ greatly in the comparisons of the Woodlawn population with those of the national population, the current use of drugs did differ (as indicated in the comparisons of the use of drugs in the past year). These results indicate that although Woodlawn respondents were not more likely to initially use drugs, they were more likely to continue using drugs. Further, this was related to their continued residence in inner city neighborhoods. Those who lived in the Chicago suburbs or who lived outside the Chicago area had much lower rates of current use; these areas were much less likely to contain ghetto census tracts (as indexed by the census tracts with 40% or more of its households living below the poverty level).

Several potential cautions concerning the study should be kept in mind. Because the cohort members were initially from a single community on the southside of Chicago, whether similar results would be obtained from other inner city populations is unknown. While Woodlawn is unique in certain ways, we have no reason to suspect that drug use patterns of its young people would differ from those from similar Chicago areas. The generalizability of these results can be answered only through replication of the study in other locales, and we hope this can be accomplished in future studies.

Our evaluation of study participants indicated that sample attrition was related to poverty and family type, but these factors did not relate to drug use. Nor did we find differences in the self reports of alcohol and drugs as adolescents between those who were re-interviewed as adults and those who were not.

Finally, our study methods and those of the NCS and NHSDA relied heavily upon self reports of alcohol and other drug use. As discussed elsewhere (Anthony et al., 1994), this might prove to be a major methodological obstacle in large-scale epidemiological studies, especially if the focus of interest is upon the lifetime prevalence of drug use for which there is no biological assay or assessment method independent of self report. Our analysis of self disclosure in relation to illicit drug use provided some evidence that Woodlawn cohort participants who reported no illicit drug use were willing to disclose antisocial, criminal, and otherwise socially undesirable aspects of their lives. There was also

relatively high agreement between official crime reports and the self reports. These findings argue against any blanket predisposition to under-report during the interview, which might have yielded spuriously low estimates of illicit drug use.

The strengths of this study are its initial epidemiologically defined cohort of children starting school in an inner city neighborhood and followed prospectively to adulthood, and the generally high levels of success in tracing and soliciting informed consent for the 1992–93 follow-up interview. Because the population included all first grade children from a neighborhood community, we know who is missing from the adult survey. A limitation of cross-sectional household surveys is that they may miss inner city populations that move in and out of households or that are incarcerated. It is difficult in such surveys to know who is missing from the surveyed population. Because we had a defined cohort of first graders, we know who was not found, who was incarcerated, and who was dead. Similarly, school surveys that begin later in the child's school career may miss students who have dropped out of school or are attending school very infrequently.

The general comparability of the Woodlawn assessments of drug use with the National Comorbidity Survey and the National Household Survey on Drug Abuse is another strength that has often been absent in other evaluations of the use and abuse of drugs by inner city populations.

## 5. Implications and conclusions

Our findings portray a complex picture of the drug use of those who grow up in the inner cities of America. In this epidemiological study of African-American adults who as children lived in inner city Woodlawn, we found a similar lifetime experience with marijuana and cocaine, and a somewhat greater than expected experience with heroin, compared to others in their age cohort. While the prevalence of DSM-III-R drug dependence for illicit drugs was similar among Woodlawn subjects compared to the NCS respondents, the prevalence of alcohol dependence was higher in the NCS estimates. However, the current use of drugs was higher

for those in the Woodlawn population than others in their age cohort.

Given the picture of high rates of drug use and abuse that is often portrayed in the social science and policy literature, the results presented here stand in contrast. Whereas a large proportion of Woodlawn cohort members (and NCS respondents) reported having tried marijuana, the vast majority of the Woodlawn study participants had not developed alcohol or other drug dependence. Fewer than one-third had tried crack or other forms of cocaine; a very small fraction reported having tried heroin. Despite the clear disadvantages that many of the members of this cohort experienced, including poverty, coming from a mother-alone family, and growing up in a welfare family, a very large proportion of the Woodlawn cohort as young adults were drug free. For most of those who were interviewed, there was no recent history of using either marijuana or cocaine, whether they were living in inner city Woodlawn or elsewhere.

Further, the Woodlawn cohort members were similar to other Americans in their fears about the potential impact of drugs on their children. Our results are similar to those reported by the Children's Defense Fund Survey (1994): many African-American parents, often living in inner city neighborhoods, express grave concern that the future of their children will be compromised by involvement in illicit drug use.

The comparison group of African Americans aged 31–34 from central cities of six major metropolitan MSA surveyed as part of the NHSDA reported the lowest rates of drug use, often quite a bit lower than reported by those of a similar age from the Woodlawn or NCS group. This further questions the assumption of high rates of drug use within minority urban populations.

Despite these results, there are also findings that are cause for concern. First, the members of this cohort report high rates of drug trafficking in their neighborhoods, especially if they live within Woodlawn or other areas in Chicago. Second, those who continued to live in inner city neighborhoods had a higher rate of current drug use, including marijuana and cocaine than those who did not. Third, while those who were incarcerated were not part of the comparisons, their drug use was much higher than others of their age cohort—either in the Woodlawn study or in the national population. Four percent of the Woodlawn population were incarcerated at the time of the interview, a higher percentage than would be expected in a national population of this age group. Finally, the number of respondents who were dead ( $n = 43$ ) was also higher than would be expected for this age cohort. As indicated on death certificates or from family reports, at least some of these deaths were directly or indirectly related to drug use.

We interpret the study's findings as weighing against the idea that a large majority of those from the inner city become seriously involved with heavy alcohol or drug use. Apparently, most do not. However, far from being a call for reduced attention to the inner city, these findings also indicate that those children who grow up in the inner city and remain there have important disadvantages with regard to drug use—they are more likely to be current drug users and they are more likely to be in a neighborhood with heavy drug trafficking. An understanding of whether the higher current drug use within inner city neighborhoods is a result of the past socialization experiences of these cohort members or whether those who are more involved in drugs elect to live in inner city neighborhoods is an important next focus of these longitudinal data. Further, why most of the study participants remain drug free and do not become drug dependent, despite what clearly are disadvantageous conditions of growing up in poor urban areas is an important question for further investigation.

Based on the complexity of these results, further exploration of quantitative, epidemiological data about the prevalence and severity of drug use within inner city areas is needed. Qualitative data and data from the Drug Use Forecasting (DUF) program point to very high drug use within the inner cities. Data from the Woodlawn cohort and from African-Americans within the NHSDA do not show especially high rates. However, the Woodlawn data support the DUF data that report high rates of drug use among those arrested; those incarcerated Woodlawn respondents also reported very high rates of drug use. Given the uncertainty of results from any single epidemiological or qualitative study, scientific and policy conclusions concerning drug use must be based on an evaluation of the consistency of data from different sources, and efforts must be made to understand the inconsistencies when they exist. We strongly suggest that those reporting on use of drugs pay close attention to who is and who is not included in the study data.

Finally, these results reinforce a need to pay more attention to what is happening in inner city neighborhoods in terms of drug trafficking. It is possible that the inner cities have become a major marketplace for trafficking in drugs because most residents in these areas do not have the social and economic resources to protect their neighborhoods from encroachment by drug dealers. The question of why drug trafficking seems so much more prevalent in inner city neighborhoods has important implications for drug enforcement policies as well as policies concerning protections needed in urban neighborhoods where the majority of residents are not illicit drug users.

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