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SEXUAL RISK PROFILES OF DELINQUENT AND HOMELESS YOUTHS

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ABSTRACT: Relatively little is know about the sexual behaviors of high-risk adolescents, such as delinquent and homeless youths. Having secured data from medical examinations, this study provides sexual risk profiles for a sample of delinquent (N = 245) and homeless (N = 160) youths in San Francisco, California. The study found several indicators of high-risk behaviors, such as high levels of STDs, trading sex for money or drugs, and unprotected sexual relations with multiple partners. The study suggests that communities provide better sex education and medical services to high-risk adolescents through multiservice health clinics, public health clinics, and street outreach.

INTRODUCTION

The health risks of juveniles, especially homeless and runaway youths as well as delinquent youths, have been of growing interest in recent years, particularly since the emergence of the AIDS epidemic.[1,2] Health care practitioners and youth advocates are becoming especially concerned about health behaviors associated with HIV transmission, such as unprotected sexual activity and injection drug use (IDU).[3-8]

Relatively little is known about the sexual risk behaviors and health care needs of delinquents in a correctional or detention setting.[9,10] Similarly, little is known about the sexual risk behaviors and medical needs of homeless and runaway youths.[2,11,12] As the Council on Scientific Affairs of the American Medical Association[2] recently stated, "Large numbers of homeless and runaway adolescents roam the streets of every major city in this country. However, little is known about them, their needs, or their experiences. . . . Knowledge of their health care needs is based more on speculation and anecdotal information than on hard data. . . . "

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Some data on these populations do exist, and they seem to suggest that these two groups engage in a variety of high-risk sexual behaviors. For example, some juveniles engage in prostitution—selling bodies for drugs and money.[13-15] They also have higher rates of substance abuse,[16-18] and generally have higher rates of a variety of health problems.[1,2]

These two groups—delinquents and homeless—are sometimes combined for study and analysis. It is frequently assumed that they exhibit the same risk behaviors and have the same medical needs. Yet this is not necessarily a valid assumption. In order to provide the best health care services to each group—including medical screening by practitioners who encounter these clients on a daily basis—it is necessary to understand the differences between these two groups, as well as the differences between these two groups and the general adolescent population.

To develop systematic medical and sexual risk profiles of delinquent and homeless youths, a study was undertaken of the medical histories and physical examinations of a sample of youths in San Francisco's juvenile detention facility and two homeless and runaway youth serving agencies. Funding from the U.S. Public Health Service (Region IX) was awarded jointly to the San Francisco Department of Public Health (Special Programs for Youth) and the URSA Institute, a nonprofit health care and social science research institute based in San Francisco. The study's procedures were approved by the URSA Institute's Institutional Review Board (IRB).

METHODS

The samples in this study were secured from three youth serving agencies in San Francisco. The sample of delinquent youths came from the Youth Guidance Center, which is the juvenile detention center for alleged and adjudicated delinquents. The sample of homeless youths came from two agencies that serve homeless and runaway youths, Larkin Street Youth Center and Huckleberry House.

The Youth Guidance Center is the only juvenile detention facility in San Francisco. Youths between the ages of 10 and 18 who are charged with a violation of the criminal law are brought to the Youth Guidance Center for intake and processing. The maximum capacity is 137, and the average length of stay is 10 days.

The Larkin Street Youth Center is a nonprofit, community-based program located in Polk Gulch, a prostitution and drug-dealing area in San Fran-

cisco. Established in 1984, the Center offers a variety of services including counseling to homeless youths. Also provided are HIV testing and prevention education, a drop-in center, street outreach, long-term stabilization planning, aftercare counseling, and linkages to other youth services.

Huckleberry House opened in 1967 in San Francisco's Haight-Ashbury district. It is a component of Youth Advocates, Inc., and has the distinction of being the oldest homeless youth and runaway shelter in this country. It operates a 24-hour crisis shelter and intake program for teenagers between the ages of 12 and 18. Homeless and runaway youths who come to the attention of police are brought to Huckleberry House for intake and possible shelter. The program is based on a crisis intervention model which offers immediate intervention toward stabilization and family reunification.

The San Francisco County Department of Public Health provides health services to all three youth serving agencies participating in the study. Each of the three agencies has a health care clinic. The three clinics are staffed primarily by nurse practitioners, but physicians are available on call. Youths presenting for primary care are given physical examinations and treatment. Comprehensive medical histories are also taken. Serious medical problems are referred to San Francisco General Hospital.

Before the study began, the two medical record forms used (medical history and physical examination forms) were somewhat different in each of the three clinics. The first task of the research project therefore was to standardize these two medical forms. Separate medical history and physical examination forms were designed for males and females.

The sample in this study consisted of all youths from whom complete medical histories and physical examinations were obtained during the six month study period—June 1, 1990 through November 30, 1990. All medical histories were completed by a nurse practitioner or registered nurse. Physical examinations were completed by a physician or nurse practitioner. The total sample was 405 youths. Of those, 245 youths were from the Youth Guidance Center (i.e., the delinquent sample); a sample 160 youths were combined from the two homeless and runaway facilities.

Specific criteria were developed to determine which juveniles received the complete medical work-up—i.e., medical history and physical examination. At the Youth Guidance Center, the complete work-up was given to those youths who were detained following their first court appearance, and if they had not had a complete physical in at least one year. At Huckleberry House, the complete work-up was given to those youths who were in residence (not drop-ins), who had not had a physical in at least one year, and who were willing to have one. At Larkin Street Youth Center, the complete work-up was given to those youths who dropped in at the Center, had not had a physical in at least one year, and were willing to complete the examination.

It is important to stress that many more youths sought and received care at the medical clinics than are reflected in the study data. Those juveniles

visited the clinic for episodic problems, e.g., wounds, birth control, etc. Only the youths receiving complete examinations (history and physical) were included in this study.

RESULTS

Components of the profile included: demographics, sexual history, current sexual behavior, sexual preference, contraception and pregnancy, and sexually transmitted diseases.

Demographics

Demographic data on the two samples are provided in Table 1. As can be seen, males constituted a higher percentage of subjects than females (71.4 to 28.6%) among the delinquent sample. The reverse was true for the homeless youths.

The subjects in the Youth Guidance Center were overwhelmingly from ethnic minority groups; 10.6% were white. By con-

TABLE 1

Demographic Profile of Samples

	Delinquent		*Homeless*	
	N	%	*N*	%
Gender				
Male	175	71.4	58	36.3*
Female	70	28.6	102	63.8
Ethnicity				
White	26	10.6	78	48.8*
African American	140	57.1	34	21.3
Latino	51	20.8	27	16.9
Asian/Pacific Islander	28	11.4	13	8.1
American Indian	0	0.0	5	3.1
Other	0	0.0	3	1.9
Average Age	245	16.3	160	16.6
Born Outside of United States	48	19.8	29	18.4

*$p<.05$

trast, 48.8% of the homeless youths were white. The average ages of the two groups were comparable—16.3 years for the sample of delinquents and 16.6 years for the youths from the homeless agencies. Relatively high percentages of both samples were not born in the United States (19.8% among the delinquents and 18.4% among the homeless).

Other general demographic information (not shown in Table 1) is of relevance. Significantly, more of the homeless youths stated that they had family problems. Eighty percent of the homeless sample answered affirmatively to the question "are there problems at home?" This compares with 21.6% of those in the delinquent population ($p = .0000$). A significantly higher percentage of the delinquent youths had been in an out-of-home placement than the homeless youths (68.5% to 40.8%) ($p = .0000$).

Sexual History

The sexual histories of both samples were relatively extensive. The age at first intercourse for the delinquent population ranged from 4 to 18; the mean age at first intercourse was 12.8 years. For the homeless population, the age range for first intercourse was from 6 to 18; the mean age was 13.7 years.

Table 2 presents a distribution of age at first sexual intercourse for the two samples. Two findings are noteworthy. First, both samples were relatively young when they became sexually active. For example, 79.1% of the delinquent and 65.6% of the homeless samples had sexual intercourse before age 15. Second, those in the delinquent sample generally began sexual activity earlier than those in the homeless sample.

Current Sexual Behavior

Eighty-eight percent of both those in the delinquent and the homeless samples stated that they were currently sexually active. Almost 57% of those in the delinquent and 53.3% of those in the homeless samples had a main sexual partner.

The subjects were asked what types of sexual activities they engaged in. Table 2 shows types of sexual behavior of the sexually active youths, by delinquent or homeless status. Slightly more than 91% of the delinquents and 80.5% of the homeless stated they engaged in vaginal sex. Slightly more than 23% of the delinquents compared to 43.6% of the homeless youths stated they engaged in oral sex. And 3.1% of the delinquents compared to 17.4% of the homeless youths stated that they engaged in anal sex.

TABLE 2

Age at First Intercourse and Current Sexual Behaviors

	Delinquent		*Homeless*	
	N	%	*N*	%
Age at First Intercourse				
Less than 12	84	38.2	25	19.5*
13-14	90	40.9	59	46.1
15 or older	46	20.9	44	34.4
Sexual Behaviors by Status	*Delinquent*		*Homeless*	
Engage in vaginal sex	204	91.1	120	80.5*
Engage in oral sex	52	23.2	65	43.6*
Engage in anal sex	7	3.1	26	17.4*
Sexual Behavior by Gender	*Males*		*Females*	
Engage in vaginal sex	174	93.0	150	98.0
Engage in oral sex	57	32.1	60	37.3
Engage in anal sex	23	12.3	10	6.5

*$p<.05$

Table 2 also shows sexual behavior by gender. The female youths were somewhat more likely to engage in vaginal sex (98% to 93%) and oral sex (37.3% to 32.1%). The male youths were more likely to engage in anal sex (12.3% to 6.5%). These percentages of oral and anal sexual activity are relatively high. The incidence of oral and anal sex is probably related, especially among the homeless sample, to sexual orientation, which is disproportionately gay, as discussed in the next section.

Another finding has particular relevance for high-risk sexual behavior. Slightly more than 4% of the delinquents, but 12.8% of the homeless sample had traded sex for money, drugs, food, or lodging ($p=.0052$). This finding has direct implications for HIV transmission.

Sexual Orientation

The sexual orientation of the two samples is presented in Table 3. The majority of both samples considered themselves to be heterosexual. But a significantly higher percentage of homeless youths were gay identified (10.8% to 0.4%).

TABLE 3

Sexual Orientation

	Delinquent		*Homeless*	
	N	%	*N*	%
Heterosexual	217	89.7	128	81.5
Gay	1	0.4	17	10.8*
Bisexual	3	1.2	3	1.9
Don't Know	21	8.7	9	5.8

*$p<.05$

Contraception and Pregnancy

Questions were asked in the present study concerning contraception (and specifically condom use), largely because of its relationship to the prevention of sexually transmitted diseases. Table 4 provides a breakdown of types of contraception used in the two samples. Close to half of each of the samples used no contraception. Of those youths who used contraceptives, condoms were by far the most commonly used by those in both samples. Slightly more than 47% of the delinquent sample and 38.5% of the homeless sample indicated they used a condom at last intercourse ($p=.1877$).

Despite the level of contraceptive use in the current study, pregnancy was an issue for the two samples. Slightly more than 17% of the female delinquents desired to be pregnant; this compares with 9.8% of the sample of homeless females ($p=.3436$). At the time of the physical examination, 26.5% of the sample of delinquents and 28.4% of the sample of homeless youths thought they might be pregnant ($p=.6796$).

Slightly more than 34% of the females in the sample of delinquents have conceived a child; this compares to slightly more than 33% of the homeless sample. Slightly more than 14% of the delinquent females have had a live birth. Almost 9% of the females in the sample of homeless youths have had a live birth.

Sexually Transmitted Diseases

Sexual behavior has obvious implications for acquiring sexually transmitted diseases (STDs). By history, 45.1% of the delinquent youths indicated that they had ever had an STD. By contrast, 36.9% of the homeless population stated that they had ever had an STD ($p=.0740$).

TABLE 4

Current Contraception and Sexually Transmitted Diseases

	Delinquent		*Homeless*	
	N	%	*N*	%
Current Contraception				
None	115	46.9	77	48.2
Condom	121	49.4	68	42.5*
Foam	4	1.6	0	0.0
Condom and Foam	1	0.4	5	3.1
Oral Contraceptive	4	1.6	9	5.6
Other	0	0.0	1	0.6
Sexually Transmitted Diseases				
Trichomonas	6	8.2	18	17.6
Gonorrhea	11	4.5	6	3.8
Chlamydia	20	8.2	22	13.8
Syphilis	5	2.0	0	0.0*
Venereal Warts	1	0.4	1	0.6

*$p<.05$

At the physical examination, slightly more than 7% of the sample of delinquents and 9.5% of the sample of homeless youths thought they might have an STD—including being HIV positive. Slightly more than 6% of the delinquents and 8% of the homeless youths stated that they were aware that their partner had an STD at the time of sexual relations.

Based on laboratory tests from the physical examinations, 13.1% of the delinquent youths and 21.9% of the homeless youths had an STD ($p=.0280$). Table 4 provides positive STD laboratory results. The delinquent youths had higher percentages of gonorrhea and syphilis. The homeless population had higher percentages of trichomonas, chlamydia, and venereal warts.

Hepatitis B is related to STDs as well as IV drug use. Many of the youths in the samples engaged in a variety of high-risk sexual and drug use behaviors, which may have caused hepatitis infections. Of the sample of delinquents, 6.1% were currently infected with hepatitis B; this compares to 5.6% of the sample of homeless youths ($p=.1826$).

DISCUSSION

The data presented in this study on the risk behaviors and health status of the samples of delinquent and homeless youths in San Francisco lead to several conclusions. The juveniles in the two samples exhibit a multitude of risk factors that affect individual morbidity as well as public health. High-risk sexual behaviors make these juveniles vulnerable to specific diseases, including sexually transmitted diseases and HIV infection.

It is important to compare the youths in this study with other samples of adolescents, and particularly the general adolescent population. Generally speaking, the youths in this study (both delinquent and homeless) have significantly more medical problems and exhibit more risk factors than adolescents in the general population.

For example, the data from this study indicate a relatively high proportion of family problems, particularly among the homeless youths. The proportion of youths with family problems in this study appears to be appreciably higher than for the general adolescent population. For example, Schubinger found that 10% to 15% of the general adolescent population report significant family problems.[19]

As mentioned, 88% of both the delinquent and homeless youths in this study were sexually active. This figure is higher than for the general adolescent population. A national survey of adolescents—part of the Center for Disease Control's Youth Risk Surveillance System—found that of all students in grades 9-12, 54.2% reported ever having had sexual intercourse.[20]

The delinquent and homeless youths in this study had relatively extensive sexual histories. The data from this study are comparable to some other studies, especially of homeless and runaway youths. Yates and his associates,[21] for example, found that 57.3% of a sample of runaway and homelesss youths had sexual intercourse before the age of 15.

The age at first intercourse among the youths in this study was younger than the general adolescent population. The average age of first intercourse in the Minnesota Adolescent Health Survey, for example, was 13.4 years for males and 14.0 years for females.[22]

The age at first intercourse, and sexual activity in general, may be related in part to a history of sexual abuse. Almost 33% of the homeless youths in this study stated that they had been sexually abused as a child; this compares to 9% of the delinquent population ($p = .0000$). Several other studies have found a link between childhood sexual abuse and subsequent acting out, particularly sexual deviance.[23-27]

Relatively high percentages of the youths in this study, particularly the homeless youths, traded sex for money, drugs, or lodging. Other studies have also found that various groups, including adolescent populations, trade sex for drugs.[14,15,28-30] Yates and his associates found that 26.4% of the youths in their study engage in "survival sex."[21] The practice of trading sex for drugs is not limited to urban areas; it also occurs in rural areas.[31]

This study found that 10.8% of the homeless youths were gay identified. This finding is consistent with other samples of homeless or runaway youths.[13,32] Yates and his associates found that 7.3% of their runaway and homeless sample were gay identified and 9.1% were bisexual.[21] However, the proportion identifying as gay in the homeless sample was much higher than in the general population. According to the Minnesota Adolescent Health Survey, 0.4% of the general adolescent population are gay identified.[22]

The proportion of delinquent and homeless youths in this study who reported using condoms was relatively high. Some other studies also report high condom use. Elfenbein et al.,[33] in a survey of sexually active male adolescents in detention, found that 69% reported condom use. Pendergast et al. found that 40% of the subjects (sexually active male adolescents) reported "always" or "almost always" using condoms.[34] And the Youth Risk Surveillance System study found that among sexually active students, 77.7% of female and 77.8% of male students used some form of contraception.[20] That study also found that among sexually active students, 49.4% of male and 40.0% of female students reported that they or their partner used a condom during last sexual intercourse.

The percentage of youths in this study who ever had an STD is relatively high compared to the general adolescent population. For example, the Minnesota Adolescent Health Survey[22] found that 0.8% of the general adolescent population reported ever having an STD.

However, the percentages of youths in this study having a current STD (based on laboratory results) are comparable to some other adolescent populations. In some instances these levels are lower than reported in other samples. Chacko and Lovichik found the prevalence of chlymydia in a sample of sexually active adolescents in Baltimore was 26%.[35] The prevalence of syphilis was low in the current study; this is similar to other studies.[36] For example, one study found that of 630 sexually active adolescents routinely screened for syphilis in a medical clinic, 10 patients had reactive syphilis serologies and 4 had active syphilis.[37]

Slightly more than 6% of the delinquent and 5.6% of the homeless youths in this study were diagnosed with hepatitis B. These rates are relatively high. For example, Scheig found in his sample that for hepatitis B, the point-prevalence of the carrier state is less than 0.55%.[38]

Despite the high levels of risk, health care for adolescents remains inadequate. As the Society for Adolescent Medicine states,[1] "Access to health care is important for society's adolescents to help modify risky behaviors and promote healthy habits. Unfortunately, many young people in the United States today face barriers to their quest for health services."

This is particularly true for delinquent and homeless youths. The 700,000 adolescents confined in juvenile justice facilities are at especially high risk for many health problems. Moreover, the 1.2 million adolescents who run away from home each year are also at increased risk for medical problems. The Society of Adolescent Medicine[1] concludes, "Poverty is the single most important factor affecting the health status of adolescents. . . . They face increased rates of adolescent pregnancy, STDs, including HIV, substance abuse, unintentional injury, and homicide."

Given the relatively high incidence of medical problems, there is not enough medical care for homeless or delinquent youths.[39] Regarding homeless youths, for example, in California 5,554 youths were served by federally funded shelters in 1989. Only 234 (4.2%) received or were referred for medical services, 177 (3.2%) for psychological services, and 205 (3.7%) for drug and alcohol treatment. Nationwide, only one fourth of the homeless youths seen by shelters received medical services.[40] There is also a need for medical care in detention.[9,41-43]

The health care provided to these special populations should be comprehensive and include physical examination (with appropriate lab tests), psychological screening, drug treatment, and dental prophylaxis. The health care should also include sex education and treatment, and family planning services. Moreover, past and current mental health problems require special attention in this population.[44]

It is important to point out distinctions between the delinquent and homeless populations as well. For intake or triage, it is necessary to examine different risk factors for the two groups. For example, the homeless population is more likely to engage in prostitution, which has implications for sexually transmitted diseases.

There are several models to improve health care for these at-risk populations. One model is the independent multiservice center such as The Door in New York City or Bridge over Troubled Waters in Boston.

These facilities provide many free services within a single site and serve youths at highest risk, especially the homeless and runaways.

A more recent addition to this type of health care facility is the Cole Street Teen Clinic in San Francisco's Haight-Ashbury District. This program, on a grant from The California Wellness Foundation, provides medical screening and services to 1,500 youths per year, with 500 of these youths entering into a case management program. In case management, they receive more comprehensive health services, including health education (such as AIDS education), and alcohol and drug education and prevention classes.

A related approach is the clinic administered through the public health system. The major strengths of these clinics are their availability in most localities and their increasing focus on preventive health care. In addition, most public health systems provide guaranteed access to categorical services for specific conditions, (e.g., prenatal care, treatment of STDs, etc.).

It must be recognized that some youths remain on the streets and choose not to secure health care, even from a multiservice center or public health clinic. It is therefore necessary to conduct outreach activities either to induce them to come to a clinic or to provide some health education and care on the streets.

Street outreach was originally most successful for AIDS education and prevention. One of the first programs to target AIDS prevention messages to people on the streets started in San Francisco.[45] This program involved the use of Community Health Outreach Workers (CHOWs) to provide education to at-risk people through one-on-one "street outreach," which is the process of directing education to individuals in their normal environments. Thus, CHOWs contact people in such locations as laundromats, bus stops, parks, street corners, building entrances, and any areas where the target population is known to congregate.[46] Drug and sex education are discussed, and information and literature on the relevant subjects in easy street language are distributed.

This same outreach model has been expanding to include other types of health care on the streets, and has been applied to street youths.[47,48] Outreach should increasingly have greater links to the types of medical services (multiservice clinics for teens) that street youths are most likely to utilize.

The delinquent and homeless youths in this study engage in a variety of high-risk sexual behaviors that put them at risk for a multitude of medical problems, including HIV infection. Special health care programs must be designed for these hard-to-reach populations.

The health care provided should be comprehensive, not only covering sexually transmitted diseases and contraception, but the gamut of other health problems commonly faced by adolescents. The health care provided should include psychosocial and mental health issues, such as suicide prevention, family conflict resolution, and related concerns.

Medical care should be more accessible to these hard-to-reach populations; independent multiservice health care centers or public health facilities should be more available. For those youths who do not readily access health care, street outreach programs should be initiated and linked with the broader health care system.

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