
The Neglected Health Care Needs of Street Youth

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Synopsis

Juveniles who live on the street are often the victims of physical and sexual abuse and family chaos. They have a multitude of health problems such as malnutrition, respiratory infections, sexually transmitted diseases, including human immunodeficiency virus, mental illness, and substance abuse. Health care, if available, is generally fragmented and often not relevant to their needs. Their high-risk existence leads to individual morbidity and has a negative effect on the health of the

community. Presently, there is limited research on the health status and health care needs of street youth who are difficult to track and quantify.

The findings of a project undertaken by Region IX of the Public Health Service in 1989 to provide technical assistance to three primary care clinics serving street youth in San Francisco are reviewed. Data were collected on demographics, overall health status, sex-related medical problems, mental health, and substance abuse and compared with another group of adolescents in the general population.

Street youth were found to have a greater number of problems—both physical and psychological—than the general adolescent population. High-risk behaviors, such as drug abuse and failure to use condoms during sex, make this population especially vulnerable to sexually transmitted diseases, including human immunodeficiency virus. The potential impact on public health is enormous. Adequate access to health services needs to be addressed legislatively.

THE PROBLEM OF HOMELESSNESS in this country has grown to distressing proportions. Not only is the number of homeless people increasing, but their profile is changing. The majority are no longer middle-aged men. They are more likely to be single mothers with two or three preschool children, two-parent families whose incomes are too meager to pay for necessities, and adolescents who have run away (1).

Although there is increasing public awareness of homeless adults, less is known about adolescents, particularly about their health problems. Runaway and homeless youths are difficult to track and quantify. One report estimated that from 730,000 to 1 million young people run away at any one time each year; of these, 25 percent were considered homeless (2). The National Network of Runaway and Youth Services estimates that there are 1.3 to 2 million street youth in this country (3). There are 5,000 teenagers a year buried in unmarked graves, because either they are unidentified

or unclaimed (4). The true numbers may never be known because fewer than half appear to be served by shelters (5).

The Juvenile Justice and Delinquency Prevention Act of 1974 provides for social services to reunite families (6). Not all street youth, however, have a realistic prospect of returning and remaining home because of continued chaos and abuse. Of those that seek assistance, fewer than half have prospects of returning home (7). According to Jed Emerson, former director of Larkin Street Youth Center in San Francisco, 68 percent of the parents contacted through his program respond by saying "You keep the kid." Hersch's study found that 35 percent of youths interviewed on the street no longer knew where their parents could be contacted (8). In Los Angeles, only 20 percent of the youth seen by shelters were considered candidates for reuniting with family (9). Authors of a report on homeless and runaway youth by the General Accounting Office of the U.S. Congress stated that 60 percent

'You escape from home and you figure you've made it and are a big hit. Then you don't want to be a hit anymore. You just want to be a little kid again.' —15 year old girl, Larkin Street Youth Center, San Francisco.

of those sheltered did not intend to return to their original living situation (7).

Street youth are of both sexes and represent all ethnicities, geographic areas, sexual identities, and socioeconomic backgrounds. They are a group with a multitude of problems that extend well beyond the obvious economic difficulties. Problems include a variety of general health and mental health concerns as well as the issue of gaining access to the health care system to address their medical needs.

Many factors contribute to homelessness among adolescents; no single reason exists to explain the cause, according to an unpublished overview of recent literature by M. Robertson, Alcoholic Research Group, Berkeley, CA, 1989. From previous research, a profile of street youth includes the following characteristics:

- 39 percent run from physical and sexual abuse,
- 44 percent flee other long-term crises such as substance abusing parents, and
- 20 percent run from short-term crises such as divorce, sickness, and school problems (7).

In another study of adolescent male runaways, 79 percent of the sample were physically or sexually abused or both (10). Also, some 12 to 32 percent of these children are "throwaways," kicked out of the home involuntarily, according to Robertson's unpublished report.

Runaway youth must cope with the danger and stress of street life, often turning to prostitution. According to one study of young people in Toronto, 54 percent were prostitutes (11). They are at extremely high risk for contracting sexually transmitted diseases (STDs) including human immunodeficiency virus (HIV) infections. In fact, Shalwitz and colleagues stated in 1990 that 12 percent of the youths tested at Larkin Street Youth Center in San Francisco were HIV seropositive (12). The unpublished recommendations of a 1989 Public Health Service Consensus Conference on HIV Prevention Strategies for Homeless and Runaway Youth in-

cluded the prediction that these street youth will become part of the third wave of the HIV epidemic.

Other health problems include malnutrition, pregnancy, respiratory infection, and periodontal disease. Substance abuse is common. Authors of one study found that 87 percent of homeless street youth were drug abusers (13). Dr. Ellen Bassuk of Harvard Medical School has done extensive research on the mental characteristics associated with homelessness in children and youth. Using the Achenbach Behavior Problem Checklist in one study, Dr. Bassuk found that 38 percent of youths ages 12 to 16 showed the need for psychiatric referral (14). There is a high incidence of depression (83.6 percent) and suicidal ideation and attempts (27 percent) according to another study (15).

In addition to health problems for homeless youths, there are educational consequences such as the failure to complete high school and the inability to obtain gainful employment.

Presently, there is limited research on the health status and health care needs of homeless and runaway youth. A review of the literature revealed only seven articles on the issue. Of these, three were Canadian. If health care is available, it is generally fragmented and may not be relevant to the health care needs of these dispossessed youths (16). Furthermore, many shelters do not have health questions on their intake forms and report that health services are not available in many communities, according to an unpublished report by the Public Health Service Region IX office in 1990 on the high-risk medical and psychological status of homeless and runaway youth living in the age of AIDS. Additionally, the report said that some youth service providers view homeless youth as a relatively healthy population that does not need health services.

In California, 5,554 youth were served by federally funded shelters in 1989. Of these, 234 (4.2 percent) received or were referred for medical services, 177 (3.2 percent) for psychological services, and 205 (3.7 percent) for drug and alcohol treatment, according to data collected by Region IX of the U.S. Administration for Children and Families from June 1, 1988, to September 30, 1989. Nationwide, one-fourth of homeless youths seen by shelter workers received medical services (7). Yates and coworkers, in a comparison of the health status of runaway with that of nonrunaway counterparts in Los Angeles in 1988, found that the runaway youth engage in health-compromising be-

haviors at a greater frequency than the nonrunaway group. As a consequence, the runaway group had increased hepatitis, uncontrolled asthma, pneumonia, scabies, pelvic inflammatory disease, drug abuse, and trauma (15).

In a large part, our project was undertaken because of the paucity of information on the specific health problems, the high-risk behaviors, and the potential impact on public health of the health status of street youths. Factors contributing to or encouraging their behaviors need to be documented. Furthermore, shelter workers need to be educated about the potential health problems of the population they serve. Finally, it is hoped that areas would be identified where technical assistance or enabling legislation would improve access of the youth to health services.

Method

Medical history and physical examination forms were completely revised and refined to collect relevant health information on the population served at three primary care clinics providing health services to street youth, ages 10–18 years, in San Francisco. The clinics are administered by the Special Programs for Youth, Department of Public Health, City and County of San Francisco. Two of the clinics, the Larkin Street Youth Center and Huckleberry House, were located in community based organizations serving youth and one was located in the Youth Guidance Center, the juvenile detention center. Technical assistance was provided by URSA Institute (UI) of San Francisco under contract. The completed forms, with all identifying information removed to protect the privacy of the young people, were transferred to UI offices where the data were analyzed.

The study sample consists of all youths from whom complete histories and physical examinations were obtained. All histories were completed by a registered nurse or nurse practitioner. There were written guidelines for the manner of questioning. All physicals were completed by a nurse practitioner or physician. During the 6-month data collection period, June 1 through November 30, 1990, 214 youths— 9.3 percent of the total number seen in the clinics—completed their medical examinations. Of the 214, 92 (43 percent) were from Larkin Street Youth Center, 67 (31 percent) from Huckleberry House, and 55 (26 percent) from the Youth Guidance Center. Those included in the sample did not identify a bona fide legal residence and specifically stated that they lived on the streets, in parks,

Table 1. Demographic profile of 214 homeless young people treated at three San Francisco primary care clinics, June–November 1990

Variables	Number	Percent
Sex:		
Female.....	128	59.81
Male.....	86	40.19
Race:		
White.....	93	43.46
Black.....	52	24.30
Latino.....	46	21.50
Asian-Pacific Islander.....	15	7.00
Native American.....	5	2.34
Other.....	3	1.40
Country of birth:		
United States.....	167	77.78
Other.....	47	22.22
Age (years):		
11 to 14.....	19	8.88
15 to 18.....	171	79.91
19 to 21.....	24	11.21

Table 2. Percentage of adolescents with histories of selected medical problems, 1990 San Francisco sample and 1989 Minnesota Adolescent Health Survey

Medical problem	San Francisco ¹	Minnesota
High blood pressure.....	7.0	5.0
Seizures.....	4.5	1.6
Anemia.....	8.5	2.2
Asthma.....	15.3	16.4
Vision.....	32.3	14.8
Sexually transmitted diseases.....	40.4	8.0
Serious illness, injury.....	30.4	NA
Headaches.....	18.9	NA
Heart disease.....	2.0	NA
Tuberculosis, positive ppd test.....	5.5	NA

¹ San Francisco percentage is a valid percent only of those who answered the question and does not include nonrespondents.
NA = Not available.

abandoned cars, “squats,” and so forth. It is important to note that many more youths sought care at the three medical clinics than are reflected in the study. Not included in the sample are those who visited the clinics for episodic problems such as tonsillitis, lacerations, birth control, sexually transmitted diseases, and so on. Only young people voluntarily returning for complete assessments were included.

The exclusive use of data collected from those receiving complete medical history workups and physical examinations raises the possibility of a selection bias. According to Erica Bisyer, RN, CFNP, Medical Director, Special Programs for Youth, those youths at highest risk with the most acute problems are less likely to be represented in the sample, especially from the Larkin Center and Huckleberry House. Youths generally come to the

Table 3. Percentage of abnormal findings from physical examinations of 214 young people in three primary care clinics in San Francisco, 1990

Findings	Number	Percent ¹
General appearance: unhealthy, acute distress	3	1.4
Skin: acne, atopic dermatitis, old scars, burns	68	31.9
Eyes: conjunctivitis, strabismus, trauma	19	8.9
Ears, nose, throat: otitis media, pharyngitis, rhinitis	33	15.6
Teeth and mouth: caries, gingivitis, ulcers	30	14.2
Lymph nodes: lymphadopathy-submaxillary, inguinal	19	9.0
Chest, lungs: wheezing, rhonchi	9	4.2
Breast: galactorrhea associated with pregnancy, fibrocystic disease	15	11.7
Heart: functional murmurs	9	4.2
Abdomen, rectum: tenderness	18	8.5
Back, spine, extremities: CVA tenderness, infections, trauma	25	11.8
Neurology: tremors, abnormal mental status	5	2.4
Genito-urinary:		
Females:		
abnormal cervix, adnexal tenderness	71	61.1
Males:		
penile lesions, scrotal rash	10	11.7

¹ Valid percentage only of those who completed physical examinations.

centers with an acute problem. They are invited to return for followup care and a complete physical examination. They may or may not return. There is no tracking of those who fail to return after resolution of the acute problem. By contrast, those from the Youth Guidance Center may be those with the most high-risk behavior and may skew the sample in the opposite direction. Further, the interview instrument used was designed for clinical use rather than for research. Many questions are answered yes or no and do not provide more detailed information. The sample size in this study is relatively small and may show fluctuations that could affect statistical significance. Also, many of the history and physical forms were incomplete. This reduced the sample size even further. Valid percents were used in the analysis so that missing cases were excluded.

Demographic data in table 1 show that almost 60 percent of the youths are females, 56 percent are nonwhite, with blacks and Latinos comprising most of the minority population, and 22.2 percent were born outside of the United States. The ages of the youths range from 11 through 21 years, with 17 the modal age and 16.7 the mean age. It should be noted that the Larkin Center serves people through age 21. The other two sites serve those up to age 18.

Other factors also contribute to the demographic profile of the sample population. About 33 percent of the adolescents stated that they had worked, the most common type of job being "unskilled labor." A total of 47 percent of the sample indicated they had been in an out-of-home placement. The most common type of out-of-home placement was in

"juvenile detention" (35.9 percent), followed by "group home" (28.3 percent), and "foster home" (17.4 percent).

Results

A total of 75 percent of the youths state that they have multiple family-related problems at home. This is in stark contrast to data on the general adolescent population. For example, Schubiner reported that only 10-15 percent of the general adolescent population have "significant family conflict" (17).

Moreover, 70.8 percent of the study sample indicated that they had experienced recent life changes (death in the family, divorce of parents, change of residence, and so forth). About 42 percent of the youth indicated that a friend or family member had died recently. A significant proportion of the adolescents experienced physical abuse (36.5 percent) and sexual abuse (30.5 percent), which is consistent with other studies (8,15).

Almost half (48.5 percent) of the sample stated that they have some sort of medical coverage, although 23.2 percent did not know the nature of their insurance. The most common identified medical coverage were MediCal (19.3 percent) and Health Maintenance Organizations such as Kaiser Permanente (15 percent). Almost 9 percent of the adolescents stated that they had some form of conventional insurance.

When asked, "Where did you go the last time you needed medical care?", the single most common response (38 percent) was a hospital other

than San Francisco's county hospital. This could mean a general hospital in some other county or State, or a private hospital. Almost 17 percent of the youths received their last medical care at one of the three medical clinics in this study. About 9 percent stated they had gone to a private physician, possibly before they ran away, 8.5 percent stated that they went to San Francisco General Hospital, approximately 8 percent said they had gone to some form of community medical clinic.

General health indicators were identified in the medical history and the physical examination. The data regarding histories are compared with self-reported data from the Minnesota Adolescent Health Survey among 34,706 young people (18). Table 2 shows that in almost every category, there is a higher proportion of homeless and runaway adolescents with a history of selected medical problems than among the Minnesota youths. For example, 8.5 percent of the homeless and runaway sample had a history of anemia, compared with 2.2 percent of the Minnesota youth. A total of 40 percent of the homeless and runaway youths have had a sexually transmitted disease, compared with only 8.0 percent in the Minnesota adolescents. Among the runaways, 30 percent having had a past serious injury or illness stands out.

Medical history data on identified health problems of the females in the sample are important to review, although no comparable data exist. The percentages of females reporting a recent history of specified genito-urinary symptoms break down to 29.7 percent with abnormal vaginal discharge, 25.8 percent with abdominal or pelvic pain, 11.7 percent with abnormal bleeding, 9.4 percent with dyspareunia, 8.6 percent with dysuria, 7.0 percent with lesions, and 7.0 percent with post-coital bleeding. These findings, despite lack of comparison, indicate significant presenting gynecologic symptomatology demanding further investigation to rule out disease in the individual youths.

Table 3 summarizes findings obtained from the physical examinations. No baseline data from other samples are available for comparison. The table specifically provides the percentage of the sample having abnormal findings for various systems, with the most common problems listed. When presenting for examination, 98.6 percent of the youths appeared healthy to the provider. But, despite their general appearance, they exhibited a variety of medical problems needing attention and evaluation.

Laboratory tests confirmed the diagnoses for some of the maladies. Of note is that 7.5 percent had positive hepatitis B markers, indicating past or

'When I was growing up I always wanted to be like my father. Then, he started doing drugs and alcohol and beating me. By 14 I was making \$1,000 a week selling drugs before I got busted.' — 14 year old boy, Youth Guidance Center, San Francisco.

current hepatitis B infection. This is most commonly related to intravenous drug injection and sexual behavior. Also, 14.1 percent of the youths had a hematocrit of less than 35 percent, which is indicative of anemia.

The youths have a variety of sex-related medical findings: 30 percent stated that they were sexually abused as children, 40 percent of the females reported sexual abuse, compared with 15 percent of the males. This difference was statistically significant ($P=.003$). In the Minnesota sample, 14 percent of the females and 2 percent of the males reported sexual abuse.

Of the San Francisco sample, 90 percent stated they had sexual intercourse. Nationally, 80 percent of men and 70 percent of women have had intercourse by age 19 (19). The modal age of our sample at first voluntary sexual intercourse is 13 years, the mean age is 13.5 years. The average age of first intercourse in the Minnesota sample was 14.6 years.

The sexual preference of the youths as well as their sexual behavior is of interest because of its implications for contracting sexually transmitted diseases, including HIV. Table 4 shows the stated sexual preference of the sample, as well as comparable data from the Minnesota Adolescent Health Survey. In the San Francisco sample, 84.3 percent indicated they were "straight" compared with 89 percent in the Minnesota sample. Higher proportions of the San Francisco sample indicated they were gay (8.6 percent) or bisexual (2.4 percent) compared with the Minnesota sample. But a higher percentage of the Minnesota sample stated they were "not sure" of their sexual preference than in the San Francisco sample (11 percent compared with 4.8 percent).

Reported sexual behavior includes the following: 85 percent of the youths engaged in vaginal sex, with a higher proportion of the females (89.1 percent) reporting vaginal intercourse than the males (62.8 percent). About 44 percent of the total

Table 4. Sexual preferences, by percentage, of young people in 1990 San Francisco sample and 1989 Minnesota Adolescent Health Survey

Preference	San Francisco ¹	Minnesota
Straight	84.3	89.0
Gay	8.6	0.4
Bisexual	2.4	0.8
Unsure	4.8	11.0

¹ Valid percentage only of those who answered question, does not include nonrespondents.

Table 5. Sexual behavior by sexual preference among young people in San Francisco sample, 1990

Preference	Vaginal sex		Oral sex		Anal sex	
	Number	Percent	Number	Percent	Number	Percent
Straight	155	87.6	69	39.0	14	7.9
Gay	6	33.3	14	77.8	13	72.2
Bisexual	5	100.0	4	80.0	1	20.0
Unsure	2	100.0	1	50.0	1	50.0

¹ P = .0001 ² P = .002.

Table 6. Comparison of substance use in the past 2 months, by percentage, of young people in the San Francisco sample with those in the general adolescent population

Substance	San Francisco sample ¹	General population ²
Cigarettes	45.9	29.6
Liquor	39.7	65.3
Marijuana	31.1	23.4
LSD (and Mescaline)	10.2	2.5
Cocaine (including crack)	8.9	6.2
Amphetamines	9.2	5.5
Heroin	1.5	0.2
PCP	0.5	1.3
Barbiturates	0.5	2.1
Ecstasy	0.5	NA ³

¹ Valid percentage only of those who answered question, does not include nonrespondents.

² Substance use by high school seniors in the past month.

³ Not available.

sample stated they engaged in oral sex, with the differences between females and males being minimal and not statistically significant. Of the total sample, 14.6 percent engaged in anal sex—8 percent of the females and 22 percent of the males, which was significant.

The type of sexual behavior the youth engaged in is, with one exception, related to the age of the adolescents and their sexual preference. Adolescents older than age 17 are more likely to engage in oral sex (47.6 percent to 31.8 percent), as well as in anal sex (18.3 percent to 6.8 percent). There was no statistically significant difference between the older

and younger youth who engaged in vaginal intercourse. Table 5 provides a cross tabulation of the type of sexual behavior the youth engaged in by their sexual preference. The findings are consistent with existing literature.

Questions were asked concerning condom use largely because of its relationship to the prevention of sexually transmitted diseases (STDs) including HIV infection. The youth were asked if they used a condom on their last sexual encounter. Condom use was not related to sex—males and females were about equal in their use of condoms. Nor was condom use (on last encounter) related to age.

Differences were found in the use of condoms depending on the type of sexual activity. For those who engaged in vaginal intercourse, 39.3 percent used a condom on their last encounter and 60.7 percent did not. For those who engaged in anal sex, 55.2 percent of the youth used a condom on their last encounter and 44.8 percent did not.

The forms of sexual behavior have implications for STDs. By history, 40 percent of the youth indicated that they have ever had an STD, with 12.5 percent aware that their sexual partner had an STD at the time of sexual relations. Sexually transmitted diseases were confirmed by laboratory results. About 13 percent had laboratory evidence of chlamydia, 7.9 percent for trichomoniasis, 4.2 percent for gonorrhea, and 0.5 percent for syphilis. And 0.9 percent were diagnosed with venereal warts (human papillomavirus testing was not available).

Other variables related to STDs include sex, age, condom use, and childhood sexual abuse. As expected, sex was a component in STD diagnoses. Of all youth, 20.6 percent tested positive on STD screening with a higher percentage of females (32 percent) than males (3.5 percent) having an STD. It is far more difficult to subject males to the procedures required to diagnose STDs. Also, the proper technique has to be used to obtain a positive result. This could account for the large differential in sex.

STDs are related to age. Younger adolescents (ages 11–15 34.9 percent) are significantly more likely to have an STD than the older youth (ages 16–21 17 percent.) Having an STD is positively associated with not using a condom on the last sexual encounter. Those youths who did not use a condom on their last sexual encounter were almost twice as likely to have a positive STD test as those who did use a condom (47.7 percent to 25.7 percent, P = .0001). Adolescents who had a positive STD test were twice as likely to have reported childhood sexual abuse than those who did not

(30.6 percent to 15.6 percent, $P = .02$). Childhood sexual abuse is also related to whether the youths traded sex for money, food, shelter, or drugs. Of those who reported being sexually abused, 28.8 percent had traded sex for one of these commodities compared with 5.2 percent of the youths who did not identify a history of sexual abuse ($P = .0001$).

The data from medical evaluations indicate that street youths have significant mental health problems. Childhood physical abuse was reported in 36.5 percent and sexual abuse in 30.5 percent. These percentages compare with 17 percent and 15 percent in the Minnesota sample. Furthermore, the youths with histories of hospitalization for mental problems include 13.3 percent hospitalized in a non-State psychiatric facility and 3.3 percent in a State mental hospital.

Of the youths, 48.7 percent have been in some form of treatment or counseling. There are sex differences—67.4 percent of the females have been in treatment or counseling compared with 32.6 percent of the males ($P = .02$). Of those youths who reported childhood sexual abuse, 71.2 percent have been in treatment or counseling compared with 28.8 percent who have not ($P = .0001$). Moreover, of those youths who were not diagnosed with an STD, 56.8 percent had been in treatment or counseling, compared with 43.2 percent who were diagnosed as having an STD. Having been in treatment or counseling was not related to alcohol or drug use ($P = .01$).

A total of 44 percent of the homeless young people “feel depressed or sad often.” The feeling of depression was not related to age or sex but to other variables. For example, the higher the number of medical problems (specified in the medical histories), the more likely the youths were to feel depressed or sad. Moreover, of those youths who reported childhood sexual abuse, 62.1 percent also reported feeling depressed or sad often, compared with 37.9 percent who had not been sexually abused ($P = .0001$).

Of the youths in the study, 42 percent have “thought of or tried to hurt themselves.” This percentage is similar to other studies. The Minnesota Adolescent Health Survey reported 43 percent with suicidal ideation or actual attempts (18). Age and sex were not related to this type of behavior. The factor that was most related to suicidal thoughts or attempts was childhood abuse. Of those youths who reported childhood sexual abuse, 66.7 percent had thought of or tried to hurt themselves, compared with 33.3 percent who were

‘I called my mother many times from the shelter. She was always friendly and sent me money when I needed it. I always told her that I loved her. Finally, one day I asked her if she loved me. She hung up.’—16 year old girl, Huckleberry House, San Francisco.

not sexually abused ($P = .0001$).

As with several other studies of homeless and runaway youths, these adolescents admit to substance abuse (table 6). Overall, 68.7 percent of the youths indicated that they had used at least one of several specified substances within the 2 months prior to the medical examination. More specifically, 39.7 percent indicated they used some form of alcohol during the previous 2 months, and 35.5 percent indicated they had used at least one of the nine illicit drugs during the same time period.

Table 6 also shows a comparison with the percentage of high school seniors in the general population who have used selected substances during the previous month (thus the time periods are not strictly comparable). Variation in type of drugs used depends on geographic area.

Important indicators of substance abuse identified by these adolescents include the following:

- 6.5 percent have been in a drug treatment facility,
- 15.1 percent used IV drugs,
- 12.4 percent have IV drug using partners,
- 9.3 percent state that drugs are a problem for them.

Studies have shown a correlation between the high-risk sexual and substance-abusing behaviors and HIV seropositivity. Because of the issue of confidentiality, HIV seropositivity rates could not be collected.

Discussion

It must be kept in mind that the sample size in this study was small and from a select subset of street youth who self-referred for health services in San Francisco. It is also recognized that self-reported histories are subject to individual perceptions. Therefore, there is the potential for bias in the results. Replicating the study with a larger sample in multiple sites would confirm the findings

and permit better statistical analysis and greater accuracy in generalizing to the rest of the country. Nevertheless, this project identifies issues that have implications for institutions serving homeless and runaway youths and for governmental agencies involved in policy making at various levels.

As a group, street youths have a greater number of health problems, both physical and psychological, than the general adolescent population. Given the number of health problems, there is a need for comprehensive health care to include physical evaluation with appropriate laboratory tests, psychological screening, drug treatment, and dental prophylaxis. Technical assistance needs to be given to shelters to revise intake forms to include health-related questions along with linkages to providers of the care. The health problems of these youths are often not immediately visible and may be overlooked by shelter workers. Protocols for the delivery of health care would be useful for providers evaluating this population.

These data indicate that a large percentage of the youths are from dysfunctional families with high rates of physical and sexual abuse. Therefore, reuniting the young people with their parents may not be feasible or desirable in many instances. This presents barriers to service because of the questionable legal status of youths outside the guardianship of a family. They can not give legal consent for treatment, nor do they have the appropriate documentation to qualify for entitlement programs. Use of private insurance is also impossible without parental consent. Therefore, access to services presents a significant problem for these youngsters. Some methodology needs to be sought to access Medicaid or private insurance.

High-risk sexual behavior makes this population extremely vulnerable to sexually transmitted diseases. Although San Francisco may be a magnet for youths with certain behaviors that contribute to the high STD rate found in this study, it is important to point out that there was significantly more pathology than in one large group of adolescents. The high-risk behaviors identified by the adolescents (such as sexual preference, sexual behavior, and nonuse of condoms) raise the possibility of increased HIV seroprevalence rates. Although HIV seroprevalence could not be collected, laboratory evidence of past or current hepatitis B infection was 7.5 percent. Hepatitis B can be considered relating to STDs as well as IV drug use. The implications from a public health standpoint are obvious.

In sum, street youths have a multitude of health problems that affect individual morbidity and well as public health. This study illustrates the need to identify ways to enhance not only health care services but access to services for these dispossessed young people.

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