Reducing AIDS and Substance Abuse Risk Factors Among Homeless, HIV-Infected, Drug-Using Persons

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Objective: The impact of a comprehensive HIV education, housing support, and 12-step recovery program in a day treatment program for homeless persons infected with HIV was studied. Method: Participants' knowledge of HIV and substance abuse risk factors was assessed for a group of new clients and for a group of clients enrolled for 3 months using an author-developed questionnaire. Continuation of high-risk sexual and substance use behaviors was assessed using the approach. Success in maintaining housing and 12-step recovery was assessed using a retrospective chart review on a separate group of past participants. Results: Statistically significant positive changes in participants' knowledge of HIV and substance use and a decrease in self-reported high-risk behaviors were found. The retrospective chart review also indicated positive changes in housing stability and substance abuse recovery. Conclusions: Preliminary results support the conclusion that the day treatment program had positive effects on the three variables of concern.

Human immunodeficiency virus (HIV), the causative organism of acquired immunodeficiency syndrome (AIDS), is transmitted through contact with the blood or body secretions of an infected person, such as may occur through sexual contact and sharing of drug paraphernalia. The Centers for Disease Control and Prevention (CDC) recently reported that the incidence of AIDS in the South is increasing faster than in any other region of the country (CDC, 1996). In 1994, the state of Georgia ranked 12th nationally in total population but ranked 7th in the total number of diagnosed HIV cases. Between 1987 and

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1992, the state of Georgia experienced a 975% increase in the number of people with HIV, during which an estimated 45,000 Georgians were infected with the virus. In December 1996, the CDC surveillance report documented that number to have dropped to 17,004, the 9th highest number of state residents with HIV (CDC, 1996).

The present outcome study was conducted as an evaluation of the Street Home Day Program, (SHDP), a day-treatment program for marginally housed persons with HIV and a history of substance abuse sponsored by three agencies serving AIDS affected persons in Atlanta, Georgia. The SHDP was designed to improve the quality of life for its participants through promoting knowledge, healthy behaviors, housing opportunities, and substance abuse treatment. Services of the SHDP included a day recovery program, case management, and assistance with housing and financial planning. The study evaluated the effectiveness of the SHDP on: (a) improving participant knowledge of HIV and substance abuse risk factors, (b) decreasing high-risk sexual and drug-related behaviors, and (c) facilitating addiction recovery and adequate housing.

METHOD

This evaluation involved three studies all conducted in the same setting but varying in the study questions, the design, and the study groups.

Agency Setting

The Home Street Home program is an HIV education and 12-step program offered by a Mobile Health Care Unit (MHC) of an Atlanta-based hospital. The MHC initiated Home Street Home in November of 1991 in a collaborative effort with three other organizations that specialized in the delivery of services to HIV-infected homeless persons. The primary objective of the Home Street Home is to increase access to HIV primary care for marginally housed or homeless persons in the metropolitan area. Secondary objectives of the Home Street Home program include increasing the number of homeless and marginally housed persons who receive HIV testing and counseling and coordinating efforts between the three agencies to provide case management and nutritional services to support the continuum of HIV primary care.

AID Atlanta (AIDAT), one of the collaborating organizations in MHC Home Street Home program, is a nonprofit community-based AIDS service organization that provides case management and referral services,

community outreach and education, and other AIDS-related services to HIV-infected persons. AIDAT provides case management and a day recovery program to persons enrolled in the Home Street Home program through the Street Home Day Program.

AIDAT case managers specializing in the needs of persons who abuse substances and in services for the homeless provide HIV and drug education in a 12-step support group setting. The voluntary enrollees in this program are encouraged to improve the quality of their lives through healthy living. Program staff use education to decrease HIV risk behaviors and the 12-step model to promote substance abuse recovery. As part of the program, SHDP clients are provided with case management services, including assistance in applying for social security, disability, and other entitlements, and assistance in securing housing or placement in emergency shelters. By providing alcohol and drug addiction counseling in conjunction with HIV education to anyone who is homeless, living in a shelter, marginally housed, and HIV positive, the goal of SHDP is to improve the quality of life for those with HIV infection and substance abuse problems.

The SHDP operates five days a week except for holidays. A typical day begins about 8:30 a.m. with the arrival of participants who come on foot or on public transit. They may socialize and drink coffee as the group gathers. This time may also provide an opportunity for staff to check in with various clients about needs or commitments to follow through with plans. At approximately 9 a.m., a structured group on the theme of spirituality is led by one of the staff. Issues covered are those relevant to persons in frail health with a chronic, severe illness, including grief and loss, aloneness, bereavement, or other topics brought by participants. At approximately 10 a.m., there is an educational group. On Tuesdays and Thursdays, the theme is HIV—information, prevention, treatments, and coping. On Monday, Wednesday, and Friday, the group focuses on the disease concept of addiction. Around noon, lunch is served to those who are most frail. Others have lunch on their own. Participants are scheduled to attend a 12-step group in the afternoon, either Alcoholics Anonymous (AA) or Narcotics Anonymous (NA), in their own neighborhoods. These are community groups that include people from all walks of life. No attempt is made to structure the entire day because many of the participants are frail and lack the ability to stay active all day. The size of the group of participants varies from 20 to 30.

Four staff members attempt to serve the day program and to supply case management services to a total caseload of more than 60 persons at any point in time. Case management includes limited individual counseling, such as bereavement over the loss of a significant other; financial planning; medical appointments and visits; emergency food, clothing, and shelter; contacts with

natural family members; and any other needed services within the capabilities of the staff. The master's of social work (MSW) program director is assisted by three paraprofessionals who are trained by the director and by attending staff development sessions at AIDAT. High turnover among staff due to low pay and high stress leads to frequent staff vacancies.

SHDP is one of the few programs that provides prevention and education services addressing both HIV and substance abuse. The major objectives of SHDP are (a) to decrease high-risk sexual and drug-related behavior among clients, (b) to assist clients in becoming and staying drug free, and (c) to enable clients to secure adequate housing. The outcome study was conducted from October 1995 to February 1996 to evaluate the SHDP's progress in meeting the stated objectives.

STUDY 1

Design

A posttest-only design with nonequivalent groups (Cook & Campbell, 1979) was used to attempt a tentative assessment of client change in knowledge of HIV and substance abuse risk factors. The posttest-only design was selected because of the necessity to complete the project within a 6-month period and the fact that clients begin services at varying times throughout the year, necessitating an ongoing admission process at which time new clients could be tested during this study period. The very high drop-out rate and irregular attendance patterns mitigated against an attempt at a pretest-posttest design.

To address SHDP's possible effect on knowledge of HIV and substance abuse, a self-administered questionnaire was used to compare knowledge between new clients and participants enrolled in the program for at least 3 months. Test scores for new clients were compared to those of enrolled clients. The impact of the educational sessions was of particular interest to the researchers. Thus, more data were gathered on the possible impact of increased knowledge of HIV and substance abuse. The hypothesis for Study 1 was that clients who had participated in the SHDP for at least 3 months would show greater knowledge of HIV and substance abuse issues than newly enrolled clients.

Outcome Measures

A questionnaire to assess the variable of client's knowledge of HIV, safer sexual practices, and drug abuse practices was developed using items from

previous studies assessing HIV knowledge (Celentano, Vlahov, Menon, & Polk, 1991; Ginzburg et al., 1986; Jenkins, Fisher, & Applegate, 1990; Kann, Nelson, Jones, & Kolbe, 1989; LeBlanc, 1993). The questionnaire was self-administered and consisted of 23 multiple choice, true/false, and fill-in-the-blank items (see Appendix A).

RESULTS

Clients

The knowledge questionnaire was administered to 28 people newly entering Street Home (Group 1) and 31 people who had been in the program for at least 3 months (Group 2). The groups were very similar in age, gender, and racial characteristics: overwhelmingly young adult, never married African American males in their 30s. Only 2 participants in each group were female.

Outcomes

The mean test score for Group 1 was 74.1 out of 100 (SD = 12.1; range 35.8 to 90.6). The mean test score for Group 2 was 80.3 out of 100 (SD = 9.4; range 62.3 to 96.2). Using a t test, the differences between the mean test scores for Groups 1 and 2 were found to be statistically significant (p = .03), $t(49) = 2.26$. Using a common measure of clinical significance, the proportion of variance explained (PVE) (Hudson, Thyer, & Stocks, 1985), the PVE reached only .09, a modest effect. The results of the knowledge questionnaire demonstrated that only 15% and 33% of the newly enrolled clients could accurately define the abbreviations HIV and AIDS, respectively, whereas clients enrolled in SHDP for at least 3 months could accurately define the terms 41% (HIV) and 56% (AIDS) of the time.

Comparison also revealed that only 78% of the new clients conceptualized addiction as a disease, whereas 91% of the enrolled clients did so. Both new and enrolled groups scored low in accurately identifying alcohol induced blackout, 36% and 39%, respectively. When asked to identify body organs most affected by alcohol and drug use, the new group responded correctly 26% of the time compared to a 59% correct response rate from the enrolled group. Although 100% of both new and enrolled clients demonstrated knowledge of HIV transmission through sexual intercourse, there were important differences regarding their knowledge of reinfection risks through unprotected sex with another HIV-infected person. Only 77% of the new group demonstrated knowledge of reinfection risks compared to 91% of the

enrolled clients. Thus, Hypothesis 1 (that clients who had participated in the SHDP for at least 3 months would show greater knowledge of HIV and substance abuse issues than newly enrolled clients) is supported.

STUDY 2

Design

A posttest-only design with nonequivalent groups was also used to measure the impact of SHDP on high-risk behavioral practices such as unprotected sexual activity, multiple sex partners, and drug use in the preceding 6 months.

A self-administered questionnaire was completed by new clients. The same questionnaire was self-administered to clients who had participated in SHDP for at least 6 months. The frequency of high-risk behaviors reported by new clients was compared with that of the 6-month group to assess the probable impact of SHDP on participants' behaviors with the hypothesis that the clients who had participated in the SHDP for at least 3 months would show decreased reported incidences of high-risk behavior. The time period of 6 months was used because behavioral changes might be expected to take longer than changes in levels of knowledge in this population due to the long-term nature of both sexual and drug use practices.

Outcome Measures

A confidential self-administered questionnaire was given to new clients and a group of participants on one occasion (see Appendix B). The questions were developed, in part, from pretested questions used in previous studies (McGowan & Johnson, 1991; Selwyn, Feiner, Cox, Lipshutz, & Cohen, 1987) addressing HIV infection in relation to high-risk behaviors such as injection drug use, unprotected sexual activity, and exchange of sex for money or drugs.

RESULTS

Clients

Behavioral questionnaires were administered to 24 new SHDP clients and 16 who had been at SHDP for at least 6 months. Of the people completing the

questionnaire, 90% were male. Of the same sample, 95% were African American, and 5% were White. The majority were single and never married. There were no significant differences between new and enrolled clients in these demographic factors. Thirty-three percent of new clients and 13% of enrolled clients reported injecting drugs in the past 6 months.

Outcomes

Five of 8 (63%) new clients who injected drugs reported that they never cleaned their needles prior to injecting as compared to 1 of 2 (50%) enrolled clients. Only 30% of the injection drug users among new clients who cleaned their needles reported using bleach. Eighty-three percent of the new clients as opposed to 38% of enrolled clients reported smoking drugs in the past 6 months. Among persons reporting that they smoked drugs, there was no difference in frequency of smoking between new and enrolled clients. Approximately 40% of the total of both groups reported having had sex with a steady partner in the last 6 months. Among enrolled clients, 33% reported always using a condom when having sex with their steady partner, as compared to none of the new clients. When asked if they have had sex with multiple sex partners, 54% of new and 25% of enrolled clients indicated a positive response. Among new clients reporting multiple sex partners, only 8% reported always using a condom as compared to 75% of the enrolled clients. Among new clients, 71% reported having sex after using drugs or alcohol, compared to 19% of enrolled clients. Forty-six percent of new clients and 13% of enrolled clients reported exchanging sex for drugs or money. None of the new clients reported always using a condom when exchanging sex for drugs or money as compared to 100% of enrolled clients. Thus, Hypothesis 2 (that the clients who had participated in the SHDP for at least 3 months would show decreased reported incidences of high-risk behavior) is supported.

STUDY 3

Design

A retrospective chart review was used to assess the success of SHDP in assisting participants in becoming drug free and in maintaining viable housing. The outcome variable, community stability, defined as the change in participants' substance use and the adequacy of their housing, was measured by conducting a retrospective chart review of historical data on a separate group of past participants not involved in Studies 1 and 2. Information was collected

from the charts of persons enrolled from July 1994 to April 1995. Process measures such as attendance, receiving entitlements, financial counseling, and referrals for housing were collected and compared using historical data abstracted from client charts. Outcome measurement on housing adequacy was determined by assessing each participant's living situation at 6 and 12 months after enrollment in the program. Housing adequacy was operationally defined to include transitional housing and supportive living. The outcome measure on substance use was extracted from the same group of charts at 6 and 12 months and operationalized as the frequency of participation in a structured recovery program and analysis of self-report data. The hypotheses for Study 3 were that community stability would be found to have increased after at least 6 months of participation and that similar gains would be noted after 1 year's participation. A general question about the types of services received by clients referred to SHDP and the adequacy of record of services and referrals was concurrently examined in the retrospective chart review.

Outcome Measures

Community stability was measured using a chart abstraction form created to collect: demographic data; process data, including attendance in SHDP, financial counseling services received, and housing referrals; and outcome data regarding enrollment, housing, and recovery status at 6 and 12 months.

RESULTS

Clients

Between July 1994 and April 1995, 107 clients were enrolled. Of these 107 charts, 28 were not reviewed, 16 were not reviewed due to time constraints, and 12 charts could not be found within the time constraints of this study, resulting in a total of 79 (74%) charts being reviewed for this evaluation. The demographic data obtained from the charts showed the mean age of enrollees to be 36 years old. Eighty-six percent of clients were male, 98% were African American, and 72% had never been married. The mean monthly income of enrollees was $260.92 (*SD* = 254.8). Eighty-seven percent were residents in Fulton County and 10% resided in DeKalb County. The health status at enrollment indicated that 27% of enrollees were diagnosed as HIV asymptomatic, 46% as HIV symptomatic, and 22% with AIDS. The mean CD4 (T-helper cell) count was 405 (*SD* = 708; range 2 to 5,000),

and the median was 269. A CD4 cell count of 200 or lower is accepted as the mark for high risk of full-blown AIDS.

Program information revealed in the chart review indicated that 43% of enrollees were referred by social workers, whereas 47% were referred by other case managers. Sixty-eight percent of enrollees had completed the intake process at AIDAT, and 32% were done at SHDP. Health care was provided by Grady Hospital, the large public charity hospital (45%); Mercy Mobile Health Care (26%); and Fulton County Health Department (23%). Eighty-five percent of enrollees were clients of AIDAT.

Process indicators provided by SHDP were also measured. Fifty-two percent of enrollees were referred to entitlement programs (Social Security, General Assistance, and food stamps) and 41% had acquired these entitlements prior to enrollment. Seventy-nine percent received or were referred to financial counseling, whereas only 1% had received this service prior to enrollment. Financial assessments on enrolled clients were completed while enrolled in SHDP for 86% of the clients. Ninety percent of clients were given housing referrals, 39% of whom were placed in some form of transitional housing and 26% of whom were referred to AIDAT's transitional house.

Outcomes

The mean number of times enrollees ($N = 79$) attended SHDP from intake to the 6-month period was 35 (range 1 to 35; median = 27). The 6-month outcome measures indicated that 16% of participants had completed the SHDP, 27% were still enrolled, 17% had dropped out and reenrolled, and 40% had completely dropped out of the program. At enrollment, 24% of participants were adequately housed, 44% were marginally housed, and 32% were homeless. After 6 months in SHDP, 47% were adequately housed, 29% were marginally housed, and 24% were homeless. At 6 months, 54% of participants reported not using substances, 38% reported substance use, and 8% of the participants' drug use status was unknown. Seventy percent of past participants indicated ongoing participation in a 12-step recovery program, and 30% reported no involvement.

Twelve-month outcome measures that were obtained on a number of clients who had remained in contact with the program during the study period, June 1995 through February 1996, indicated important changes. For those participants who had not completed the program within 6 months, an additional 20% had graduated later, 9% had dropped out and reenrolled, and 71% had dropped out completely. At 12 months, 46% of participants had adequate housing, 25% were marginally housed, 18% were homeless, and 11% were unaccounted for. For this same group, 41% reported not using substances at

12 months, 30% were using substances, and 29% had insufficient data to determine substance use. Additional information indicated that 39% of the past participants were continuing a 12-step recovery program, 34% were not involved in recovery, and the substance use status on the remaining 27% was unknown. Thus, Hypothesis 3A (that community stability would be found to have increased after at least 6 months of participation) and Hypothesis 3B (that similar gains would be noted after 1 year's participation) are both supported. In addition, important information on the services offered by referring agencies, the efficiency of the primary service systems, and documentation of services was discovered to serve as a baseline for future studies and for program improvements.

DISCUSSION AND APPLICATIONS TO SOCIAL WORK PRACTICE

Study 1

Both new and enrolled clients demonstrated a high level of HIV knowledge and awareness of substance abuse risks. The high level of knowledge among new clients might be partially attributed to information received during previous HIV testing and counseling. Many of the participants had previously been in substance abuse recovery programs designed to contribute to their knowledge of substance abuse risks. Some had received services and education experiences from community organizations or while incarcerated prior to entering SHDP. Despite the already high degree of knowledge in all persons tested, those enrolled in SHDP demonstrated a significantly higher knowledge level of risk factors of HIV and substance abuse than persons newly enrolled. Although no conclusions of causality can be drawn from a study using the chosen design, these results suggest that persons attending SHDP were learning critical information needed to effect behavior changes that could reduce the risks of HIV transmission to others and of reinfection in themselves. This finding is consistent with experimental and nonexperimental studies that support the theory that HIV education can promote reduction of high-risk drug and sexual behaviors in the substance-abusing population (Longshore, 1992).

Study 2

Few of the clients from either the new or enrolled groups reported that they were currently injecting drugs. However, most of the new clients and more

than one third of the enrolled clients reported smoking drugs, probably crack cocaine. With this fact in mind, it is recommended that SHDP expand educational efforts to include an emphasis on the hazards of smoking drugs for HIV-infected persons. Educational messages should emphasize the effects of smoking drugs on the lungs and the increased risk for opportunistic infection such as pneumonitis carinii pneumonia. Clients enrolled for 6 months reported less drug use than new clients, suggesting that the SHDP was having an effect in decreasing substance abusing behavior.

Of the clients reporting sexual activity with a steady (monogamous) partner within the last 6 months, one third of the enrolled clients reported always using a condom with their steady partner, whereas none of the new clients reported ever using a condom with their steady partner. The increase in safer sex practices and the reduction in sex with multiple sex partners provides support for the position that the knowledge of HIV risk factors and the threat of reinfection can change the behavior of many SHDP participants. According to Kann, Anderson, et al. (1991), HIV education programs help participants to acquire the knowledge and skills they need to adopt and maintain behaviors that reduce the risk of HIV infection or reinfection. The increase in knowledge also coincided with the reduction of numbers of persons with multiple sex partners participating in SHDP. More than half of new clients but less than one third of enrolled clients reported having multiple sexual partners. This knowledge seems to assist participants in decreasing their risk of infecting others and possibly reinfecting themselves with another strain of the HIV virus, one their immune system is even less prepared to resist. The decrease in frequency of sexual activity after using drugs or alcohol suggests that the educational interventions offered at SHDP resulted in a decrease in high-risk behavior.

Study 3

At the time of the study, the client population at SHDP consisted predominantly of 20-year-old to 40-year-old African American men with symptomatic HIV infection. Therefore, the program should provide interventions addressing medical issues with an emphasis on educating clients in maintaining good health. According to this study, most of the SHDP participants had accessed one of the three coordinating organizations and were on the caseloads of AIDAT. It became apparent that one referral source warranted further assessment to improve outreach efforts and coordination with other organizations in locating persons in need of SHDP services. The chart reviews indicated little evidence of outreach efforts by one particular referral source. A plausible explanation is that clients were being referred to SHDP

through AIDAT but there was no record of such referrals in the intake form or client encounter record. It can be concluded that better documentation should be kept to note referrals from outreach efforts and that there may be a need for evaluating outreach efforts to determine whether they are successful in referring HIV-infected homeless persons in need of services from shelters to SHDP. Clients enrolled in SHDP should attend the day program at least three times per week. Over a 6-month period, the curriculum period for SHDP, a client should attend at least 72 times. Our study found that the average attendance over a 6-month period was considerably lower (mean = 35). This low number may be, in part, due to the low number of staff at SHDP, which creates difficulties in documenting attendance and ensuring that encounter forms are placed in each client's file. Moreover, this population is transient and unreliable, and many attend SHDP intermittently and sporadically. Incentives currently in place to attract participants are education, 12-step meetings, and hot meals. However, the educational and recovery incentives are not immediately rewarding to most clients, and there are only 10 meals delivered each day to SHDP, which typically has 20 to 30 clients per day. Meals are given only to the most needy of the participants so that meals are not an incentive for half to two thirds of SHDP clients.

Other services provided at SHDP include referrals to entitlements and financial counseling. Such referrals are provided to facilitate clients in obtaining an income if the client does not already have an income and in managing funds to maintain adequate housing. Although more than 90% of clients receive entitlement counseling and close to 80% receive financial counseling either before enrolling in SHDP or as part of SHDP, 10% to 20% of charts failed to note that the services were received. This finding may reflect a failure to record the dates when services were received. However, some of the clients may have missed these services. One quarter of participants were referred to AIDAT's transitional house, although the number who actually began to live there was not assessed. With 90% of clients referred to transitional housing and 39% actually securing adequate housing, some success with a difficult population is indicated. Because many participants have poor credit or are financially unstable, securing housing is a major challenge in this population.

Although the percentage of clients who graduated after 6 months appears to be low, a high drop-out rate is predictable in this type of program. It is difficult to determine how successful this program is compared to others that address HIV infection, homelessness, and substance abuse because there is no known basis for comparison. However, SHDP is successful in helping many clients secure adequate housing and in maintaining participation in a 12-step recovery program.

Although some clients need more than 6 months to graduate from the SDHP, study data suggest that many continue in the program and go on to secure housing and maintain 12-step recovery participation. The continuation in a 12-step recovery program suggests that SHDP successfully communicates to clients the need for ongoing support in recovery. These data support the conclusion that the SHDP is effective in supporting recovery and stable housing arrangements.

Limitations

The primary limitations of the study are related to several factors that may have influenced the degree of reliability and both internal and external validity. These influences included: a lack of standardized measures, use of self-report questionnaires, the low level of literacy, and the transience of the study population. As previously stated, there were no appropriate standardized measures uncovered by the literature review. With self-report questionnaires, it is never clear whether participants' responses are given because they feel them to be socially acceptable or because respondents are being truthful. According to Swadi (1990), self-reports are seen to be the most likely mechanism of obtaining data in sex and drug surveys with the degree of validity varying according to the caution taken in ensuring confidentiality and careful design of the measurement tool. Martin and Vance (1994) suggested that the reliability of sexual behavior information decreases as the frequency of the activities increases. In other words, respondents may tend to report less activity than is actually occurring, and this error increases disproportionately as the frequency of high-risk behaviors increases. Due to the self-administration of the questionnaires, the level of literacy may have been a problem for some clients. Because SHDP was targeted toward the homeless population of HIV-infected substance abusers, the transience of clients was a problem with follow-up. In addition, some estimates of services provided may be low because some information may have been lost due to inadequate record keeping.

A major challenge in evaluating the success of substance abuse programs is the difficulty in establishing the reliability of reports of drug use patterns during or after completion of a program. Most evaluations must rely on self-reports of drug use. The validity of self-reported sexual and substance abuse questionnaires is problematic. Saltzman, Stoddard, McCusker, Moon, and Mayer (1987) pointed out a number of threats to the validity and reliability of measurements of HIV and substance abuse knowledge and behavior, including behavior changes that may occur during the time between dates of administration of questionnaires, reactivity to the answer categories by some

respondents, and social desirability as a process affecting some of the answers. Martin and Vance (1994) suggested that the reliability of reported sexual and drug-use behavior information decreases as the frequency of the activity increases. However, O'Malley, Bachman, and Johnston (1983) found the reliability and stability of self-reports of illicit drug use to be high.

A cautionary word is in order when interpreting the results of any study, such as this one, that relies on a preexperimental design. Although such studies are worthwhile to explore the possible effects of interventions, they do not claim to control for internal threats to validity, such as history and maturation. The fact that the sample size was small and that the study group was composed largely of young and African American males also limits the generalizability of the tentative findings. In addition, under the chosen design of the study, it is not possible to determine the impact of multiple services or subprograms provided through the SDHP on the outcome.

These evaluations provided preliminary evidence that SHDP and similar programs may be an effective approach for improving participants' knowledge of AIDS and substance-abuse issues, for promoting a decrease in high-risk behavioral practices, and for improving community stability in this hard-to-reach population. Continued monitoring and evaluation of the program, and others serving this population, will promote refinements of services and improved ways of evaluating outcomes.

Appendix A
AID Atlanta: Street Home Questionnaire

Name: _____Social Security Number: _____

As part of a special project, we are asking persons participating in Street Home/AID Atlanta to complete the following questionnaire. All information on this form will be kept confidential and will not affect your services. Please complete all questions by yourself.

Before today, were you an AID Atlanta client? (circle one) yes no
If yes, please write down the full name of your case manager: _____
Is today your first day attending Street Home? (circle one) yes no
If today is not your first day, how long have you been attending Street Home? _____months
Please write your answer to the following questions in the space provided.

1. What does the abbreviation "HIV" stand for?

2. What does the abbreviation “AIDS” stand for?

Please circle the letter corresponding to the correct answer. Each question only has one correct answer.

3. Addiction is a:
   a. mental illness
   b. disease
   c. human weakness

4. The 12-Step program is
   a. a recovery program that uses peer support
   b. a medical treatment for AIDS
   c. one-on-one addiction counseling
   d. a government-supported food and shelter program

5. Which part or parts of the body are most affected by alcohol and drug use?
   a. the heart
   b. the liver
   c. the kidneys
   d. the heart and the kidneys
   e. the liver and the kidneys

6. What is the best way to clean your works (needles) to reduce the chance of spreading HIV?
   a. rinse with water
   b. rinse with bleach solution followed by water
   c. rinse with rubbing alcohol
   d. rinse with peroxide
   e. rinse with boiling water

7. A blackout is:
   a. passing out (loss of consciousness)
   b. damage to the lungs
   c. damage to the liver
   d. loss of memory

For each of the following questions, please circle true or false:

8.	Alcohol is a drug.	TRUE	FALSE
9.	Detoxing from alcohol without medical attention can be fatal.	TRUE	FALSE
10.	Use of illegal drugs may cause the symptoms of HIV disease to occur sooner than if a person remained drug free.	TRUE	FALSE
11.	Smoking drugs will increase the chance of developing AIDS related pneumonia (PCP or pneumocystis karinii pneumonia).	TRUE	FALSE
12.	Relapse is a part of recovery.	TRUE	FALSE

13. HIV can be transmitted from person to person through sexual intercourse. TRUE FALSE

14. HIV can be transmitted from person to person through sharing needles. TRUE FALSE

15. HIV can be transmitted from person to person through mosquitoes. TRUE FALSE

16. HIV can be transmitted from an infected mother to her unborn baby. TRUE FALSE

17. HIV can be prevented by using latex condoms. TRUE FALSE

18. HIV can be prevented by abstaining from sex and intravenous drug use. TRUE FALSE

19. You can tell if a person is infected with HIV just by looking at them. TRUE FALSE

20. If you are diagnosed with HIV, this means you have AIDS. TRUE FALSE

21. You can test negative for HIV and still be infected with the virus. TRUE FALSE

22. Some of the early symptoms of HIV disease include swollen lymph glands, unexplained weight loss, night sweats, and chronic diarrhea. TRUE FALSE

23. If you are HIV infected, you can become reinfected by having unprotected sex with another person who is also HIV infected. TRUE FALSE

Thank you for completing this questionnaire. After you turn in your completed questionnaire, feel free to ask the case manager any questions you may have about questions which appeared on the questionnaire.

Appendix B
Street Home Behavioral Questionnaire

Date Enrolled in Street Home: ____/____/____ Today's Date: ____/____/____

Name (Last, first): _____ SSN: _____-_____-_____

Date of Birth(month/day/yr): ____/____/____ Sex (circle one): Male Female

Race (circle one): White Black Hispanic Asian Native American

Marital status (circle one): Married Never married Separated Widowed Divorced

(Please circle your answer to each question below. Your answers are confidential and will be used only to improve the Street Home Program: your information will not be released to anyone outside AID Atlanta. Please answer truthfully so that we may improve the Street Home Program and better meet your needs.)

1. Have you injected drugs in the last 6 months?
   a. Yes
   b. No
      1a. In the past 6 months, on average, how often did you inject?
         a. Once a month or less
         b. Two or three days per month
         c. About once a week
         d. Two to six days a week
         e. Every day

      1b. If you injected drugs, how often did you clean your works prior to injecting?
         a. Never
         b. Less than half the time
         c. About half the time
         d. More than half the time
         e. Always

      1c. If you cleaned your works, what did you use to clean them?
         a. Plain water
         b. Bleach solution
         c. Rubbing alcohol
         d. Peroxide
         e. Boiling water
2. Have you smoked drugs in the past 6 months?
   a. Yes
   b. No
      2a. In the past 6 months, on the days that you smoked drugs, on average, how often did you smoke drugs?
         a. Once a month or less
         b. Two to three days per month
         c. About once a week
         d. Two to six days a week
         e. Every day

3. Have you had sex with a steady partner in the past 6 months?
   a. Yes
   b. No
      3a. If yes, how often did you use a condom with your steady partner?
         a. Never
         b. Less than half the time
         c. About half the time
         d. More than half the time
         e. Always

4. Have you had sex with more than one steady partner in the past 6 months?
   a. Yes
   b. No
      4a. If yes, how often did you use a condom when you had sex with these persons?
         a. Never
         b. Less than half the time
         c. About half the time
         d. More than half the time
         e. Always

5. In the past six months, have you had sex after using drugs or alcohol?
   a. Yes
   b. No
6. In the past 6 months, have you exchanged sex for drugs or money?
   a. Yes
   b. No
      6a. If you have exchanged sex for drugs or money in the past 6 months, how often did you use a condom?
         a. Never
         b. Less than half the time
         c. About half the time
         d. More than half the time
         e. Always

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