Spring/ Summer 2000 volume 3, issue 1

CDUHR news

Center for Drug Use and HIV Research
in the Institute for AIDS Research at National Development and Research Institutes, Inc.

It is estimated that 65% to 90% of injection drug users are infected with hepatitis C (HCV). Furthermore, IDUs account for 60% of HCV cases in the U.S. and it is estimated that one-third of those infected with HIV are also coinfected with HCV. Testing and counseling for HCV should be routinely recommended for anyone with an injection drug use history or who is HIV positive.

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Drug Use, Hepatitis C and HIV

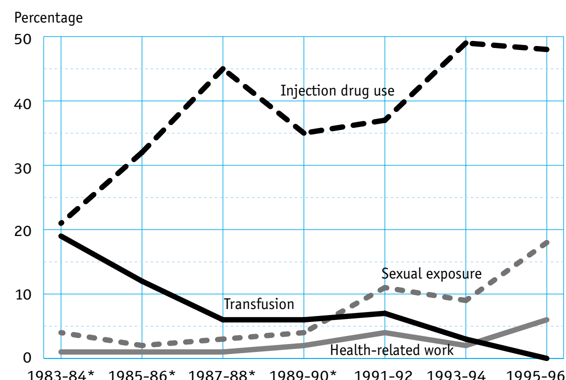
Internationally, it is estimated that 175 million people are infected with hepatitis C (HCV)[1]–over four times the number infected with HIV. In the U.S., 4 million carry the antibody for HCV, approximately 2.7 million are chronically infected with HCV.[2] Although HCV is one of several viruses that can cause inflammation of the liver (e.g., Hepatitis A [HAV], hepatitis B [HBV]), it is the major cause of chronic hepatitis, cirrhosis and liver cancer. For many years, the clinical syndromes were recognized, and referred to as non-A, non-B hepatitis. It was not until 1988 that HCV was identified, and in 1990, a test was developed to detect the virus in blood samples.[3]

HCV disease progression is highly variable, with many unaware of being infected and remaining healthy for over 20 years. Approximately 15% to 25% will overcome the virus, without treatment, during the initial infection. The remaining 75% to 85% will develop a chronic infection (and will be able to transmit HCV throughout their lives). Of these, 10% to 20% will develop cirrhosis, and 1% to 5% with chronic infections will develop liver cancer. There are few reliable indicators that predict the course of the infection.[3]

Modes of Transmission for Hepatitis C

The primary mode of transmission for HCV is through direct blood-to-blood contact (this includes sharing injection equipment and paraphernalia). Aside from this, HCV appears to be difficult to transmit. Perinatal (mother-to-fetus) transmission occurs in approximately 5% of cases. There has been debate regarding the extent to which HCV can be transmitted sexually. The Centers for Disease Control and Prevention (CDC) estimate that sexual transmission accounts for close to 20% of HCV infections in the U.S.[4] However, in a study of HCV serodiscordant couples (one person positive, the other negative), with an average follow-up of 46 months, only one seronegative person out of 112 couples became infected.[5] While sexual transmission is possible, it is thought to be inefficient compared to direct blood contact.

We would like to acknowledge the helpful comments on this article from Sharon Stancliff, M.D., Medical Consultant, AIDS Institute, New York State Department of Health.



Reported cases of HCV by selected risk factors–U.S., 1983-1996 (Graph adapted from CDC, 1998.[4])

* Data presented for non-A, non-B hepatitis.

Drug Use, HCV and HBV Infection

It is estimated that injection drug users (IDUs) account for 60% of all HCV infections in the U.S.[4] Studies have found that HCV is widespread among IDUs, with prevalence estimates ranging from 65% to 90%,[6-8] with similar rates for HBV.[7,9] Infection with HCV is rapid among new injectors with 50% to 80% becoming infected within 6 to 12 months following initiation into injection.[10]

HCV rates from CDUHR studies– While the Center's main focus is the joint drug use-HIV epidemic, some CDUHR studies also look at HCV and HBV since these blood-borne pathogens disproportionately affect drug users and are additional indicators of sex and injection risk behaviors. Among current injectors, in the *HIV Risk Among Street Recruited Drug Injectors* study, 47% were infected with HCV, 30% were exposed to HBV (T.E. Perlis, personal communication, May 2000). In a combined sample from East Harlem (*Women Drug Users, AIDS, and Social Context*) and the Lower East Side of Manhattan (*HIV Risk and Transitions from Non-injecting Heroin Use*), among current non-injecting drug users (heroin and cocaine) with a prior injection history, 59% were HCV positive. Among non-injecting drug users, with no self-reported injection history, 16% were HCV infected.[11]

HIV, HCV and HBV coinfection–HIV, HCV and HBV share common transmission routes. It is estimated that one-third of persons infected with HIV are also infected with HCV[12] and up to 90% of HIV-infected IDUs may have been exposed to *(Continued next page.)*

Due to the relationship of HCV with HIV and drug use, this article presents some key points about HCV; references and web sites are provided for those who would like additional information.

HBV.[13] Perinatal transmission of HCV when the mother is coinfected with HIV increases to 17%.[14] Moreover, HIV and HCV coinfection accelerates the clinical progression of liver disease; the effect of HCV infection on HIV disease is less clear.[12] Treatment for HIV and HCV coinfection is complex since highly active antiretroviral therapy (HAART) may aggravate liver function and increase HCV viral load.[15]

Implications

With high rates of coinfection of HIV and HCV, it is recommended that all persons infected with HIV, and persons who have any history of drug injection, be routinely tested and counseled for HCV and evaluated for treatment.[16] Currently there is no vaccine for HCV; vaccines for HAV and HBV are recommended for at-risk populations.

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11. Tortu, S., Neaigus, A., McMahon, J., & Hagen, D. (in press). *Hepatitis C among non-injecting drug users: A report. Substance Use and Misuse.*
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15. Dietrich, D.T. (1999). Hepatitis C virus and human immunodeficiency virus: Clinical issues of coinfection.. *American Journal of Medicine, 107* (6B), 79S-84S.
16. Centers for Disease Control and Prevention (1999). 1999 USPHS/IDSA guidelines for the prevention of opportunistic infections in persons with human immunodeficiency virus: U.S. Public Health Service (USPHS) and Infectious Diseases Society of America (IDSA). *MMWR, 48* (RR-10), 1-67.

INFORMATION FOR SERVICE PROVIDERS

In this section of the newsletter, sources of information particularly helpful to service providers are identified.

Web Sites for Additional Information on Hepatitis B and Hepatitis C

Organization	Web Site	Description
American Liver Foundation (ALF) National Chapter	**http://www.liverfoundation.org**	This site offers general information on the function of the liver and liver disease including information on state chapters of the ALF and their activities, advocacy groups and publications that can be downloaded. In addition, it provides numerous links to additional web sites related to the liver.
The Hepatitis Information Network	**http://www.hepnet.com**	HepNet offers comprehensive information on hepatitis A, B, C, D, and G through online slide presentations, interactive quizzes and webcasts (audio and video presentations). There is also a section that provides information in French.
HIV and Hepatitis Treatment Advocates	**http://www.hivandhepatitis.com**	This is an online publication for HIV/AIDS, HBV and HCV treatment and clinical trials. It includes summaries of selected presentations from conferences and scientific workshops on HIV/AIDS and viral hepatitis.
Centers for Disease Control and Prevention National Center for Infectious Diseases	**http://www.cdc.gov/ncidod/diseases/hepatitis**	The CDC site offers up-to-date information on hepatitis A, B, C, D and E. The site includes slide sets, brochures, posters and CDC publications that can be downloaded.
National Library of Medicine Medline	**http://igm.nlm.nih.gov**	Medline is a bibliographic database covering the fields of medicine, nursing, dentistry and the healthcare system. It contains bibliographic citations and abstracts from over 4000 biomedical journals throughout the world.

CDUHR provides these web sites for informational purposes only and does not necessarily endorse the points of view expressed in them.

In this section of the newsletter, information regarding current research projects will be featured. Summaries of two ongoing projects are presented in this issue.

"This study provides an opportunity to examine influences on risk behaviors in a single ethnic group in two socio-cultural environments. The differences in risk behavior are in part due to differences in access to methadone maintenance treatment programs and syringe exchange programs."

Sherry Deren, Ph.D., Principal Investigator, Puerto Rican Drug Users in New York and Puerto Rico: HIV Risk Behavior Determinants

Puerto Rican Drug Users in New York and Puerto Rico: HIV Risk Behavior Determinants

Principal Investigator: Sherry Deren, Ph.D.
Funding Agency: NIDA

Background

High rates of HIV/AIDS have been found among Puerto Rican drug users since early in the epidemic. Significant differences in risk behavior have been found between Puerto Rican drug users (injectors and crack smokers) who reside on the island of Puerto Rico and those who reside in New York. Little information exists to help understand these differences. This study, conducted in East Harlem, NY and Bayamón, PR, provides an opportunity to examine influences on risk behaviors in a single ethnic group in two socio-cultural environments.

Objectives

The main objectives of this dual-site study are to:

- Assess the influences on HIV-related risk behaviors among Puerto Rican injection drug users (IDUs) and crack smokers in Puerto Rico and New York
- Assess the influences on changes in risk behavior over time
- Examine individual, social, health-related, cultural and environmental influences on risk behavior
- Examine the impact of migration, mobility, acculturation and HIV serostatus on risk behavior
- Develop recommendations for interventions tailored to Puerto Rican drug users in the two locations

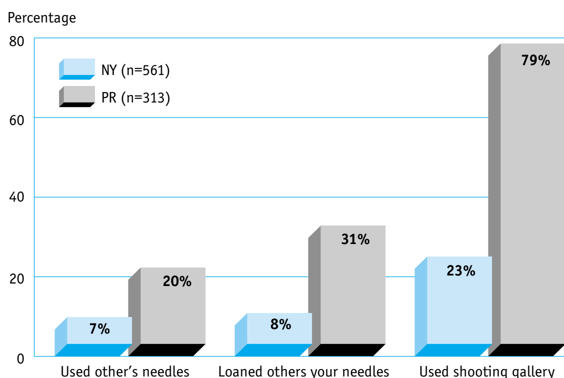
Participants and Methods

The study used qualitative methods (mapping, focus groups, ethnographic interviews and field observations) and quantitative survey methods (baseline and 6-month follow-up interviews) to assess risk behaviors and potential influences on risk behaviors. Participants for the survey were street-recruited in the two communities. The criteria for inclusion were: 18 years or older, self-report as Puerto Rican and use of injection drugs or crack in the 30 days prior to recruitment. Participants were tested for HIV and given pre/post-test counseling. A total of 1200 participants (800 from East Harlem, 400 from Bayamón) were recruited for the survey from January 1998 through August 1999. In East Harlem, 73% of the participants were male, with an average age of 38; in Bayamón, 79% were male, average age was 33.

(Top, from left to right)
Rosa Arroyo, Field Site Supervisor, Romulo Gil, Interviewer
(Middle, from left to right)
Rosalyn Cedeno, HIV Counselor, Denise Oliver-Velez, ABD, Ethnographer, Gladys Torres, Interviewer, Miguel Santiago, Security/Reception
(Bottom, from left to right)
William Rodriguez, HIV Counselor, Monserrate Cabrera, Outreach Worker, Nadina Correa, Outreach Worker

Preliminary Findings

HIV seroprevalence and incidence–Among those with recent injection drug use, 28% tested positive for HIV in East Harlem vs. 22% in Bayamón. Among crack users, 18% in East Harlem compared to 12% in Bayamón were seropositive. There has been a significant decline in seroprevalence among IDUs in both locations (from about 50% in 1992–1993). Nonetheless, 6-month follow-up data indicated that current seroincidence rates (new cases) were high, approximately 2.7 PYAR (per one hundred person years at risk) in the New York sample and 5.1 PYAR in the Puerto Rico sample.[1]



Injection-related Risk Behavior Among Puerto Rican IDUs in New York and Puerto Rico (prior 30 days)

Injection-related risk behavior–Participants in Bayamón reported injecting almost 2.5 times more frequently than East Harlem injectors (184 vs. 76 times in the prior 30 days). They also reported riskier injection practices, e.g., 20% reported using another person's needles, compared with 7% in East Harlem. In addition, 79% in Bayamón reported using shooting galleries, compared with 23% in New York.[1]

Syringe exchange programs (SEPs)–IDUs in PR obtain approximately 18% of their syringes from an SEP, compared with 55% in New York. In PR, SEPs have a policy of a maximum of two

(Continued next page.)

syringes per exchange, and have limited hours of operation; in NY, there is no limit on the number exchanged, and the hours of operation are more extensive. Participants in Puerto Rico were also more likely to report police harassment related to carrying syringes.[2]

Methadone maintenance treatment programs (MMTPs)– IDU participants who had ever used heroin were more likely to be in a MMTP (in the prior 30 days) in NY than in PR (56% vs. 11%). Both qualitative and survey results indicated that individuals in MMTP injected less frequently, engaged in lower rates of injection risk behaviors, and those who knew they were HIV positive were more likely to be taking HIV medications.[3]

Sex-related risk behavior–In the 30 days prior to the interview, participants in Bayamón who engaged in sex had higher rates of sex-related risk behaviors than those in East Harlem. Among IDUs, a higher percentage in Bayamón reported sex with multiple partners (36% vs. 27%) and reported a higher frequency of unprotected sex acts. Among crack users, a similar pattern emerged, with 58% in Bayamón vs. 27% in East Harlem reporting multiple partners, as well as a higher frequency of unprotected sex acts.[1]

Residential status –Injection-related risk behaviors were generally higher for those IDUs who were homeless or living in their parents' home, and lowest for those living in their own home. For example, the highest percentage of shooting gallery use occurred among the homeless in both locations (87% in Bayamón, 41% in East Harlem) and the lowest among those living in their own home (70% and 11%, respectively). Risky sexual behaviors (e.g., unprotected sex) was highest among those living in their own home, which may have been related to having steady sexual partners.[4]

Pooling money to buy drugs – In both sites, pooling money to buy drugs among IDUs was associated with risky drug preparation practices, such as sharing injection paraphernalia. IDUs in both locations reported that joint drug purchases occurred in approximately 12–14% of injection episodes. Joint drug purchases were particularly frequent among injectors of speedball (heroin and cocaine mixed together) and homeless IDUs.[5]

(Top, from left to right) Sung-Yeon Kang, Ph.D., Data Analyst, Tania Melendez, Administrative Assistant, Sherry Deren, Ph.D., Principal Investigator, Kristine Ziek, Follow-up Coordinator

(Bottom, from left to right), Jane Schmirler, Research Associate, Jonny Andía, Ph.D., Project Director, Carmen Ortiz-Priester, Administrative Coordinator

(From left to right) Hector Colón, ABD, Co-Investigator, Rafaela Robles, Ed.D., Co-Investigator.

(Photos were not available for other staff from the Bayamón site, including Francisco Acevedo, Maria del Carmen, Ann Finlinson, Ph.D., Wanda Garcia, Myra González Collazo, Cruz María López, Rafael Quiñones Beltrán, Angel Rivera, Denise Santana, Myra Soto and Wanda Torres; and Mark Beardsley, Rh.D., of the New York site)

Implications and Recommendations

Puerto Rican drug users living in Puerto Rico continue to be more likely to engage in risky injection and sex-related risk behavior compared to those living in New York. These differences are in part due to differences in access to MMTPs and SEPs. Efforts to disseminate these findings and their implications have been undertaken, including dissemination efforts to local policy makers and service providers. Increasing access to risk reduction tools (e.g., syringes and condoms) and methadone maintanance treatment, reducing homelessness, and addressing police harassment related to carrying syringes, are some of the recommendations emerging from this study. Identification of the contribution of a wide variety of influences on risk behavior (using multivariate analyses) is underway.

1. Deren, S., Robles, R. R., Andia, J., Beardsley, M., & Colon, H. M. (1999, November). HIV-related risk behaviors and HIV seroprevalence among Puerto Rican drug injectors in PR and NY. Presented at the American Public Health Association Annual Meeting, Chicago, IL.

2. Finlinson, H.A., Oliver-Velez, D., Deren, S., Robles, R.R, Colón, H.M., Beardsley, M., Cant, J.G.H., Andia, J., Soto-Lopez, M. (in press). Syringe acquisition and use by Puerto Rican drug injectors in New York and Puerto Rico: Comparisons based on quantitative and qualitative methods. *AIDS and Behavior.*

3. Oliver-Velez, D., Beardsley, M., Deren, S., Robles, R.R., Finlinson, A., Andia, J., & Colón, H.M. (1999, November). The impact of methadone treatment on HIV risk behaviors among Puerto Rican IDUs in East Harlem, New York and Bayamón, Puerto Rico. Presented at the American Public Health Association Annual Meeting, Chicago, IL.

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5. Colón, H.M., Finlinson, H.A., Robles, R.R., Deren, S., Andia, J., Kang, S.Y., Oliver-Velez, D. (in press). Joint drug purchases and drug preparation risk behaviors among Puerto Rican injection drug users in Puerto Rico and New York. *AIDS and Behavior.*

For additional information on this study you may contact Sherry Deren, Ph.D., Principal Investigator – E-mail: sherry.deren@ndri.org.

"This study suggests that norms about high-risk drug use and condom use are probably factors in reducing HIV transmission. Research is needed on how such norms come about; how social networks, local social-contol action and other forces strengthen or weaken such norms; and how networks are associated with HIV and other infections among youth."

Samuel R. Friedman, Ph.D.,
Principal Investigator,
Drug Use and HIV Risk
Among Youth

Drug Use and HIV Risk Among Youth

Principal Investigator: Samuel R. Friedman, Ph.D.
Funding Agency: NIDA

Background

Young adults living in communities with large numbers of injection drug users (IDUs) and crack smokers may be at high risk for HIV and other sexually transmitted infections (STIs). Pilot data in one such high-risk neighborhood, Bushwick, Brooklyn, New York City indicated that youth engage in unprotected sex with multiple partners and have high rates of STIs. They also suggested that locally-generated norms might have led to lowered rates of using heroin, cocaine, crack and injecting drugs.

Objectives

The main objectives of the study are to determine, among young adults in Bushwick, the prevalence of: 1) drug use patterns, 2) high-risk sexual behavior and high-risk sexual networks and how these vary by drug use, and 3) infection with HIV, hepatitis B (HBV), hepatitis C (HCV), and other STIs, and how these vary by drug use. In addition, the study examines the social and personal risk factors for involvement in higher-risk drug use, high-risk sexual behavior and high-risk sexual networks, for HIV and other STIs; and whether peer norms are determinants of drug and sexual risk behavior.

Participants and Methods

Two groups of 18–24 year old Bushwick residents were recruited: a probability household sample and a sample of street-recruited youth who inject drugs or use crack, other cocaine, or heroin. The probability sample was chosen by dividing the neighborhood into face-blocks. A face-block is both sides of a street or avenue between adjacent city blocks. Face-blocks were used instead of city blocks because preliminary data indicated that social interactions in Bushwick take place more often among neighbors across the street or on the same street than neighbors around the corner. Of the 577 face-blocks in Bushwick, 41 were randomly selected and all dwelling units within the selected face-blocks listed and screened for eligible participants. In dwelling units where there was more than one eligible person, one was randomly chosen to participate.[1] Participants were interviewed for approximately two hours and asked to provide blood and urine samples for testing for HIV, other STIs and drugs. In this ongoing study, 499 participants have been interviewed with a mean age of 20.8; 55% are men; 77% are Latino, 16% are African-American; 52% were neither employed nor in school.

(From left to right) Samuel R. Friedman, Ph.D., Principal Investigator, Joy Settembrino, Interviewer/ Phlebotomist, Elsie Rodriguez, Interviewer/ Phlebotomist, Milagros Sandoval, Assistant Project Director

Preliminary Findings

Drug use behavior–Drug use was categorized on a scale of "hardest" lifetime drug use–none, marijuana use, non-injection use (NIU) of cocaine or heroin, crack use, and injection drug use (IDU). In the household sample, among men, 21% reported they had not used drugs, 45% used marijuana, 26% reported NIU of cocaine or heroin, 5% used crack and 3% were IDUs. Among women, 41% reported they had not used drugs, 36% used marijuana, 19% were NIU of cocaine or heroin, 3% used crack, and 1% were IDUs.

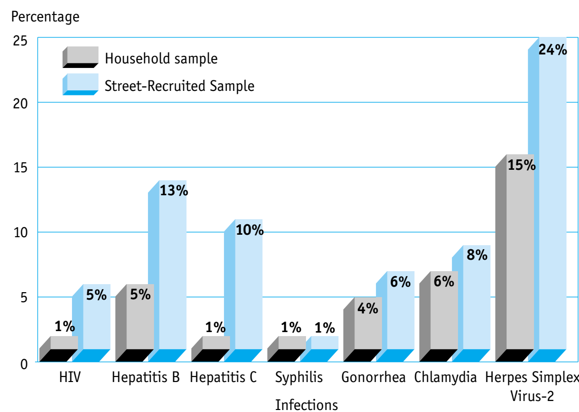
Sexual risk behavior–In the combined sample, in the prior 12 months, 92% of men and 85% of women reported vaginal, anal or oral sex with at least one sex partner; 79% of men and 87% of women reported sex without the use of a condom. Forty-four percent of the men and 23% of the women had concurrent sex partnerships (two or more partners in any month in the prior 12 months). Forty-six percent of the men and 15% of the women reported sex with casual partners (anyone who was not a primary or commercial sex partner). Fewer participants reported exchanging sex for money/drugs/other goods, 7% of the men, and 10% of the women.

Relationship between drug use and sexual risk behavior–Users of "harder" drugs on the drug use hierarchy had more sex partners and were more likely to: have engaged in commercial sex work, have had concurrent sex partners, have had sex with someone a network member also had sex with and have had unprotected sex. Higher proportions of women than men who engaged in commercial sex or shared partners with a network member were crack smokers and drug injectors. Crack smoking and *(Continued next page.)*

(From left to right) Peter Flom, Ph.D., Data Analyst, Benny Jose Kottiri, Ph.D., Project Director

drug injection were more strongly associated with increased sex risk behavior among women than among men.[2]

Peer norms on drug use and condom use–Peer norms at age 15 regarding drug use (as recalled by participants) were strongly related to current drug use. Participants whose friends objected to, or did not encourage, drug use reported using drugs which appeared lower on the drug use hierarchy (in the prior 12 months). Current peer norms regarding condom use were associated with condom use; participants whose friends encouraged condom use were more likely to report consistent condom use.



Prevalence of Infections Among Household and Street-Recruited Samples (Men and Women Combined)

Prevalence of infections–Overall, higher rates of infection were found among the street-recruited drug user sample. Among the household sample, there were no statistically significant differences between men and women on prevalence rates for HIV, HCV, syphilis, gonorrhea and chlamydia. There were differences for HBV, with men having a higher rate of infection (8% vs. 2%) and herpes simplex virus-2 (HSV-2) where the rate was higher among women (23% vs. 6%). Among the street-recruited sample, there were no differences between men and women for HIV, gonorrhea and chlamydia. Women had significantly higher rates of infections for HBV (26% vs. 10%), HCV (22% vs. 7%), syphilis (6% vs. 0%) and HSV-2 (53% vs. 15%).

Implications and Recommendations

In Bushwick, where there is widespread use and distribution of drugs and a large population of IDUs and crack smokers, youth may be at considerable risk for HIV and other STIs. The youth in this neighborhood are engaging in high risk sexual behavior with many reporting multiple partners and unprotected sex, and among men, a high proportion reporting concurrent sex partnerships and casual sex. Local peer norms seem to be preventing higher levels of high-risk drug use. Prevention efforts should use peer and normative influence to help youth avoid unsafe sex and high-risk drug use.

1. Flom, P.L., Friedman, S.R., Jose, B., Curtis, R. (in press). Peer norms regarding drug use and drug selling among household youth in a low income "drug supermarket" urban neighborhood. *Drugs - Education, Prevention and Policy.*

2. Flom, P.L., Friedman, S.R., Jose, B., Sandoval, M., Curtis, R., & Neaigus, A. (1999, July). Sex risk and drug use among youth in a high risk neighborhood. Presented at the International Society for Sexually Transmitted Diseases Research, Denver, CO.

For additional information on this study you may contact Samuel R. Friedman, Ph.D., Principal Investigator–E-mail: sam.friedman@ndri.org.

Edna Bula died on May 19, 2000. Ms. Bula was the field site supervisor of the Parent Pre-adolescent Training for HIV Prevention (PATH) Project and has worked on various community HIV prevention projects on the Lower East Side with NDRI for 11 years. A scholarship has been established in her name at the Community Health Education Program at Hunter College. Contributions may be mailed to Marilyn Auerbach, Dr.P.H. at Hunter College, School of Health Sciences, Community Health Education, 425 East 25th Street, New York, NY 10010, with checks made payable to: The Edna Bula Scholarship.

CDUHR PUBLICATIONS

December 1999–May 2000

Davis, W. R., & Johnson, B. D. (2000). Criminal justice contacts of users and sellers of hard drugs in Harlem. *Albany Law Review, 63* (3), 877-922.

Des Jarlais, D. C. (2000). Prospects for a public health perspective on psychoactive drug use. *American Journal of Public Health, 90* (3), 335-337.

Des Jarlais, D. C., Guydish, J., Friedman, S. R., & Hagan, H. (2000). HIV/AIDS prevention for drug users in natural settings. In J. L. Peterson, & R. J. DiClemente (Eds.), *Handbook of HIV Prevention.* Hingham, MA: Kluwer Academic Publishers.

Des Jarlais, D. C., Marmor, M., Friedmann, P., Titus, S., Aviles, E., Deren, S., Torian, L., Glebatis, D., Murrill, C., Monterroso, E., & Friedman, S. R. (2000). HIV incidence among injection drug users in New York City, 1992-1997: Evidence for a declining epidemic. *American Journal of Public Health, 90* (3), 352-359.

Friedman, S. R. (2000). What hath RAR wrought? *International Journal of Drug Policy, 11,* 37-39.

Golub, A., Labouvie, E., & Johnson, B. D. (2000). Response reliability and the study of adolescent substance use progression. *Journal of Drug Issues, 30* (1), 103-118.

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Magura, S., Laudet, A., Kang, S.Y., & Whitney, S. A. (1999). Effectiveness of comprehensive services for crack-dependent mothers with newborns and young children. *Journal of Psychoactive Drugs, 31* (4), 321-338.

Miller, M., Meyer, L., Boufassa, F., Persoz, A., Sarr, A., Robain, M., Spira, A., & the SEROCO Study Group. (2000). Sexual behavior changes and protease inhibitor therapy. *AIDS, 14* (4), F33-F39.

Rhodes, F., Deren, S., Wood, M. M., Shedlin, M. G., Carlson, R. G., Lambert, E. Y., Kochems, L. M., Stark, M. J., Falck, R. S., Wright-DeAgüero, L., Weir, B., Cottler, L., Rourke, K. M., & Trotter, R. T. (1999). Understanding HIV risks of chronic drug-using men who have sex with men. *AIDS Care, 11* (6), 629-648.

Salomon, N., Perlman, D. C., Friedmann, P., Ziluck, V., & Des Jarlais, D. C. (2000). Prevalence and risk factors for positive tuberculin skin tests among active drug users at a syringe exchange program. *International Journal of Tuberculosis and Lung Disease, 4* (1), 47-54.

Tortu, S., Beardsley, M., Deren, S., Williams, M., McCoy, H. V., Stark, M., Estrada, A. L., & Goldstein, M. F. (2000). HIV infection and patterns of risk among women drug injectors and crack users in low and high seroprevalence sites. *AIDS Care, 12* (1), 65-76.

Additional Projects Currently Supported by the CDUHR*

Project and Funding Source	Principal Investigator	Population	Location	Objective
Drug Users' Self-Reported HIV Status: Validity/Methods National Institute on Drug Abuse	Shiela M. Strauss, Ph.D.	IDUs and crack smokers	Eleven sites from the NIDA Cooperative Agreement Study	Secondary analysis on the validity of self-reported HIV status
Family-Based HIV Prevention in Mexico World AIDS Foundation	Beatrice J. Krauss, Ph.D.	Parents and their pre-adolescent children	Venustiano Carranza, Mexico City	Replication and evaluation of an HIV prevention intervention
Networks, Resources and Risk Among Women Drug Users National Institute on Drug Abuse	Maureen Miller, Ph.D.	Women who use drugs	Lower East Side, NYC	Ethnographic study to explore economic, social and network influences on HIV risk
Non-Injecting Heroin Users, New Injectors and HIV Risk National Institute on Drug Abuse	Alan Neaigus, Ph.D.	Non-injecting heroin users and new injectors	Lower East Side, NYC	Assess behavioral and network risks of transitioning to seroconversions to HIV, HBV and HCV
Women Drug Users, Their Male Partners and HIV Risk National Institute on Drug Abuse	Stephanie Tortu, Ph.D.	Women drug users of heroin, crack, cocaine and their main male sex partner	East Harlem, NYC	Examine effect of relationship characteristics, drug use patterns and situation variables on HIV risk behaviors in couples

*A complete list of currently supported CDUHR projects is on page 8. See CDUHR News, Volume 1, Issue 1, for a brief summary of the original list of projects.

The Training Institute

The Training Institute provides training for the New York State Department of Health AIDS Institute and conducts courses by special request. Following are courses available from August–December 2000, offered at no cost. All courses are offered at the NDRI offices unless otherwise noted.

Date	*Course*
8/8, 10/5[a], 11/7	Domestic Violence and HIV/AIDS (One day)
8/16, 9/12[b], 9/20[a], 10/10, 11/9	HIV Reporting and Partner Notification: Assisting Persons Living with HIV/AIDS (One day)
9/5–9/8, 11/13–11/16	Community HIV/AIDS Educator (Four days)
9/18[c], 11/2	Overview of HIV Infection and AIDS (3 hrs)
9/18[c]	Reducing Perinatal HIV Transmission in the Prenatal, Maternity and Newborn Setting (3 hrs)
9/25–9/26, 10/18-10/19, 11/28-11/29	HIV Testing Procedures (Two days)
10/2, 12/12	Cultural Diversity (One day)
10/4[c]	What HIV/AIDS Service Providers Should Know About STDs (3 hrs)
10/4[c]	HIV Confidentiality Law: What Health and Human Service Providers Need to Know (3 hrs)
10/23–10/25, 12/4–12/6	Reducing the Risk and Harm of HIV (Three days)
11/2[b]	Update on Clinical Management of HIV Infection (3 hrs)

a Bronx AIDS Services
b Queens, exact location to be announced
c Bronx, Lincoln Hospital

These courses are eligible for contact hours for CASAC credentialing. For a complete listing of Year 2000 courses, the curriculum of Special Request courses, CDUHR/ Training Institute courses, and information on the courses listed above, call the Training Institute at (212) 845-4569. This information is also available on our Web site at http://www.ndri.org where you may register for these courses.

CDUHR Pilot Project Awards

CDUHR's Project Development Core announced the awarding of seven pilot projects during the period of March to June 2000.

Marya Gwadz, Ph.D., was awarded funding for *Health Care Utilization Among Street Youth.* Dr. Gwadz will be examining barriers to health care utilization among street youth with a focus on HIV testing.

Delores Jones-Brown, Ph.D., J.D., was funded for *Understanding the Relationship Between Truancy, Drug Use, Sexual Behavior and HIV Risk Among School-Aged Minority Males.* Dr. Jones-Brown is conducting a qualitative analysis on the social context of risk for HIV infection and transmission among court-involved young men in urban settings.

Michael Palij, Ph.D., received funding for *Development of "A Guide to HIV/AIDS Resources on the Internet for Research, Treatment, Prevention and Education."* Dr. Palij will produce a book and CD-ROM on internet resources for HIV/AIDS which can be used by researchers, service providers, and people with HIV/AIDS.

Andrew Rosenblum, Ph.D., was funded for *Chronic Pain Among Persons with Chemical Dependence.* This project will estimate the prevalence of chronic pain among drug users, determine pain intensity, its impact on daily functioning, and examine the relationships between chronic pain, the use of addictive drugs and HIV serostatus.

James Ron Walker, M.A., received an award for *HIV/AIDS in the Brooklyn Caribbean Community: Is There a Substance Use Connection?* This project will explore if and how drug use is related to the risk of HIV transmission in the Brooklyn Trinidadian community.

Rebecca M. Young, Ph.D., received two awards: *Exploring Alternative Recording Methods for Dialogical Analysis* and *Varying Respondent Characteristics in a Dialogical Analysis.* These projects will explore alternative methods for recording and analyzing dialogues (collected as part of an ethnographic study) and assess the applicability of analyzing dialogues across a range of literacy levels, social classes, ethnicity and drug use patterns.

CDUHR Supported Projects

Alternative Program for Methadone Maintenance Dropouts (NIDA)
Principal Investigator: Sherry Deren, Ph.D.

Drug Use and HIV Risk Among Youth (NIDA)
Principal Investigator: Samuel R. Friedman, Ph.D.

Drug Users' Self-Reported HIV Status: Validity/Methods (NIDA)
Principal Investigator: Shiela M. Strauss, Ph.D.

Estimating Current Hard Drug Users and Operatives (NIDA)
Principal Investigator: Bruce D. Johnson, Ph.D.

Families in Transition (NYS AIDS Institute)
Co-Director: Beatrice J. Krauss, Ph.D.

Family-Based HIV Prevention in Mexico (WAF)
Principal Investigator: Beatrice J. Krauss, Ph.D.

HIV Risk Among Women IDUs Who Have Sex With Women (NIDA)
Principal Investigator: Samuel R. Friedman, Ph.D.

Networks, Resources and Risk Among Women Drug Users (NIDA)
Principal Investigator: Maureen Miller, Ph.D.

Non-Injecting Heroin Users, New Injectors and HIV Risk (NIDA)
Principal Investigator: Alan Neaigus, Ph.D.

Parent/Pre-adolescent Training for HIV Prevention (NIMH)
Principal Investigator: Beatrice J. Krauss, Ph.D.

Puerto Rican Drug Users in New York and Puerto Rico (NIDA)
Principal Investigator: Sherry Deren, Ph.D.

Risk Factors for AIDS Among IDUs (NIDA)
Principal Investigator: Don C. Des Jarlais, Ph.D.

Women Drug Users, Their Male Partners and HIV Risk
Principal Investigator: Stephanie Tortu, Ph.D.

CDUHR Core Directors

Administration and Coordination Core
Sherry Deren, Ph.D.

Methods Development and Data Analysis Core
Samuel R. Friedman, Ph.D.

Project Development Core
Beatrice J. Krauss, Ph.D.

Strategic National and International Comparisons Core
Don C. Des Jarlais, Ph.D.

Training and Dissemination Core
Andrew Osborne, M.S. Ed., CHES

CDUHR is funded by the National Institute on Drug Abuse to provide an infrastructure to support the HIV/AIDS-related research projects at NDRI. It is the first center for the socio-behavioral study of drug use and HIV in the United States and is dedicated to increasing our understanding of the drug use-HIV epidemic.

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