

FOIA MARKER

**This is not a textual record. This is used as an
administrative marker by the William J. Clinton
Presidential Library Staff.**

Collection/Record Group: Clinton Presidential Records
Subgroup/Office of Origin: National AIDS Policy Office
Series/Staff Member: Kristine Gebbie
Subseries:

OA/ID Number: 3773
FolderID:

Folder Title:
Methadone Conference 4/22/94

Stack:	Row:	Section:	Shelf:	Position:
S	66	5	4	2

Clinton Presidential Records Digital Records Marker

This is not a presidential record. This is used as an administrative marker by the William J. Clinton Presidential Library Staff.

This marker identifies the place of a publication.

Publications have not been scanned in their entirety for the purpose of digitization. To see the full publication please search online or visit the Clinton Presidential Library's Research Room.

The International Journal
of the Addictions

28pgs

A reprint from

**THE INTERNATIONAL JOURNAL
OF THE Addictions**



April 5, 1994

APR 5 1994

Ms. Kristine Gebbie
National AIDS Policy Coordinator
Office of National Aids Policy Coordinator
750 17th Street, N.W., Suite 1060
Washington, D.C. 20503

Dear Ms. Kristine Gebbie:

We are very excited that you have accepted our invitation to speak at the National Methadone Conference 1994, "Changing Lives - Healthy Communities." The title of your plenary session is "Health Care: Quality, Access, and Coverage for Addicted Patients." The session is scheduled on Friday, April 22, from 9:00 a.m. to 10:15 a.m. and will take place in the Independence Ballroom of the Grand Hyatt Washington. You are scheduled to speak at approximately 9:45 for no longer than 17 minutes. A copy of the Conference Program is included for your information. I will be in contact with you to discuss your remarks and information regarding logistical details.

The conference has generated enthusiastic nationwide and international interest. We are anticipating approximately 1000 participants at the conference. The purpose of this conference is to provide addiction professionals and administrators with up-to-date clinical, medical and scientific information about methadone treatment. The audience will be interested in national issues that have a direct impact on the drug treatment system, particularly methadone treatment.

As you are aware, methadone treatment, especially long-term maintenance, reduces illicit drug abuse, crime and incarceration, as well as the risk of contracting and spreading HIV infection and HIV-related tuberculosis. It is the most effective treatment modality for severe opiate addicted individuals. Nevertheless, myths and controversy continue to surround methadone treatment, stigmatizing patients and often perpetuating a negative image of methadone within the community.

We hope that your presentation will provide insight into your views about drug treatment in general, and methadone treatment in particular. The audience will be especially interested in policy or legislative issues that may have an impact on the future of methadone treatment. The various health care reform proposals leave a number of unanswered questions regarding the type of coverage that may be available for methadone patients.

In the past, much of the funding for methadone treatment has been through public funding such as State Block Grants or Medicaid. It appears uncertain whether these programs will continue to support the level of services required to address the current needs in the country. How will patients continue to be served? How will the public's

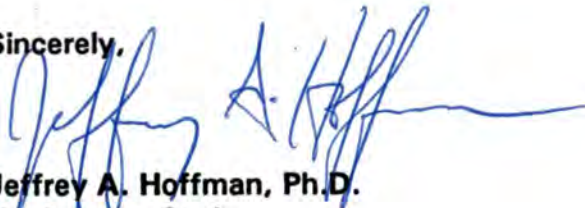
interests be preserved? These are some of the tough, but critical issues that the participants will be interested in hearing about.

Important: Please complete the attached registration form and mail or fax immediately to Bob Holden as instructed. This will allow us to prepare your conference materials. You will receive a full waived registration if you are interested in participating in any of the other conference events.

I will call your office during the next week to discuss any of these issues further in preparation for the conference. Please contact me at (202) 328-5733 if you are interested in any resource materials or if you have any questions prior to my call. I look forward to speaking with you soon.

Thank you very much.

Sincerely,



Jeffrey A. Hoffman, Ph.D.
Conference Chair

HIV epidemic being driven by:

Sexual transmission

transmission associated $\bar{c}$ substance abuse.

~~HIV~~

Also intersects $\bar{c}$ epidemics of STD's / TB

"pods" of the epidemic — not mutually exclusive —
gay men / substance abusers / women / young adults / comm of color

Nat'l Policy:

Research — Brown talked about research on alt. to

Services — health reform / Ryan white

methadone & med for cocaine addiction

Prevention —

~~Drug~~ Drug treatment expansion

HIV related services
to be documented

~~Conclusions~~

~~From~~
From HIV perspective

Continuing critical issues —

inclusion of HIV dx & Tx in sub. abuse program

doesn't necessarily mean "do it" but

see that it gets done

early dx & treatment

prevention education $\rightarrow$ sexual behavior & identity

pneumocystis prophylaxis

TB dx & treatment

Community partnerships!

Beth Ryan white &
Prevention



NATIONAL METHADONE CONFERENCE • 1994 • April 20 - 23 •

• *Changing Lives* •

Healthy Communities

RECEIVED
MAY 12 1994

May 4, 1994

Ms. Kristine Gebbie
National AIDS Policy Coordinator
Office of National Aids Policy Coordinator
Suite 1060
750 17th Street, N.W.
Washington, D.C. 20503

Dear Ms. Gebbie:

I would like to thank you very much for speaking at our Plenary Session about Health Care at the National Methadone Conference 1994 -Changing Lives, Healthy Communities. Your speech was very informative and relevant. I agree with you that it is critical to improve the communication between the AIDS and substance abuse professionals. Hopefully, this conference was a step in that direction. From all accounts, it was the most successful conference to date, and it was by far the best attended. Your support is greatly appreciated and if I can be of any assistance to you in the future, please do not hesitate to call.

It was a pleasure to have you participate with us. Thank you.

Sincerely,

Jeffrey A. Hoffman, Ph.D.
Conference Chair

- Substance abuse is one of the two driving forces in the spread of the HIV epidemic;
- There are many multi-epidemic communities from which the substance abuse, HIV , TB, STD's , violence, and crime originate.
- Currently, many these communities lack access to providers, health insurance coverage, or a public structure which can meet the needs. In fact, these communities are probably "red-lined" from obtaining coverage. (Hopefully, the President's HSA will turn around many of these inequities.);
- In order to meet the needs of the individual, we must treat the individual in the context of his or her community;
- Substance abuse treatment, particularly methadone treatment, must be provided as a comprehensive practice;
- Long-term methadone maintenance can save money;
- Continuous methadone treatment is associated with a reduced risk of contracting HIV;
- Because of the relationship among HIV infection, AIDS, and methadone treatment many programs have developed service delivery programs to deal with the high numbers of infected patients;
- Staff should receive special training in the HIV spectrum disease to provide risk reduction education, distribute condoms, and assist with referrals to infectious disease specialist;
- Primary care including T cell monitoring and prescriptions should be provided along with prophylaxis for *Pneumocystis carinii* (PCP) pneumonia and other opportunistic infections;
- An increase in tuberculosis, especially treatment resistant tuberculosis should necessitate TB case management, prophylaxis and treatment;

REGISTRATION FORM

• Use one form for each registrant. Photocopies of the form are acceptable. Please print clearly or type. •

Name _____

Title _____

Affiliation/Agency _____

Address _____

City _____ State _____ Zip Code _____

Country _____

Daytime Phone Number () _____ Fax () _____

Special Needs/Requests _____

Participation in this conference assumes knowledge and authorization of audio or video recording of portions of the conference.

Signature _____ Date _____

■ Method of Payment

(Payable in U.S. currency to National Methadone Conference 1994)

☐ Full Conference Package

☐ Single Day _____
(Indicate day)

☐ Awards Banquet Only

Total Amount Enclosed: \$ _____

Enclosed:

☐ Check

☐ Money Order

☐ Credit Card (VISA or Mastercard only)

☐ Purchase Order

Purchase Order Number _____

The F.I.D. number for the American Methadone Treatment Association, Inc. is 13-3299366.

VISA # _____ Expiration date _____

Mastercard # _____ Expiration date _____

Signature _____

■ Continuing Education Units

Please mark your professional affiliation:

☐ Physician

☐ Psychologist

☐ Nurse

☐ Mental Health Counselor

☐ Marriage and Family Therapist

☐ Licensed Clinical Social Worker

☐ Certified Addictions Professional

☐ Physician Assistant

☐ Other _____

■ Attendance

☐ I plan to attend the Welcome Reception, Wednesday, April 20, 1994.

☐ I plan to attend the Awards Banquet, Friday, April 22, 1994.

For office use only _____ Date payment received _____

Clip and mail with payment

CONFERENCE REGISTRATION

CONFERENCE REGISTRATION IS BEING PROCESSED THROUGH PIDARC OF WASHINGTON, DC

■ Conference Registration

- Payment accompanying this registration form constitutes registration.
- Registration fees must be paid in full.
- If you completed the Advance Registration form and sent in your fees, you do not need to complete and return the registration form in this Conference Brochure.
- Pre-registration deadline: postmarked on or before April 15, 1994.
- Written cancellations must be received by April 15, 1994 for a 75% refund. No refunds will be given for cancellations received after April 15.
- The conference badge that you will receive on-site is your admission to all events.

To register for the conference, mail the tear-off Registration Form with your payment in full (payable to *National Methadone Conference 1994*) to:

Bob Holden, Conference Treasurer,
National Methadone Conference 1994
c/o PIDARC, 2112 F Street, N.W., Suite 101,
Washington, D.C. 20037, U.S.A.

For additional information, call Audrey Cannamela at (202) 296-6611 or fax (202) 296-5455.

■ Conference Registration Fees

	PRE-REGISTRATION 2/1/94 - 4/15/94	ON-SITE (4/20-23/94)
FULL CONFERENCE PACKAGE (Includes admission to all Plenary and Special Sessions, Workshops, Exhibits, Continental Breakfasts, Welcome Reception, and Awards Banquet.)		
One person from agency	\$365.00	\$385.00
Two or more from same agency, each	\$345.00	\$365.00
SINGLE DAY REGISTRATION (Does not include banquet)		
Thursday or Friday	\$175.00	\$175.00
Wednesday or Saturday	\$115.00	\$115.00
AWARDS BANQUET ONLY		
Child's plate (12 and under)	\$25.00	\$25.00

■ Continuing Education Units (CEUs)

Continuing Education Units for both the conference workshops and the pre-conference course will be available. Application has been made to offer CEUs through Howard University to physicians, psychologists, nurses, certified addiction professionals, licensed clinical social workers, mental health counselors, mar-

riage and family therapists and physician assistants. For additional information, please contact Lynne McArthur, Project Director, Methadone Treatment Improvement Project, Johnson, Bassin & Shaw, Inc. (301) 495-1080.

■ Important Dates to Remember

CONFERENCE April 20 - 23, 1994

PRE-REGISTRATION POSTMARK DEADLINE April 15, 1994

HOTEL RESERVATION CONFERENCE RATE DEADLINE March 21, 1994

THE WHITE HOUSE
WASHINGTON

January 30, 1994

Karst J. Besteman
Chairman, Plenary Sessions
Program Planning Committee
Center for Drug Treatment and Research
1156 15th Street, N.W.
Suite 200
Washington, DC 20005

Dear Mr. Besteman:

This letter confirms the appearance of Kristine M. Gebbie, National AIDS Policy Coordinator, at the National Methadone Conference, on Friday, April 22, 1994 at 9:00 a.m. in Washington, DC to deliver a keynote address on the intersection of HIV/AIDS and methadone treatment.

Please call me at (202) 632-1090 with any questions or for further clarification. I am enclosing a biographical sketch and curriculum vitae for your reference.

Sincerely,

W. Steve Lee

W. Steve Lee, Executive Assistant
and Scheduler to the
National AIDS Policy Coordinator

Enclosures



NATIONAL METHADONE CONFERENCE • 1994 • April 20 - 23 •

• *Changing Lives* •

Healthy Communities

Oct 20, 1993

OCT 26 1993

Ms. Kristine Gebbie, R.N., M.N.,
Office of the National AIDS Policy Coordinator
Executive Offices of the President
750 17th St., N.W., Suite 1060,
Washington, DC. 20503

*w/ Peter Edelman
picture/bio*

Dear Ms. Gebbie:

The National Methadone Conference 1994 will be hosted by Washington, DC. on April 20-23, 1994 at the Grand Hyatt Washington. This conference will be attended by 700-1000 addiction treatment professionals, recovering patients, and community advocates as well as health officials from foreign countries. The conference theme is: "Changing Lives-Healthy Communities".

The Planning Committee of the conference invites you to address the plenary session at 9 a.m. on the morning of April 22, 1994. Attendees at the conference are dealing on a daily basis with the impact of the human immunodeficiency virus (HIV) within the methadone maintenance treatment programs.

We are particularly interested in knowing the priorities of your office, policies and treatment practices which can help us provide better addiction services and primary health care to our patients. Successful models and strategies to lower the pattern of HIV risk behavior of our patients and their partners are of special interest to us.

The impact of the HIV and AIDS has changed the focus of our clinical practice from the concentration on addiction issues with a relatively healthy patient population to a broad range of health care, communicable disease, and public health issues.

I will be contacting your office to confirm your participation in this important national conference. If you or your staff need any further information, please contact me at (202) 737-2970.

Sincerely,

Karst J. Besteman
Chairman, Plenary Sessions,
Program Planning Committee,
National Methadone Conference 1994

Clinton Presidential Records Digital Records Marker

This is not a presidential record. This is used as an administrative marker by the William J. Clinton Presidential Library Staff.

This marker identifies the place of a publication.

Publications have not been scanned in their entirety for the purpose of digitization. To see the full publication please search online or visit the Clinton Presidential Library's Research Room.

Dear Colleague:

Welcome to Washington, DC for the National Methadone Conference 1994, "Changing Lives – Healthy Communities!" Prepare yourself for a peak experience! As you can see from the packed program, you will be kept very busy during the next few days. Beginning with the Pre-Conference session for medical practitioners and the Report to the Field by Federal agency administrators, you will gain new knowledge and insights even before enjoying the Welcome Reception on Wednesday evening.

Thursday morning begins with the opening Plenary Session featuring our distinguished hosts and key leaders in the field. It continues with the first in a series of excellent workshops that will conclude on Saturday morning. Thursday afternoon, we invite you to engage in hot topic discussions, review state-of-the-art research at the poster session, and NIDA invites you to participate in the International Forum. Our second dynamic Plenary Session on Friday morning will focus on the role of drug treatment in primary health care. Finally, don't miss the concluding Town Hall Meeting on Saturday, "Effective Advocacy: Making Our Voices Heard." It is time for patients and advocates to speak out on behalf of treatment and recovery. This inspiring meeting will be a new starting point.

Friday night is the Awards Banquet, which promises to be captivating, delightful, and elegant as ever! We encourage you to join us in honoring some of the outstanding contributors in the field. We may even have a little surprise for you.

The first National Methadone Conference Jam'n Dance will take place Thursday evening, so bring your dancing shoes and check out the hidden talents of your colleagues. Throughout the conference you may take the opportunity to see the latest in technology and product development in the Exhibit Area. Anonymous Meetings are also available in the early evenings.

This conference has attracted a great turnout, so we advise you to arrive at the sessions on time. If you are unable to attend all of the workshops that you would like, audiotapes will be available for you to order on site. If you have any questions or problems, please seek assistance from the Conference Office in the main foyer.

On behalf of the Mayor of the District of Columbia, Sharon Pratt Kelly, the American Methadone Treatment Association, Inc., the Planning Committee, and my Honorary Co-Chair, Maude R. Holt – welcome to DC!

Sincerely,

A handwritten signature in black ink, reading "Jeffrey A. Hoffman". The signature is fluid and cursive, with a long horizontal stroke at the end.

Jeffrey A. Hoffman, PhD
Conference Chair

Resource Materials
For Your Information



What is the Future of MMTP Under Health Care Reform?

by Mark Parrino, M.P.A., President
The American Methadone Treatment
Association

National Health Care Reform and Managed Care Initiatives are creating new anxieties for methadone treatment providers. Clinical personnel are providing a richer mix of services to patients in need of more intensive care.

Program Administrators are questioning the impact that health care reform will have on their respective outpatient programs.

While the outcome of the Clinton Administration's proposals are uncertain, the following points should provide some guidance:

- Funds from the existing substance abuse block grant could be diverted to pay for mental health and other health care services. This could severely cut back subsidies to publicly funded methadone treatment programs. Individual states would also be allowed to transfer current drug and alcohol treatment dollars into newly formed "regional health alliances" to promote integrated health care.
- The proposed substance abuse benefit does not provide adequate coverage for pregnant addicted women, women with children or homeless addicted people. In fact, funding for such critical patient populations may be restricted.
- The Administration's proposal would merge drug and alcohol benefits with a mental health benefit. People who would need access to both substance abuse and mental health services would be restricted to only one set of benefits. A number of our patients could easily exhaust either benefit category, and the patient would lose access to any additional care. Hopefully, the drug and alcohol benefits will remain distinct from mental health benefits.
- The proposed plan appears to support the provision of substance abuse services through the existing network of drug treatment programs. Methadone maintenance treatment programs would need to be designated as "essential providers" in order to effectively compete with health maintenance organizations. HMOs do not have a good track record in treating methadone main-

tained patients. Free-standing methadone programs will be at even greater risk without an "essential provider" designation.

- The proposed plan contains a cost-sharing requirement which would apply to outpatient methadone treatment programs, and would include even the poorest patients. In fact, patients in the lowest cost-sharing category of the three schedules would be required to pay \$10.00 for every outpatient counseling session. A number of national organizations, including the American Methadone Treatment Association, will recommend eliminating such cost-sharing requirements, since this provision would be financially prohibitive for most of our patients, especially at the higher cost-sharing levels.

It is also uncertain if the existing Federal

NATIONAL HEALTH
CARE REFORM...?

Confidentiality of Alcohol and Drug Abuse Patient Records will remain in effect. It is possible that these powerful protections will be weakened under a single uniform set of general medical protections. The American Methadone Treatment Association will argue for the necessity of maintaining the most stringent confidentiality standards in order to protect the interests of our patients.

The American Methadone Treatment Association will work with other national organizations in protecting the collective interests of our patients and their families. The Administration's proposal will present extraordinary challenges to methadone treatment providers if the existing provisions are implemented. In closing, it is important to cite the extraordinary leadership of the Legal Action Center in aggressively tracking these issues and in providing clear guidance to the substance abuse treatment community.

Human Immunodeficiency Virus Seroconversion Among Intravenous Drug Users In- and Out-of-Treatment: An 18-Month Prospective Follow-Up

David S. Metzger, George E. Woody, A. Thomas McLellan, Charles P. O'Brien, Patrick Druley, Helen Navaline, Dominick DePhilippis, *Paul Stolley, and †Elias Abrutyn

*University of Pennsylvania/VA Center for Studies of Addiction; †Philadelphia VA Medical Center and Medical College of Pennsylvania, Philadelphia, Pennsylvania; and *University of Maryland, Baltimore, Maryland, U.S.A.*

Summary: Our objective was to determine the prevalence and incidence of human immunodeficiency virus (HIV) infection and related risk behaviors among opiate-abusing intravenous drug users (IVDUs) either in or out of methadone treatment. The subjects, 152 in-treatment and 103 out-of-treatment intravenous opiate users, were followed prospectively for 18 months. Behavioral and serologic assessments were made at 6-month intervals, with complete information available on 89% of the sample. Subjects were recruited from a single methadone maintenance program and the surrounding neighborhood in north-central Philadelphia. At baseline, the HIV seroprevalence rate for the total sample was 12%; 10% for the methadone-maintained group and 16% for the out-of-treatment group. Out-of-treatment subjects were injecting drugs, sharing needles, visiting shooting galleries, and practicing unsafe sex at significantly higher rates than in-treatment subjects. Follow-up of HIV-negative subjects over the next 18 months showed conversion rates of 3.5% for those who remained in methadone maintenance versus 22% for those who remained out of treatment. The sixfold difference in rate of seroconversion between the two groups suggests that although rapid transmission of HIV still occurs, opiate-abusing IVDUs who enter methadone treatment are significantly less likely to become infected. In contrast, those opiate addicts who do not enter treatment are at significantly higher risk of contracting and spreading the disease. Implications for developing additional risk interventions for out-of-treatment IVDUs are discussed. **Key Words:** Human immunodeficiency virus—Prevalence—Incidence—Intravenous drug users—Methadone treatment—Risk interventions.

Stopping the spread of human immunodeficiency virus (HIV) among intravenous drug users (IVDUs) has become a national public health objective (1-3). Since the test for antibodies to HIV became avail-

able in 1985, studies conducted among IVDUs in the United States have found seroprevalence rates ranging from 0 to 61%. In examining factors associated with this marked variability in seroprevalence, past studies have identified both personal and situational characteristics, including city of drug use, drug of abuse, recency of injection initiation, access to new needles, and demographic characteristics (4-9).

While information from seroprevalence studies

Address correspondence and reprint requests to Dr. Metzger at University of Pennsylvania/VA Medical Center, Center for Studies of Addiction, 3900 Chestnut Street, Philadelphia, PA 19104, U.S.A.

Manuscript received August 14, 1992; accepted January 5, 1993.

has been very useful in characterizing areas and populations at greatest risk of the disease, such studies cannot provide information on those factors within the high-risk regions and populations that are most associated with HIV *seroconversion*. Comparatively few studies have focused on factors associated with variability in seroconversion among IVDUs. This type of information could be particularly important to the planning and evaluation of educational, treatment, and other types of prevention interventions by permitting a more focused approach on those at particularly high risk within the IVDU group.

This report presents the results of a prospective, longitudinal study examining rates of both seroprevalence and seroconversion among IVDUs from Philadelphia over an 18-month period. In this effort we have built upon earlier studies of seroprevalence by focusing our efforts on IVDUs from within a single, high-prevalence community of the city. Because we thought that participation in methadone treatment could be an important marker of risky behavior (10-14) and HIV spread, we examined HIV prevalence and conversion rates separately among out-of-treatment (OT) and in-treatment (IT) cohorts of IVDUs from this community.

METHODS

In-Treatment Subject Recruitment

IT subjects were recruited from the outpatient methadone program of the Girard Medical Center, the largest methadone program in Pennsylvania with an average census of 440. This program is located in north-central Philadelphia, a neighborhood with areas of severe poverty, inadequate housing, and high rates of drug use. All patients in the program were invited to take part in the initial phase of this study beginning in July of 1989. Three hundred seventy-nine patients (86% of the clinic census) completed a self-administered questionnaire, which asked about their recent participation in AIDS high-risk behaviors.

One hundred fifty-two of those patients who completed the questionnaire were randomly selected using the sampling routine of the Statistical Package for the Social Sciences (SPSS). Each was asked to participate in the longitudinal serologic study. Seventy-two patients who did not keep their appointments were each replaced with a randomly selected alternate, producing a 68% (152 of 224) participation rate. Although five individuals reported that they did not wish to take part in the study because of their concern about HIV infection, the majority of nonresponders simply did not answer our request for participation. Analyses of demographic characteristics, drug use patterns, treatment histories, and risk behaviors did not identify any differences ($p > 0.05$ by t test or χ^2) among those who agreed to participate ($n = 152$), those who were not selected ($n = 155$), and those who did not respond ($n = 72$).

Out-of-Treatment Subject Recruitment

One hundred three OT subjects were recruited through referrals from IT subjects and by community outreach in the neighborhood surrounding the Girard Medical Center. Since we wanted a sample comparable to the IT subjects with regard to drug use, selection for participation was made after the completion of a brief, semistructured screening interview conducted by the research staff. To be eligible for study participation, referrals had to be >18 years of age, have a drug history that included a period of regular (at least three times per week) intravenous opiate use, and could not have been in any drug abuse treatment during the preceding 10 months. Subjects meeting these inclusion criteria were enrolled in the study. Twenty-five subjects were excluded because they did not meet the study criteria (most of them had no history of opiate use), and only three eligible subjects decided not to continue after learning more about the project.

PROCEDURE

All subjects were assessed at 6-month intervals. At each assessment point, subjects in both the IT and OT groups provided informed consent and were given pretest HIV counseling. Counseling sessions were designed to ensure that subjects were aware of the potential emotional impact of knowing their HIV status, that there was a possibility that a negative result could be found even after viral exposure, and that there were resources available for the treatment of HIV infection should they wish to take advantage of them. As part of counseling, risk-reduction strategies were discussed with all subjects, including instruction on how to use bleach and the importance of condom use. Also, all OT subjects were informed of the available treatment options and were encouraged to enroll.

Following pretest counseling, blood was collected and tested for antibodies to HIV using an ELISA technique with Western blot confirmation. Criteria for a positive Western blot required evidence of the presence of three viral components: p24, p31, and either gp41 or gp160. All specimens were tested by the Red Cross and were confirmed independently at a second laboratory; no discordant results were found.

Additionally, all subjects were assessed to determine their patterns of illicit drug use, participation in drug treatment, needle use, and sexual behaviors. The instruments used were the Addiction Severity Index (15), a 45-min structured interview that provides assessments of problem severity in seven functional areas commonly impaired among drug abusers; a modified version of the AIDS Initial Assessment (AIA) (16), a 30-min interview assessing participation in behaviors related to HIV transmis-

sion; and the Risk for AIDS Behaviors (RAB) (17), a self-administered questionnaire that also assesses needle-sharing and unprotected sexual activity. The staff conducting these interviews were knowledgeable about both substance abuse and HIV infection and were sensitive to the needs and concerns of IVDUs. Each subject was paid \$20 for the assessment session, which typically lasted ~2 h.

Chi-square and *t* tests were used to compare the demographic and behavioral characteristics of the two samples at baseline. Differences in incidence rates between treatment groups were tested for significance using relative odds ratios. Probabilities of ≤ 0.05 were considered significant.

RESULTS

Demographic Comparisons

Table 1 presents comparisons of selected socio-demographic characteristics between the two cohorts at the beginning of the study. Comparisons found the OT sample to be younger (mean age of 38 versus 40, $p < 0.05$), with more blacks (78% versus 59%, $p < 0.05$) and more men (85% versus 69%, $p < 0.01$), than the IT sample. The groups did not differ by marital status or educational level. More IT subjects were working (25% versus 10%, $p < 0.01$), and while income was significantly lower among the IT subjects, fewer reported receiving money from illegal activity (15% versus 34%, $p < 0.01$).

TABLE 1. Sample characteristics

Characteristics	In treatment (n = 152)	Out of treatment (n = 103)	Significance
Age (yrs)	40 ± 8	38 ± 8	$t = 2.31, p < 0.05$
Gender (% male)	69%	85%	$\chi^2 = 7.81, p < 0.01$
Marital status			NS
Single/never married	43%	54%	
Married	23%	17%	
Separated/divorced	28%	25%	
Widowed	6%	4%	
Race			$\chi^2 = 10.53, p < 0.05$
Black	59%	78%	
White	31%	17%	
Hispanic	9%	5%	
Other	1%	1%	
Highest grade completed	11	11	NS
Monthly income (median)	\$196	\$300	$\chi^2 = 8.01, p < 0.01$
Any illicit income	15%	34%	$\chi^2 = 11.93, p < 0.01$
Employed (% full- or part-time)	25%	10%	$\chi^2 = 9.39, p < 0.01$

Drug Use Comparisons

Age of initiation of drug use did not differ between the two samples, with both groups having used marijuana by age 17, heroin by 20, and cocaine by 27. With regard to treatment participation, the IT subjects had entered treatment more times than the OT sample (5.6 versus 3.5, $p < 0.01$). The average daily methadone dose among the 120 IT subjects reporting this variable was 44 mg (median = 45; mode = 50).

Although continued illicit drug use was reported by a substantial proportion of the IT sample (Table 2), the prevalence of drug use at the initial interview was consistently less than the OT sample. Overall rates of injection were significantly lower among IT subjects, and, for those who reported injecting, weekly heroin use was less than half as prevalent (33% versus 69%, $p < 0.01$), and cocaine injection was one-third as prevalent (22% versus 61%, $p < 0.01$) as in the OT sample.

The OT sample also reported engaging in more high-risk practices related to drug use (Table 2). Of those who reported injecting, a higher proportion of the OT sample had visited shooting galleries (55% versus 33%, $p < 0.01$) and crack houses (28% ver-

TABLE 2. AIDS high-risk behaviors at baseline by treatment status

Behaviors	In treatment (n = 152)	Out of treatment (n = 103)
Injection during previous 6 months ^a		
No injections	18% (27)	6% (6)
Injections but no sharing	48% (73)	24% (25)
Sharing 1–2 times	13% (20)	10% (10)
Sharing ≥ 3 times	21% (32)	60% (62)
Behaviors of those injecting during previous 6 months ^b		
Weekly injections during previous months		
Heroin	33% (40)	69% (61) ^a
Cocaine	22% (27)	61% (54) ^a
Combined ("speedball")	32% (39)	45% (40) ^c
Been to "shooting gallery"	33% (41)	55% (48) ^a
Been to "crack house"	11% (13)	28% (25) ^a
Report difficulty getting new needles	14% (17)	25% (22) ^c

^a $p < 0.01$ by chi-square.

^b Of those reporting injecting, two in-treatment subjects and nine out-of-treatment subjects had missing values for weekly injections, visiting "crack house," visiting "shooting gallery," or needle acquisition and were omitted from these analyses. For those in treatment $n = 123$; for those not in treatment $n = 88$.

^c $p < 0.05$ by chi-square.

sus 11%, $p < 0.01$). More subjects in the OT group reported difficulty acquiring new needles (25% versus 14%, $p < 0.05$). Finally, the OT sample was engaging in needle-sharing at higher rates ($p < 0.01$) than the IT group. In fact, 70% of the OT group reported sharing needles at least once during the previous 6 months, as compared with 34% of IT subjects.

Few sexually active subjects from either group were using condoms on a regular basis (12% of the OTs and 15% of the ITs). However, the OT group reported a higher average number of partners (4.6 versus 2.3, $p < 0.01$) during the previous 6 months and more frequently engaged in commercial transactions for sex (46% versus 28%, $p < 0.01$).

Follow-up Rates Over 18 Months

Serostatus was determined for 91% (138 of 152) of the IT subjects at each follow-up point during the first 18 months of study. One subject who was HIV positive at baseline died between months 12 and 18 from HIV-related illness. Four of the 14 subjects whose serostatus was unknown also died. The cause of death in one case was drug overdose; two died from alcohol-related illness; and one died from "massive infection." Of the remaining 10 subjects, we were unable to locate one, another did not wish to continue, six were interviewed while incarcerated but were unable to have blood drawn, and two had inaccessible veins.

Among the OT group, serostatus was determined at each follow-up point for 85% (88 of 103) of the subjects, including one HIV-positive subject who died after the 12-month follow-up from an AIDS-related illness. Nine of the 15 OT subjects whose serostatus was unknown at the 18-month follow-up could not be located. Of the remaining six subjects, three were incarcerated, and three were residing out of state. Although these six subjects completed interviews, we were unable to obtain blood specimens.

To examine the potential impact of attrition, baseline data provided by subjects whose serological status was unknown at the 18-month follow-up were compared with retained subjects who were HIV negative at baseline. A higher proportion of the subjects ($n = 29$) who were lost to follow-up were sharing needles (65% versus 45%, $p = \text{NS}$), were engaging in unsafe sex (48% versus 31%, $p < 0.05$), and were likely to have purchased a needle in a shooting gallery (57% versus 33%, $p < 0.05$).

Thus, those who were lost to follow-up were more often engaging in behaviors known to increase the risk of HIV infection than those who were retained. These differences did not differ between the two cohorts.

HIV Prevalence

Prevalence rates were calculated using only those subjects with complete serologic data. Figure 1 presents the infection rates for the subjects ($n = 226$) whose serostatus was known at all four assessment points. For these subjects, infection rates rose over an 18-month period from 11% (15 of 138) to 15% (21 of 138) among the IT sample and from 18% (16 of 88) to 33% (29 of 88) among the OT sample. These prevalence rates differed significantly at both 12 months ($p < 0.01$) and 18 months ($p < 0.01$).

HIV Incidence

These increasing prevalence rates reflect the seroconversion of 6 (4.4%) IT subjects and 13 (14.8%) OT subjects, producing an overall incidence rate of three conversions per 100 person years of exposure for the IT cohort and 10.7 conversions per 100 person years of exposure for the OT cohort. As seen in Table 3, incidence within each cohort varied by follow-up interval. Among the IT cohort, respective 6-month incidence rates were 4.5 conversions per 100 person years of exposure during the first interval. This number dropped to 3.3 in the second interval and to 1.7 during the third interval. Among the OT cohort, dramatically higher incidence rates

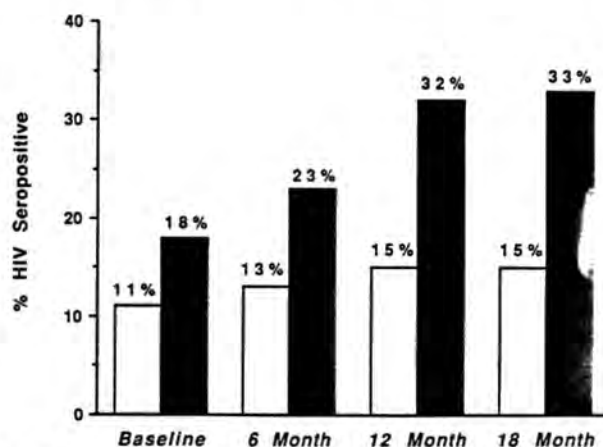


FIG. 1. HIV infection rates by baseline treatment status. White bars, in treatment ($n = 138$); black bars, not in treatment ($n = 88$).

TABLE 3. HIV prevalence and incidence by initial treatment status

	In treatment			Out of treatment		
	No. pos/ no. tested	% Pos	Incidence per 100 person yrs	No. pos/ no. tested	% Pos	Incidence per 100 person yrs
Initial assessment	15/152	10%	—	16/103	16%	—
6 Months	18/146	12%	4.6	20/88	23%	11.1
12 Months	20/138	15%	3.3	28/87	32%	23.9
18 Months	21/138	15%	1.7	29/88	33%	3.3

Pos, positive.

were found. Seroconversion occurred at a rate of 11.1 per 100 person years of exposure during the initial interval. This rate rose to 23.9 during the second interval and dropped to 3.3 during the final interval.

Seroconversion and Treatment Participation

During the course of the study, 15 OT subjects entered methadone treatment, and 42 IT subjects left treatment. To further examine the relationship between treatment participation and seroconversion, all of the initially seronegative subjects with complete serologic data ($n = 185$) were grouped according to their participation in methadone treatment over the 18-month study period. Forty-six percent ($n = 85$) were in methadone treatment at all points, 24% ($n = 45$) were in treatment at one, two, or three points (intermittent treatment), and 30% ($n = 55$) were not in methadone treatment at any point.

As seen in Fig. 2, 3.5% (three of 85) of those in treatment at all points became HIV positive by 18 months; 4.4% (two of 45) of the intermittent treat-

ment sample seroconverted, and 22% (12 of 55) of the untreated sample seroconverted. Compared with the group who was in methadone treatment at all points, the odds of seroconversion were 7.63 among the untreated subjects ($CI = 1.99-29.27$; $p < 0.01$) and 1.08 (NS) for the intermittent treatment group. Thus, the subjects who remained out of methadone treatment were 7.63 times more likely to become HIV positive during the 18-month study period than those who remained in treatment. Furthermore, the untreated group was six times ($CI = 1.23-29.34$; $p < 0.05$) more likely to seroconvert than the intermittent treatment group. Both of the seroconverters in the intermittent treatment group began the study in treatment, and each had been out of methadone treatment during the 6 months before their seroconversion.

Multiple logistic regression was used to determine the relative odds of seroconversion while controlling for race, gender, age, and needle-sharing. Although the odds of seroconverting relative to the treated group were somewhat lower ($OR = 5.39$; $CI = 1.64-17.77$; $p < 0.01$) with these variables in the equation, treatment status remained as the only significant factor.

COMMENT

These data provide an examination of seroconversion and high-risk behaviors among two cohorts of IVDUs. The prevalence of HIV infection in the overall group of 255 opiate addicts was 12% at the beginning of the study. Eighteen months later, this figure had increased to 22%. These aggregate data therefore provide confirmation of other studies showing that as a group, IVDUs continue to be at significant risk for becoming infected with HIV. The incidence rates reported here are higher than any previous U.S. study and thus require careful interpretation (1,18,19). We are not suggesting that all IVDUs in Philadelphia continue to seroconvert

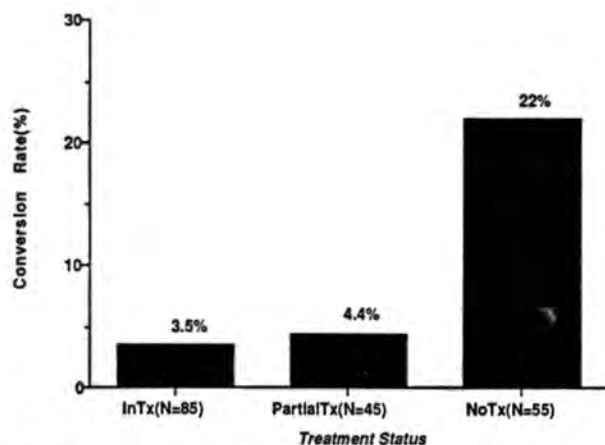


FIG. 2. Eighteen month HIV conversion by treatment retention.

at a rate of 15% every 1.5 years. In fact, even within this sample, by the final 6-month interval, seroconversion rates had dropped to 2.2%. It is quite likely that these data merely reflect the pace with which the virus can spread among IVDUs, moving rapidly within active needle-sharing groups in concentrated geographic areas. The prospective nature of this study allowed us to capture this phenomenon during a relatively short period. Undoubtedly, similar rapid "bursts" of infection have occurred in other high prevalence areas, such as New York City, where retrospective data suggest that seroprevalence rates rose from <20% to 50% in just 3 years (8).

The finding that 3.5% of those who continued to participate in methadone treatment throughout the 18 months of observation seroconverted, while 22% of those who remained out of methadone treatment seroconverted is striking. Although these differences suggest that methadone treatment reduces the incidence of seroconversion, several aspects of this study prevent such a definite conclusion. These aspects include the self-selected nature of treatment participation, the relatively small sample size, the nonprobability techniques used in the recruitment of OT subjects, and the focus on a particular neighborhood within a single city. These factors do limit our ability to generalize the findings. Yet it is important to note that the IT subjects were randomly selected and appear to be representative of the larger clinic population from which they were drawn. The OT subjects were referred by IT subjects and were typically members of their social networks. In addition, OT subjects were similar to IT subjects with regard to their abuse of opiates, education levels, and marital status. Given the high rate of subject retention, it is unlikely that our findings are a reflection of the effects of attrition. In fact, when compared with those who were retained, those subsequently lost to follow-up (12%) reported higher rates of risky behavior, suggesting that incidence rates might have been even higher had we been able to retain all subjects.

Although it is possible that long-term methadone treatment helps prevent HIV infection by normalizing immune function in IVDUs (20), the difference in these incidence rates is more likely due to differing levels of risk behaviors (Table 2). Yet because of the limitations cited above, we cannot conclude that the lower rates of risk behaviors are the direct effects of the methadone program. Furthermore, because of the known efficacy of methadone treat-

ment, it was not possible, and it may never be possible, to randomly assign IVDUs who apply for treatment to conditions of methadone versus no treatment. It is also important to note that past studies have not consistently found an association between methadone participation and lower levels of seropositivity (21,22). Thus, the lower rates of HIV risk behaviors found among the IT subjects may be independent of their treatment participation, a conclusion that agrees with the comparably lower incidence rate found among those who were treated only part of the time.

While treatment status at the time of recruitment may simply be a marker for motivation and lower rates of needle-sharing, there is evidence to support the conclusion that methadone treatment is causally related to the lower levels of risk behaviors and seroincidence observed here. First, numerous studies have now documented the effectiveness of methadone treatment in helping patients reduce their use of opioids and other illicit substances as well as needle-sharing (10-13). The data reported here are in agreement with this body of research. Also, given the high rate of relapse to drug use known to occur after methadone treatment, it is unlikely that reductions in risk behaviors could be maintained without the ongoing support of the treatment program (23). In this regard it is important to note that the two subjects treated intermittently who seroconverted began the study while in treatment and became infected after leaving treatment, suggesting that discontinuation of treatment may be a marker for high-risk behaviors.

As reported, high-risk behaviors did not cease among IT subjects. In fact, participation in risk behaviors remained unacceptably high among those in treatment. However, their rates of seroconversion were two to three times lower than those of the OT group. We have examined characteristics associated with continued needle-sharing among IVDUs in methadone treatment and found that the subgroup who continued to share were characterized by higher levels of psychiatric symptoms and less time in treatment (24).

Implications for Out-of-Treatment IVDUs

Regardless of whether the comparatively lower rates of HIV seroconversion among the IT cohort were due to preexisting subject differences, the direct effects of treatment, or to a combination of these factors, the results of this prospective study

offer some cause for optimism about IVDUs who are in methadone maintenance. In contrast, the high-risk behavior and elevated incidence of HIV infection observed among the OT subjects suggest these IVDUs are at substantial risk for both acquiring and spreading HIV. In fact, these data may actually underestimate incidence in the larger community, since our contact with these OT subjects included repeated HIV testing and education, potential interventions that are often not readily available to IVDUs who are not in treatment.

It is possible that intensified outreach efforts could draw more IVDUs into methadone maintenance or other forms of drug treatment and that participation in treatment would produce positive changes. However, we believe that novel and more creative approaches to treatment will be required to achieve this goal. Eighty percent of the OT subjects had been in methadone maintenance an average of three times and were quite familiar with other treatment options. Moreover, these subjects were encouraged by our staff to enter treatment, but almost all rejected these offers despite the fact that treatment was readily available, with no waiting lists and at no cost. Clearly, traditional approaches to substance abuse treatment were not very attractive to these OT subjects.

Our success in subject recruitment and retention, however, does suggest that these individuals were interested in their HIV serostatus and were willing (with payment incentives) to participate in behavioral and serologic assessments and in brief counseling sessions over the 18-month period of monitoring. It is important to note that our ability to engage out-of-treatment IVDUs in activities of this type is not unique (25-28). Although retention rates in this study are unusually high, groups have been able to locate and enroll out-of-treatment IVDUs in programs of risk-reduction education, serologic testing, and counseling. Clearly, under some circumstances, untreated opiate-abusing IVDUs are reachable and can be engaged in at least minimal levels of intervention. Thus, we feel that a major finding of this study is the ongoing participation of these "treatment resistant" IVDUs who appear to be at greatest risk of HIV infection and transmission. Perhaps these tentative steps toward treatment could be expanded by new pharmacotherapies, such as buprenorphine, that are effective and more attractive to a broader base of the IVDU population (29). It is also clear that IVDUs will be attracted to and retained by those interventions that

address their extensive unmet basic needs (e.g., housing, food, and financial support), either directly or through the establishment of closer links between substance abuse treatment and other important social services.

Acknowledgment: The work reported here was supported by NIDA grants no. RO1 DA05593 and no. DA05186. This work could not have been completed without support and cooperation of Dr. Christopher D' Amanda and the staff of the Goldman Clinic of the Gerard Medical Center of the North Philadelphia Health System. The authors thank Joseph Williams, Suzette Dyanick, Shoshana Waskow, and Raymond Incmikoski for their assistance in the completion of this study. This article is dedicated to Patrick Druley, who died of AIDS on December 18, 1992.

REFERENCES

1. Hahn RA, Onorato IM, Jones ST, et al. Prevalence of HIV infection among intravenous drug users in the United States. *JAMA* 1989;269:2677-84.
2. Centers for Disease Control. Update: acquired immunodeficiency syndrome associated with intravenous drug use—United States, 1988. *MMWR* 1989;38:165-70.
3. Centers for Disease Control CDC. The HIV/AIDS epidemic: the first 10 years. *MMWR* 1991;40:357-69.
4. Lee HH, Weiss SH, Brown LS, et al. Patterns of HIV-1 and HTLV-I/II in intravenous drug abusers from the middle Atlantic and central regions of the USA. *J Infect Dis* 1990;162:347-62.
5. Chaisson RE, Bacchetti P, Osmond D, et al. Cocaine use and HIV infection in intravenous drug users in San Francisco. *JAMA* 1989;261:561-5.
6. Koblin BA, McCusker J, Lewis BF, et al. Racial/ethnic differences in HIV-1 seroprevalence and risky behaviors among intravenous drug users in a multisite study. *Am J Epidemiol* 1990;132:837-45.
7. Nelson KE, Vlahov D, Cohn S, Lindsay A, Solomon L, Anthony JC. Human immunodeficiency virus infection in diabetic intravenous drug users. *JAMA* 1991;266(16):2259-61.
8. Des Jarlais DC, Friedman SR, Novick DM, et al. HIV-1 infection among intravenous drug users in Manhattan, New York City, from 1977 through 1987. *JAMA* 1989;261:1008-12.
9. Schoenbaum EE, Hartel D, Selwyn PA, et al. Risk factors for human immunodeficiency virus infection in intravenous drug users. *N Engl J Med* 1989;321:874-9.
10. Ball JC, Lange WR, Myers CP, Friedman SR. Reducing the risk of AIDS through methadone maintenance treatment. *J Health Soc Behav* 1988;29:214-26.
11. Hubbard RL, Marsden ME, Cavanaugh E, et al. Role of drug abuse treatment in limiting the spread of AIDS. *Rev Infect Dis* 1988;10:377-84.
12. Gerstein DR, Harwood HJ, eds. *Treating drug problems: a study of the evolution, effectiveness, and financing of public and private drug treatment systems*, vol. 1. Washington, D.C.: Institute of Medicine, 1990.
13. Abdul-Quader AS, Friedman SR, DesJarlais D, et al. Methadone maintenance and behavior by intravenous drug users that can transmit HIV. *Contemp Drug Prob* 1987;11:425-34.
14. Novick DM, Farci P, Croxson TS, et al. Hepatitis D virus and human immunodeficiency virus antibodies in parenteral drug abusers who are hepatitis B surface antigen positive. *J Infect Dis* 1988;158:795-803.

15. McLellan AT, Luborsky L, O'Brien CP, et al. An improved evaluation instrument for substance abuse patients: the Addiction Severity Index. *J Nerv Ment Dis* 1980;168:26-33.
16. Centers for Disease Control. CDC. Risk behaviors for HIV transmission among intravenous drug users not in treatment: United States 1987-1989. *MMWR* 1990;39:273-6.
17. Metzger DS, Woody GE, McLellan AT, et al. The impact of HIV testing on risk for AIDS behaviors. In: Harris L., ed. *Problems of drug dependence: Proceedings of the 53rd Annual Scientific Meeting*. Rockville MD: National Institute on Drug Abuse. NIDA Research Monograph No. 119, 1992; 297-8.
18. Des Jarlais DC, Friedman SR, Marmor M, et al. Development of AIDS, HIV seroconversion, and potential co-factors for T4 cell loss in a cohort of intravenous drug users. *AIDS* 1987;1:105-11.
19. Anthony JC, Vlahov D, Nelson KE, Cohn S, Astemborski J, Solomon L. New evidence on intravenous cocaine use and the risk of infection with human immunodeficiency virus type 1. *Am J Epidemiol* 1991;134(10):1175-88.
20. Novick DM, Ochshorn M, Violette G, et al. Natural killer cell activity and lymphocyte subsets in parenteral heroin abusers and long-term methadone maintenance patients. *J Pharmacol Exp Ther* 1989;250:2606-10.
21. Ball JC, Ross A. *The effectiveness of methadone maintenance treatment*. New York: Springer-Verlag, 1991.
22. van Ameijden EJC, van den Hoek JAR, van Hastrecht HJA, Coutinho RA. The harm reduction approach and risk reduction for human immunodeficiency virus (HIV) seroconversion in injecting drug users, Amsterdam. *Am J Epidemiol* 1992;136:236-43.
23. Zangerle R, Fuchs D, Rossler H, et al. Trends in HIV infection among intravenous drug users in Innsbruck, Austria. *J Acquir Immun Defic Syndr* 1992;5:865-71.
24. Metzger DS, Woody GE, DePhilippis D, et al. Risk factors for needle sharing among methadone treated patients. *Am J Psychiatry* 1991;148:636-40.
25. Vlahov D, Anthony JC, Munoz A, et al. The ALIVE study, a longitudinal study of HIV-1 infection in intravenous drug users: description of methods and characteristics of participants. In: Hartsock P, Genser SG, eds. *Longitudinal studies of HIV infection among intravenous drug users: methodological issues in natural history research*. Rockville, MD: National Institute on Drug Abuse. NIDA Research Monograph No. 109. 1991;735-53.
26. Booth R, Weibel WW. Effectiveness of reducing needle related risks for HIV through indigenous outreach to injection drug users. *Am J Addicts* 1992;1:277-87.
27. Iguchi MY. Human immunodeficiency virus seroprevalence and correlates of risk in Newark and Jersey City. In: *Epidemiologic trends in drug abuse: community epidemiologic work group, June 1992*. DHHS Publication No. (ADM) 92-1958. 1992;484-93.
28. Liebman J, Thomas C. Development of a sampling strategy to monitor trends in human immunodeficiency virus risk behavior in out-of-treatment drug users. In: *Epidemiologic trends in drug abuse: community epidemiologic work group, June 1992*. DHHS Publication No. (ADM) 92-1958. 1992;494-502.
29. Johnson RE, Jaffe JH, Fudala PJ. A controlled trial of buprenorphine treatment for opioid dependence. *JAMA* 1992; 267:2750-5.

Opiate Dependency Among the Subscribers of a New York Area Private Insurance Plan

Jon Eisenhandler, PhD, Ernest Drucker, PhD

Objective.—To estimate the prevalence of opiate use among the subscribers of a large private insurance plan, Empire Blue Cross and Blue Shield (EBCBS).

Design.—Six and a half million hospital inpatient claims for the period January 1, 1982, through June 30, 1992, were reviewed. Thirty-one thousand eight hundred ten different individuals who had a total of 55 143 hospital admissions with a primary diagnosis of opiate dependency (*International Classification of Diseases, Ninth Revision, Clinical Modification* 304.0 and 304.7) were identified. In the same period, 17 493 EBCBS subscribers (15 191 male and 2302 female) were identified from hospital admissions data as having acquired immunodeficiency syndrome. These data were cross-matched with the opiate dependency data to estimate the "capture" of opiate users in the EBCBS subscribers with acquired immunodeficiency syndrome and to model the size of the opiate using population in EBCBS.

Results.—It is estimated that between 1982 and 1992 EBCBS insured approximately 141 000 opiate users, 85 000 of whom are currently insured by EBCBS.

Conclusion.—There is a large population of insured opiate users who may be excluded from the estimates of the overall number of opiate users as insured opiate users are less likely to be counted via contact with government agencies. This suggests that current estimates of the number of opiate users and their social characteristics should be reconsidered.

(JAMA. 1993;269:2890-2891)

OUR UNDERSTANDING of the size and characteristics of the heroin-using population is incomplete due to, in large part, the illicit nature of heroin use and the difficulties this engenders for epidemiologic studies.^{1,2} To date, most descriptions of this population have been based on data from publicly funded drug treatment programs and individuals receiving medical care in public institutions or in the criminal justice system.^{3,4} These heroin users are often the inner-city's poor and minorities, frequently unemployed and dependent on public assistance. Yet there is reason to believe that these individuals are not and never have been completely representative of the heroin-using population as a whole (*New York Times*, February 12, 1993:B5).^{5,6} In this study we identify and describe a large opiate-dependent population of stably employed individuals with private health insurance.

Empire Blue Cross and Blue Shield (EBCBS) is the New York region's largest private health insurer, with more than 8 million subscribers in 1992. Most of these subscribers live and work in the New York City metropolitan area. In 1986, EBCBS began analyzing its experience with the acquired immunodeficiency syndrome (AIDS) and identified 17 493 individuals with AIDS among its subscribers as of June 1992.⁷ Because of the relationship of AIDS to heroin addiction and injecting drug use (IDU) in New York City,⁸⁻¹³ where more than 60% of all new AIDS cases involve IDU,¹⁴ this analysis was expanded to include subscribers who had been hospitalized with diagnoses related to opiate dependency.

Methods

We analyzed more than 6.5 million hospital admissions that occurred and were paid for by EBCBS between January 1982 and June 1992. Opiate-dependent individuals were identified by examining the primary admitting diagnosis based on the *International Classification of Diseases, Ninth Revision, Clinical Modification*.¹⁵ Individual claims with diagnosis codes of 304.0 (opi-

oid-type dependence) and 304.7 (opioid-type drug dependence with any other drug) were included in the analysis.

In keeping with EBCBS policy of strict confidentiality on all identifiable data, no permanent list of individuals was created, and only aggregate reports on the demographics and health care utilization of this population were produced. The data set with identified cases used in this analysis was created only within the confines of an automated system and was automatically erased on completion of processing.

Because all opiate users are not routinely hospitalized, it is likely that the individuals so identified underestimate the total opiate-using population insured by EBCBS. To estimate the size of this population, a capture-recapture technique was used in which opiate-related hospital admissions were cross-matched with AIDS cases. Adult female patients with AIDS, of whom 50% nationally are associated with IDU (principally heroin),^{1,16} form the basis for establishing the capture ratio and for estimating the size of the total population of opiate-dependent individuals insured by EBCBS.

Results

Identified Cases.—From 1982 to 1992, 31 810 individuals insured by EBCBS were hospitalized at least once for opiate dependency. Of this population, 76.0% (24 191) were male and 24.0% (7619) were female. The mean age at first hospital admission was 33.0 years for males and 31.2 years for females. These individuals had a total of 55 143 hospital admissions in the study period with a mean of 1.7 hospital admissions per individual; 35.6% had more than one hospital admission. The principal reason for hospitalization was addiction treatment: 96% of these hospital admissions were for detoxification (length of stay, 5 to 10 days), rather than for overdose or other severe drug reactions.

These opiate-dependent individuals were primarily working adults. Among identified individuals, 71.3% (22 677)

From Empire Blue Cross and Blue Shield, New York, NY (Dr Eisenhandler); and the Department of Epidemiology and Social Medicine, Montefiore Medical Center, Albert Einstein College of Medicine, Bronx, NY (Dr Drucker).

Reprint requests to Empire Blue Cross and Blue Shield, 622 Third Ave, New York, NY 10017 (Dr Eisenhandler).

Table 1.—Estimating the Total Number of Opiate Users in the EBCBS-Population*

EBCBS Population		No.
(A)	Adult female AIDS cases (observed)	2231
(B)	Adult female opiate users (observed)	7619
(C)	Cross-match of observed cases (A and B)	251
(D)	Proportion of US female AIDS cases associated with IDU	0.50
(E)	Estimated No. of EBCBS AIDS cases associated with IDU (A × D)	1116
(F)	Ratio of expected to observed female IDU/AIDS cases (E/C)	4.44
(G)	Estimated EBCBS female population (B×F)	33 828

*EBCBS indicates Empire Blue Cross and Blue Shield; AIDS, acquired immunodeficiency syndrome; and IDU, intravenous drug user.

Table 2.—Insured Opiate-Dependent Population

Sex	Identified	Projected	Insured as of June 30, 1992
F	7619	33 828	20 297
M	24 191	107 408	64 445
Total	31 810	141 236	84 742

(males, 74.4% [17 796]; females, 61.4% [4681]) were EBCBS subscribers. Most were insured as a benefit of their employment; a small number (<5%) purchased their health insurance directly. Seventeen percent (5556) (males, 15.1% [3652] of total; females, 25% [1904] of total) were insured through the policy of a spouse. Only 11% (3597) of the individuals were the children of policy holders (males, 10.5% [2543]; females, 13.6% [1034]), generally younger than 20 years. When compared with the overall population of EBCBS, identified opiate users were more likely to work for a larger employer, ie, groups of 250 or more employees.

Estimating the Size of the EBCBS Population of Opiate Users.—Table 1 shows the data used in estimating the total number of opiate users in the EBCBS population. There were 17 493 cases of AIDS identified in the EBCBS

population during the study period, of which 2231 were adult females. Two hundred fifty-one (11.3%) of these females with AIDS were able to be cross-matched to the 7619 women hospitalized for opiate dependency. For the United States as a whole, 50% of adult females with AIDS are linked to drug use,¹⁶ generally injection of heroin (for New York City, this figure is 61%).¹⁴ We conservatively assume that 50% of the EBCBS females with AIDS (1116 cases) were IDUs. Thus, the capture rate from our drug hospitalization data (251 cases) was less than 25% of the expected total. This yields a ratio of 4.44:1, from which the total female drug-using population can be estimated to be 4.44 times the size of the observed population (Table 1). As there is no reason to believe that males are substantially more or less likely than females to receive treatment for opiate use, we assume that the same ratio, 4.44, applies to males. Applying this ratio to the observed IDU population suggests that the total number of IDUs insured by EBCBS between 1982 and 1992 was about 141 321. Of these approximately 60% (84 822) were still insured at the end of the period of this study (Table 2).

Comment

These data reveal the existence of a large group of stably employed opiate-dependent individuals with private health insurance. Cases of "controlled" or "nondeviant" drug use¹⁷ have frequently been commented on in clinical and historical literature^{5,18-19} and in the popular press (*New York Times*, February 12, 1993:B5). There is also considerable literature on "nonharmful" opiate use stressing the "functional users' ability to work."^{18(p488)} But, to the best of our knowledge, prior to this study, evidence for this pattern has not been dem-

onstrated before in US population data on a socially and economically functional group, such as the EBCBS subscribers.

While the total number of opiate users insured by EBCBS can only be approximated from the available data, these data suggest that as of June 30, 1992, EBCBS was insuring approximately 85 000 IDUs or approximately 1% of its total subscriber population and 2% of its adult males. This prevalence is similar to that found in some population surveys of the United States.²⁰⁻²² Since we used the most conservative rate of female AIDS cases associated with IDU (50%), these rates should be considered minimal estimates of the size of the EBCBS opiate-dependent population. Further, since there are other insurers operating in the same area, the number of privately insured IDUs in the New York City region is presumably even larger than the EBCBS estimate.

This raises the possibility that the total population of IDUs in the New York City area substantially exceeds the current estimate of 200 000^{9,22} since privately insured IDUs are less likely to be counted via contact with publicly sponsored drug treatment or social service agencies and legal authorities. In addition, not only should estimates of the total size of New York's IDU population be revised upward, but its social and economic characteristics should be corrected to reflect the significant numbers of stably employed adults.

Finally, this large and previously unreported population of privately insured opiate users also may include many individuals infected with the human immunodeficiency virus. Neither IDU per se nor AIDS cases related to it should be thought of as being restricted to the most marginalized inhabitants of the inner cities. Our data instead suggest that these problems are situated to a significant degree in our mainstream working population.

References

1. National Academy of Sciences. *AIDS: Sexual Behavior and Drugs*. Washington, DC: National Research Council; 1990.
2. Mandell J, Aldrich M. AIDS in the neutral zone. Presented at the First International Conference on Harm Reduction; April 21, 1989; Liverpool, England.
3. Butynski W. *State Resources and Services Related to Alcohol and Other Drug Abuse Problems for 1989*. Washington, DC: National Association of State Alcohol and Drug Abuse Directors; 1990.
4. Gerstein DR, Harwood HJ, eds. *Treating Drug Problems, I*. Washington, DC: National Academy Press; 1991.
5. Winick C. Social behavior, public policy, and non-harmful drug use. *Milbank Q*. 1991;69:437-460.
6. Zinberg N. *Drug Set and Setting: The Basis for Controlled Intoxicant Use*. New Haven, Conn: Yale University Press; 1984.
7. Eisenhandler J. AIDS update: the medical costs of AIDS. Presented at the Society of Actuaries Spring Meeting; April 8, 1992; Las Vegas, Nev.
8. DesJarlais DC, Friedman SR, Novick DM, et al. HIV-1 infection among IDUs in Manhattan, New

- York City, from 1981 through 1987. *JAMA*. 1989; 261:1008-1012.
9. Drucker E, Vermund S. Estimating population prevalence of human immunodeficiency virus infection in urban areas with high rates of intravenous drug use: a model of the Bronx in 1988. *Am J Epidemiol*. 1989;130:133-142.
10. Drucker E. AIDS and addiction in New York City. *Am J Drug Alcohol Abuse*. 1986;12:165-181.
11. Drucker E. Communities at risk: the social epidemiology of AIDS in New York City. In: Ulack R, Skinner WF, eds. *AIDS and the Social Sciences*. Lexington: University Press of Kentucky; 1990:45-63.
12. DesJarlais D, Friedman S. HIV and intravenous drug use. *AIDS*. 1988;2(suppl 1):565-569.
13. Schoenbaum EE, Hartel D, Selwyn P, et al. Risk factors for human immunodeficiency virus infection in intravenous drug users. *N Engl J Med*. 1989;321:874-879.
14. New York City Department of Health. *AIDS Surveillance Report*. New York: New York City Department of Health; 1992. Fourth quarter.
15. Commission on Professional and Hospital Ac-

- tivities. *International Classification of Diseases, 9th Revision, Clinical Modification*. Ann Arbor, Mich: Commission on Professional and Hospital Activities; 1992.
16. Centers for Disease Control and Prevention. HIV/AIDS surveillance update. *MMWR Morb Mortal Wkly Rep*. 1992;41:1-18.
17. Courtwright DT, DesJarlais D, Joseph H. *Addicts Who Survived*. Knoxville, Tenn: University of Tennessee Press; 1990.
18. Musto DF. *The American Disease*. New York, NY: Oxford University Press Inc; 1987.
19. Waldorf D, Biernecki P. *Pathways From Addiction*. Philadelphia, Pa: Temple University Press; 1984.
20. Kandel D. Epidemiology Catchment Area Study. *Milbank Q*. 1992;69:365-414.
21. Cohen P. *Non-Deviant Cocaine Use in Amsterdam in Non-Deviant Subcultures*. Amsterdam, the Netherlands: University of Amsterdam Press; 1991.
22. National Institute of Drug Abuse. *National Household Survey on Drug Abuse: Population Estimates, 1990*. Rockville, Md: National Institute of Drug Abuse; 1992.

**REMARKS OF DR. LEE P. BROWN
DIRECTOR, OFFICE OF NATIONAL DRUG CONTROL POLICY**

NATIONAL METHADONE CONFERENCE

WASHINGTON, D.C.

APRIL 21, 1994

I am pleased to be with you today. The work that you do with heavy and addicted drug users is very important to the Nation and to the drug control policy of this Administration, and I want to offer you my sincere thanks.

As Drug Policy Director, it is my responsibility to develop the President's National Drug Control Strategy. And as many of you know, the President chose to present the Administration's 1994 Strategy to the Nation from the site of a drug treatment program in a correctional facility.

In his remarks, the President made four things very clear:

- o The drug problem is a priority for this Administration;
- o The President's Cabinet will act as a team in addressing the problem of drugs;
- o This Administration is committed to providing drug treatment to hardcore and addicted users, including those who are incarcerated or otherwise under criminal justice jurisdiction; and
- o This Administration understands that, while addiction is a chronic, relapsing disorder,

drug treatment, properly administered, is an effective tool to reduce drug use and its attendant negative consequences.

Today, I'd like to give you a brief overview of the National Drug Control Strategy, and to address myself in particular to the Strategy's provisions that relate to drug treatment and health care reform.

This Nation's drug situation remains very serious. Nearly 80 million Americans have tried illegal drugs, and over 11 million are current drug users. Chronic, hard-core drug use in particular continues unabated. And earlier this year, we received the bad news that -- after years of overall declines in casual drug use -- more of our youth have either used drugs or think it might be okay to use them.

But even these numbers don't tell the real story about what drugs and the violent crime they spawn are doing to this country. They don't tell you about the fear -- the fear of citizens as they walk the streets of their neighborhoods, the fear of children as they walk to school, or even when they're in school. As the President said in his State of the Union address, this fear is "crippling our society, limiting personal freedom and fraying the ties that bind us."

In response to this festering problem, the President has asked the Congress to provide \$13.2 billion for drug control and prevention programs, the largest drug budget ever and \$1 billion more than the

previous year. But even more important than the amount of money is how those funds will be spent.

Our new Strategy departs from previous Strategies in a number of important respects, and it challenges Americans to view the drug problem in a new and different way.

The Strategy places greater emphasis on -- and more resources in -- programs that reduce the demand for drugs -- prevention, education, and treatment. These are and should be our first line of defense against drugs.

Unlike previous strategies, the new strategy focuses on hard core drug use, the toughest aspect of the entire drug problem. Although not as numerous as the so-called casual drug users, the chronic users cause a disproportionate share of the violent crime and human misery that afflict our communities, especially our disadvantaged communities. The people at this gathering are quite familiar with the hardcore user population. As you know, chronic users also drive demand for drugs. It has been estimated, for example, that only 20 percent of the cocaine users in this country are responsible for using up to 80 percent of all cocaine sold on our streets.

In response, our Strategy seeks \$355 million in new funding to treat an additional 140,000 hard core users of cocaine and heroin. Effective drug treatment is key to breaking the cycle of hard core drug use, and treating drug users is a good investment for America. The National Institute on Drug Abuse estimates that each dollar spent on drug treatment is repaid seven-fold in the form of reduced public expenditures and greater productivity. And, as you know, methadone treatment is among the most cost-effective of treatment modalities.

In addition to the increase in public funding, the President's Health Security Plan will provide every American with access to treatment for substance abuse problems through the new substance abuse benefit.

In my view, it is altogether appropriate that the President's plan cover substance abuse in light of the major contribution substance abuse makes to the Nation's health care crisis. A recent report from the Robert Wood Johnson Foundation called substance abuse the Nation's number one health problem, and estimated that substance abuse costs our economy over \$230 billion annually.

Basically, the President's plan does five essential things:

1. It Provides Guaranteed Private Insurance, coverage for all Americans that can never be taken away;
2. It Gives you the Choice of the doctor you want;
3. It Outlaws Insurer Abuses;

4. It Preserves Medicare for our seniors; and
5. It Guarantees Health Benefits at Work.

All the people in this room and all of the people you treat will have health care coverage as good as what members of Congress get.

Unlike other proposals, the President's Health Security plan offers specific benefits for substance abuse treatment. Even in its early stages of implementation, Health Care Reform will improve access, and remove certain obstacles to substance abuse treatment for most Americans. Many more substance abuse benefits will be eligible for coverage under the American Health Security Act than is presently the case; those with "pre-existing conditions" will no longer be excluded from coverage; those who require and use treatment services will no longer face the "lifetime limits" common to many policies; and support for related services that will remove other barriers to treatment participation are included under companion public health initiatives -- for example, transportation, outreach, patient education, and translation services.

In general, health care reform is designed to encourage community treatment in the least restrictive environment. To accomplish this, the States are provided with maximum flexibility and challenged to make full, coordinated use of all available treatment resources.

Specifically, through initial day and visit limits and a benefit substitution approach, the plan intends to spur better assessment, treatment/patient matching, treatment progress monitoring, and transition planning. In simple terms, the plan uses 30 days of inpatient coverage as the annual coverage base and allows the substitution of one inpatient day for two days of intensive outpatient treatment or four days/visits of outpatient treatment. In this manner, the plan attempts to avoid and contain costly hospitalization and residential care.

These are significant steps. However, health care reform, in its early stages of implementation, cannot be expected to resolve the long-festering problems presented by hardcore and addicted drug users, many of whom need long-term care now and many of whom are in great financial need. For the foreseeable future, it will be necessary to maintain the commitment to public funding of drug treatment.

There are also a number of needs that must be addressed during the transition to health care reform so that the public and private treatment sectors will be integrated when health care reform is fully implemented, such as the training of new counselors and staff and infrastructure development.

Because many hardcore users eventually run afoul of the law, we need more and better drug treatment for those involved in the criminal justice system. We're very enthusiastic about the drug court model of

court ordered treatment, a very promising initiative that can help non-violent drug offenders obtain the treatment they need to get off drugs, and put their lives back on track. And we support the crime bill's provisions that provide more drug treatment within the criminal justice system.

The Strategy recognizes that the best anti-drug program is prevention, stopping drug use before it starts. We will increase our efforts to instill in America's youth a set of values to, in effect, immunize them against the allure of drug trafficking and the escape of drug addiction. The Strategy proposes a \$191 million increase in funding for Safe and Drug-Free Schools programs. And it calls on all adults to let their children know, in no uncertain terms, that drugs are not only dangerous -- they're illegal.

While we increase our efforts to prevent drug use, we also must deal more effectively with the crime and violence that are the byproducts of using and trafficking in drugs.

Overall, the Strategy calls for increasing assistance for state and local law enforcement by more than 300 percent. It proposes a dramatic increase in community policing programs, to help neighborhood residents take back their streets. When we instituted community policing in Houston, the crime rate dropped. When we implemented it in New York City, the crime rate declined there as well.

Community policing helps the residents of drug-infested communities to reclaim their parks, playgrounds, and streets, and to make them safe once again for all our citizens, and especially for our children.

That gives you a general overview of the Strategy. I think you can see that our commitment to drug treatment is substantial. And I think you can see the important role that you have in helping us reach the goals of the Strategy.

I ask that you also see the challenges we share in the coming months:

First, we are challenged to secure the resources necessary to provide treatment to heroin addicts and other hardcore users. To accomplish this, we need the public treatment funding requested in the President's budget. And, as the details to implement health care reform are worked out, we need to ensure that they foster treatment entry and retention for the poorest of the hardcore users.

Second, we are challenged to ensure that the framework of government regulations fosters the most effective treatment. As you know, the Institute of Medicine is nearing completion of its

study of methadone regulations. My Office is looking forward to their report and we will seek your comments on their recommendations.

Third, we are challenged to bring an unvarying standard of high quality to all methadone programs. Drug treatment is expected to demonstrate concrete results. And while a large body of research tells us that properly administered methadone programs have experienced marked success in reducing drug use, criminal activity, and HIV transmission, we know that the quality of programs is not uniform today. The Federal government will provide for training and technical assistance, but we must rely on you to demand that your colleagues adhere to the highest standards of performance.

And finally, we are challenged to forge a strategic approach to the development and application of medications for the treatment of addiction. My Office will be working closely with the National Institute on Drug Abuse in the development of a new approach. For many years, methadone has been the only widely-used pharmacotherapy. LAAM is now available and may offer a useful alternative for certain populations and for certain circumstances. We need to maintain a continuing dialogue on its use and results. We also need to prepare for the introduction and appropriate use of additional medications for the treatment of opiate addiction.

And, of course, we need to revitalize our efforts to find effective medications for cocaine addiction. I believe we are making progress in this regard. Research is underway to develop catalytic antibodies that will bind, hydrolyze, and deactivate cocaine as it enters the blood stream -- in essence to interfere with and neutralize the psychoactive effect of cocaine.

I seek your involvement, as experts, in these challenges. And I seek your involvement as citizens in the broader challenge we face.

As the President said when he presented his budget to the Nation, "our problems go way beyond the reach of government." And he said that "the American people have got to want to change from within if we're going to bring back work and family and community."

The President was speaking about individuals taking responsibility for their own actions. He was talking about parents taking responsibility for their children, teaching them that using drugs is wrong, and that violence is a dead end. He was talking about citizens banding together to take back their neighborhoods block by block. He was talking about each of us making room in our own lives to help a young person one-to-one.

That, ladies and gentlemen, is how we will reclaim our

communities from drugs and violence; and how we will make a better, brighter future for our children.

I hope that the organizations and programs present here today will join us in making the Congress aware of how important this Drug Strategy budget and Health Care Reform are to our Nation's future.

Thank you very much.
