



Published in final edited form as:

*J Addict Dis.* 2009 ; 28(1): 8–12. doi:10.1080/10550880802544625.

## Substance Abuse Treatment Clinician Opinions and Infectious Disease Service Delivery

### **Kathlene Tracy, PhD,**

Department of Psychiatry, New York University School of Medicine and VA New York Harbor Healthcare System, New York, New York

### **Lawrence S. Brown, MD, MPH,**

Addiction Research and Treatment Corporation, Brooklyn, New York; Department of Public Health, Weill Medical College, Cornell University, New York, New York

### **Steven Kritz, MD,**

Addiction Research and Treatment Corporation, Brooklyn, New York

### **Donald Alderson, MS,**

New York State Psychiatric Institute, New York, New York

### **Jim Robinson, MED,**

Nathan Kline Institute, Orangeburg, New York

### **Edmund J. Bini, MD, MPH,**

Department of Psychiatry, New York University School of Medicine and VA New York Harbor Healthcare System, New York, New York

### **Michael Levy, PhD,**

CAB Health and Recovery Services, Danvers, Massachusetts

### **Donald Calsyn, PhD,**

Alcohol and Drug Institute and Department of Psychiatry and Behavioral Sciences, University of Washington, Seattle, Washington

### **Traci Rieckmann, PhD,**

School of Medicine, Oregon Health and Science University, Portland, Oregon

### **Bret Fuller, PhD,**

Department of Public Health and Preventive Medicine, Oregon Health and Science University, Portland, Oregon

### **Pat McAuliffe, MBA, LADC, and**

Connecticut Renaissance, Inc., Norwalk, Connecticut

### **John Rotrosen, MD**

Department of Psychiatry, New York University School of Medicine and VA New York Harbor Healthcare System, New York, New York

## Abstract

Substance abuse treatment programs are an important platform for delivery of services for infectious diseases associated with drug and alcohol use. However, important components of

infectious disease care are not universally provided. Clinician training often focuses on information about infectious diseases and less attention is paid to provider opinions and attitudes that may be barriers to providing infectious diseases services. In a national multi-site trial conducted by the National Drug Abuse Treatment Clinical Trials Network (CTN), we investigated the relationship between clinician opinions and the delivery of services for human immunodeficiency virus, hepatitis C virus, and sexually transmitted infections in substance abuse treatment settings. Survey data were collected from 1,723 clinicians at 269 CTN treatment programs. Clinician opinion was found to be significantly related to infectious disease service delivery. Implications for training are discussed.

## Keywords

Infectious disease treatment; human immunodeficiency virus (HIV); hepatitis C (HCV); sexually transmitted infections (STI); opinions

---

## Introduction

Substance abuse treatment programs are an important platform for delivering infectious disease services for human immunodeficiency virus, hepatitis C virus, and sexually transmitted infections.<sup>1-4</sup> However, important components of infectious disease care are not provided by all programs or staff who could deliver treatment.<sup>2,3,5</sup>

To increase or improve service delivery, training and credentialing often focus on informational aspects of infectious diseases.<sup>6</sup> Less attention has been paid to incorporating exercises into the training that address overcoming provider opinions or attitudes that may be barriers to providing infectious disease services.

In a national multi-site trial conducted by the National Drug Abuse Treatment Clinical Trials Network (CTN), we investigated the role of substance abuse treatment clinician opinions in human immunodeficiency virus, hepatitis C virus and sexually transmitted infections service delivery. This was conducted as a first step in understanding the relationship of attitudes toward infectious disease service delivery to guide future programs and studies aimed at improving training.

## Methods

### Design and Population

The Infections and Substance Abuse Study was a cross-sectional examination of services and related state policies and funding associated with targeted infections in substance abuse treatment settings within the CTN. This was achieved through a one time survey of state substance abuse and health departments, program administrators, and clinicians in substance abuse treatment programs across the country.

This report is limited to information derived from clinician responses to the Practices and Opinions sections of the clinician survey. Surveys were provided to 2,210 clinicians at 269 CTN-affiliated treatment programs across 26 states and District of Columbia. Approval was obtained from Institutional Review Boards with jurisdiction over the participating treatment programs. Participants were provided information about the aims of the study prior to administration of the survey instruments.

Due to the lack of existing validated surveys that met the project needs, there was an extensive development process to construct the survey questions. Over an 18-month period,

the national research team and the National Drug Abuse Treatment CTN protocol review board held conference calls, meetings, and several reviews to facilitate survey development. A survey consultant and national experts in the field who also collaborated on the protocol development were brought in to augment the process. The survey questions selected and categories had face validity. The survey was piloted twice on clinicians in its development to ensure its relevance.

### **Practices Section of Survey**

The Practices section of the clinician survey included 27 questions that asked clinicians to identify how frequently (percent of patients) they delivered infectious disease services in the past 12 months. The questions covered services within each of the seven broad categories: awareness and inquiries about high risk behaviors; inquiries and encouragement for patients to be screened for infectious diseases; infectious disease education; encouraging risk reduction behaviors; infection-related medical history/physical examination; infection related counseling; and monitoring of infectious diseases. With this design, it was possible to calculate the average percent of patients who received services under each of the broad categories by each clinician.

### **Opinions Section of Survey**

The Opinions section of the clinician survey included 13 items. In the first section, clinicians were asked to indicate agreement using a Likert scale from 1 (strongly agree) to 5 (strongly disagree) that “full abstinence from illicit drugs or alcohol is necessary for patients in drug treatment programs to succeed in reducing their involvement in high risk injection or other drug use practices and high risk sexual behaviors.”

Using the same rating scale, clinicians were also asked to indicate agreement to the statement that “providing medical care within a substance abuse treatment program distracts patients from focusing on their substance abuse disorders.”

Next, clinicians were asked their comfort level in discussing sexual and intimate relationship issues using a Likert scale from 1 (very comfortable) to 5 (very uncomfortable) with the following situations: men who have sex only with women; women who have sex only with men; men who have sex at least some of the time with men; women who have sex at least some of the time with women; people who earn part of their living by selling sex or trading sex for drugs; and people who seem unable to protect themselves from getting an infection from a sexual partner.

Lastly, clinicians were asked to rate how important they felt prevention and treatment of substance abuse and communicable diseases were using a 5-point Likert scale from 1 (very important) to 5 (very unimportant).

### **Statistical Analyses**

The opinion data were used as an independent variable and separated into two groups: those clinicians who responded 1 to 2 on the items showing agreement, comfort, or importance, and those who responded 3 to 5 on the items showing indifference, disagreement, discomfort, or lack of importance. These two groups were compared using the conservative Kruskal-Wallis ANOVA analysis to see if there were significant differences in delivery of infectious diseases services within the seven categories.

## Results

### Response Rate

The response rate for treatment program clinicians was 1,723 (78%) of the 2,210 surveys sent and was 269 (84%) of the 319 treatment programs contacted within the 17 nodes of the CTN at the time of the study.

### Relationship of Opinions to Service Delivery

**Abstinence**—Opinions regarding full abstinence being necessary to succeed in reducing involvement in high-risk injection or drug use practices and sexual behaviors were not significantly related to delivery of the seven infectious diseases services (all subsequent data are in Table 1).

**Medical Care**—Clinicians who believed that providing medical care did not distract patients from focusing on substance abuse treatment were more likely to provide infection-related medical histories and physical exams ( $P < .05$ ) and infection-related counseling ( $P < .05$ ).

### Comfort Level Discussing Sexual/Intimate Relations

Clinicians who were comfortable discussing sexual and intimate relationship issues with individuals who have same sex and heterosexual relationships, individuals who earn part of their living selling sex or trading sex for drugs, and individuals who seem unable to protect themselves from getting an infection from a sexual partner were more likely to provide all seven infectious disease services or referrals ( $P < .001$  for all comparisons).

### Importance of Substance Abuse and Communicable Disease Prevention and Treatment

Clinicians who believe that substance abuse and communicable disease prevention and treatment are important were more likely to provide all seven infectious disease services or referrals (ranging from  $P < .05$  to  $P < .001$  for all comparisons).

## Discussion

Clinician opinion was significantly correlated with infectious disease service delivery. Limitations to the study include use of self-reported service delivery data and, as with any study with multiple comparisons of data, the risk for Type II errors is increased. Future efforts should focus on training strategies to overcome provider opinions or attitudes that restrict infectious disease service delivery.

## Acknowledgments

This study was supported by the National Institute on Drug Abuse/National Institutes of Health via the National Drug Abuse Treatment Clinical Trials Network (2U10DA13046). The authors are indebted to the efforts of administrators, clinicians, and investigators of the 17 universities and medical centers along with the participating community-based substance abuse treatment programs of the National Drug Abuse Treatment Clinical Trials Network.

## References

1. Rothman J, Rudnick D, Slifer M, Agins B, Heiner K, Birkhead G. Co-located substance use treatment and HIV prevention and primary care services, New York State, 1990–2002: a model for effective service delivery to a high-risk population. *J Urban Health*. 2007; 84(2):226–242. [PubMed: 17216572]

2. Edlin BR, Kresina TF, Raymond DB, Carden MR, Gourevitch MN, Rich JD, et al. Overcoming barriers to prevention, care, and treatment of Hepatitis C in illicit drug users. *Clin Infect Dis*. 2005; 40(Suppl 5):S276–S285. [PubMed: 15768335]
3. Vassilev ZP, Strauss SM, Astone J, Des Jarlais DC. Injection drug users and the provision of Hepatitis C-related services in a nationwide sample of drug treatment programs. *J Behav Health Serv Res*. 2004; 31(2):208–16. [PubMed: 15255228]
4. Strauss SM, Falkin GP, Vassilev Z, Des Jarlais DC, Astone J. A nationwide survey of Hepatitis C services provided by drug treatment programs. *J Subst Abuse Treat*. 2002; 22(2):55–62. [PubMed: 11932130]
5. Strauss SM, Astone J, Vassilev ZP, Des Jarlais DC, Hagan H. Gaps in the drug-free and methadone treatment program response to Hepatitis C. *J Subst Abuse Treat*. 2003; 24(4):291–97. [PubMed: 12867202]
6. Grossman, H. Addressing the need for HIV specialists: The AAHIVM Perspective. CMP media inc; 2006.

**TABLE 1**  
**Comparison Clinician Opinion to Percent of Clinician's Patients Receiving Services in the Seven Infectious Diseases Categories**

Opinion Category	Agreed With Opinion No. (%) <sup>*</sup>	Disagreed With Opinion No. (%) <sup>*</sup>	Awareness P (Means) <sup>**</sup>	Screening P (Means) <sup>**</sup>	Patient Education P (Means) <sup>**</sup>	Encourage History P (Means) <sup>**</sup>	Medical P (Means) <sup>**</sup>	Counsel P (Means) <sup>**</sup>	Monitor P (Means) <sup>**</sup>
Full abstinence is necessary to reduce high risk drug use practices	657 (38.2)	1,066 (61.7)	.39 (48.7, 49.7)	.34 (53.5, 55.0)	.25 (52.3, 54.6)	.79 (46.7, 46.8)	.55 (59.2, 58.2)	.73 (62.4, 62.3)	.15 (47.3, 43.8)
Full abstinence is necessary to reduce high risk sexual behaviors	680 (39.5)	1,043 (60.5)	.33 (48.5, 49.8)	.21 (53.1, 55.2)	.17 (52.0, 54.6)	.95 (46.4, 46.9)	.60 (58.8, 58.1)	.81 (63.0, 61.8)	.15 (47.1, 43.8)
Medical care within substance abuse programs distracts patients from focusing on their substance abuse disorders	141 (8.1)	1,582 (91.7)	.19 (45.7, 49.4)	.11 (49.8, 54.6)	.07 (48.4, 54.0)	.08 (41.2, 47.1)	<.05 (50.5, 59.2)	<.05 (54.8, 63.0)	.12 (39.0, 45.7)
Comfortable with men who have sex with women	1,427 (82.8)	296 (17.1)	<.001 (51.1, 36.6)	<.001 (56.5, 39.9)	<.001 (55.8, 39.6)	<.001 (48.9, 31.9)	<.001 (60.6, 44.0)	<.001 (65.0, 44.1)	<.001 (47.5, 28.9)
Comfortable with women who have sex with men	1,462 (84.9)	261 (15.1)	<.001 (50.9, 36.6)	<.001 (56.3, 39.3)	<.001 (55.5, 39.1)	<.001 (48.4, 33.6)	<.001 (60.1, 45.3)	<.001 (65.6, 44.6)	<.001 (47.4, 27.7)
Comfortable with men who have sex with men	1,245 (72.2)	478 (27.7)	<.001 (51.9, 40.9)	<.001 (57.7, 44.0)	<.001 (57.3, 42.4)	<.001 (50.3, 35.8)	<.001 (62.3, 46.6)	<.001 (66.3, 49.6)	<.001 (48.8, 33.9)
Comfortable with women who have sex with women	1,275 (74)	448 (26)	<.001 (51.8, 40.5)	<.001 (57.6, 43.1)	<.001 (57.1, 42.0)	<.001 (49.8, 36.4)	<.001 (62.3, 45.5)	<.001 (66.1, 49.3)	<.001 (48.6, 33.8)
Comfortable with those who trade or sell sex	1,301 (75.5)	422 (24.5)	<.001 (52.0, 38.7)	<.001 (57.2, 43.5)	<.001 (56.9, 41.4)	<.001 (50.2, 33.8)	<.001 (61.8, 45.9)	<.001 (66.1, 48.0)	<.001 (48.1, 34.0)
Comfortable with those unable to protect from infection	1,307 (75.8)	416 (24.1)	<.001 (52.0, 38.4)	<.001 (57.5, 42.7)	<.001 (56.6, 42.2)	<.001 (49.8, 35.1)	<.001 (61.9, 45.7)	<.001 (66.1, 47.8)	<.001 (48.6, 31.9)
Prevention of substance abuse is important	1,590 (92.3)	133 (7.8)	<.001 (49.8, 35.1)	<.01 (54.9, 41.4)	<.05 (54.0, 43.4)	<.01 (47.2, 35.1)	<.001 (59.1, 40.9)	<.001 (63.2, 41.3)	<.01 (45.8, 29.6)
Treatment of substance abuse is important	1,605 (93.1)	118 (6.8)	<.001 (49.7, 32.6)	<.01 (54.8, 37.9)	<.01 (54.1, 38.0)	<.001 (47.3, 26.0)	<.001 (59.1, 36.0)	<.001 (63.1, 35.5)	<.01 (45.7, 26.4)
Prevention of communicable diseases is important	1,600 (92.9)	123 (7.2)	<.001 (49.8, 31.1)	<.001 (54.9, 35.4)	<.001 (54.2, 35.0)	<.001 (47.5, 23.2)	<.001 (59.3, 33.5)	<.001 (63.3, 32.4)	<.001 (45.9, 23.6)
Treatment of communicable diseases is important	1,600 (92.9)	123 (7.1)	<.001 (49.8, 31.3)	<.001 (55.0, 35.7)	<.001 (55.6, 18.6)	<.001 (47.6, 22.9)	<.001 (35.4, 23.7)	<.001 (63.2, 34.0)	<.001 (45.8, 24.7)

\* The first two columns of data refer to the number (N) of clinicians and corresponding percent who agreed/were comfortable or disagreed/were uncomfortable with the opinion.

\*\* The means in the seven infectious diseases service categories represent the percent of patients that clinicians delivered services to for each infectious disease service category. The first mean in the sequence is for the group of clinicians that showed agreement, comfort, or importance for the opinion item and the second mean is for the group that showed indifference, disagreement, discomfort, or lack of importance for the opinion item.