

# COMMUNITY-BASED SUBSTANCE ABUSE REDUCTION AND THE GAP BETWEEN TREATMENT NEED AND TREATMENT UTILIZATION: ANALYSIS OF DATA FROM THE "FIGHTING BACK" GENERAL POPULATION SURVEY

ELIZABETH TIGHE, LEONARD SAXE

*Despite the utility of substance abuse treatment, large numbers of people with serious substance use problems do not get the treatment that is needed. Communities that participated in the Robert Wood Johnson Foundation's "Fighting Back" program (see Saxe et al., this issue) developed a range of strategies to facilitate the provision of treatment to community members. As part of the national evaluation of Fighting Back, a general population survey conducted in 1995, 1997, and 1999 in 12 of the Fighting Back communities and 29 comparison communities assessed problem substance use, dependence, and treatment. These data were used to examine whether the gap between treatment need and treatment utilization was reduced in the Fighting Back communities. Results indicated that the discrepancy between treatment need and utilization of specialized treatment was unchanged, with as few as 6% to 7% identified as needing treatment actually receiving treatment. There were, however, a number of characteristics that distinguished those who received treatment from those who did not: (1) females were more than seven times less likely to receive treatment when needed than were males; (2) African Americans were four times less likely and Hispanics three times less likely than White respondents; (3) those 25 years and younger were four times less likely than those over 25; (4) unemployed and those living in poverty were three times more likely to receive treatment. The implications of these findings are that even within comprehensive approaches to substance abuse, more must be done to identify those in need of treatment, to understand the factors that explain the discrepancies between those in need of treatment who do and do not receive treatment, and to develop methods for getting those in need into treatment.*

---

Elizabeth Tighe, Ph.D., is Senior Research Associate at the Heller School for Social Policy and Management, Brandeis University. She is a social psychologist with interests in community-based approaches in substance abuse and child welfare, the development of community identity and the influence of communities in shaping behavior of individuals. Leonard Saxe, Ph.D., is a social psychologist and Professor of Social Policy and Management at the Heller School of Brandeis University. Professor Saxe has conducted evaluation studies in health care and education and policy-oriented research syntheses concerned with children's mental health, substance abuse treatment, and the validity of honesty testing. From 1995-2002, he was principal investigator of the evaluation of the Robert Wood Johnson Foundation's "Fighting Back" demonstration.

## INTRODUCTION

Estimates of the rates of people in need of substance abuse treatment who actually receive treatment vary widely, from 10% (Substance Abuse and Mental Health Services Administration [SAMHSA], 2003) to over 50% (Woodward et al., 1997). Less than 1% of those in need received treatment at a specialty substance abuse facility, whereas over half sought treatment through self-help groups such as AA (SAMHSA, 2003). Although the rates vary for particular substances, the conclusion is the same: substantial numbers of individuals in need of treatment go untreated (D'Onofrio, 2003; Lamb, Greenlick, & McCarty, 1998).

An underlying assumption of the Robert Wood Johnson Foundation's "Fighting Back" program was that substance abuse is a public health problem, not simply a criminal justice issue, economic problem, or evidence of moral decay (Spickard, Dixon, & Sarver, 1994). With the public health model came an emphasis on the continuum of care, with each community asked to develop a comprehensive, community-wide prevention and treatment system (Saxe et al., 1997; Spickard et al., 1994). Such a comprehensive system proved difficult to implement (Lindholm, Ryan, Kadushin, Saxe, & Brodsky, 2004), but this focus had the potential to shift policy and practice to increased attention to treatment issues.

Throughout the implementation of Fighting Back, sites varied greatly in the extent to which they focused on the integration of treatment resources within their communities. Marshall Heights in Washington, D.C., for example, contracted with a treatment provider to open an abstinence-based treatment program within the community, while Little Rock created a program called "Insure the Children," which provided substance abuse insurance coverage for students in the Little Rock school district (Thompson, 2001). Other treatment activities across sites included development and implementation of drug courts, forming partnerships with the primary health maintenance organizations in the community to improve substance abuse services to enrollees, and working with local agencies to ensure that needed services, such as programs for substance abusing women with children, were not closed.

The present paper examines whether the Fighting Back initiative, given its broad mandate to develop a comprehensive system of prevention, treatment, and aftercare for substance abuse, had any measurable impact on the likelihood that those in need of treatment for alcohol and other drugs (AOD) would obtain it. In addition, Fighting Back provides the opportunity for an analysis of the factors associated with treatment need and treatment utilization in a very large sample of individuals throughout 41 communities in the United States. With these data we can describe who is in need of treatment, and, of those, who receives treatment.

## GAP BETWEEN TREATMENT NEED AND TREATMENT UTILIZATION

### METHOD

As part of the national evaluation of the Fighting Back project, a random-digit dialing telephone survey was conducted in the spring of 1995, 1997, and 1999 (see Saxe et al., 1997, 2006). The survey was designed to assess community-wide rates of substance use, prevention efforts, the substance use environment, crime victimization, and perceptions of the neighborhood. The survey also assessed use of alcohol and other drug (AOD) treatment resources in the community (see Kadushin, Reber, Saxe, & Livert, 1998).

### SAMPLE

Respondents were 45,887 residents in 12 Fighting Back (N=25,452) and 29 comparison sites (N=20,435). All were aged 16 to 44. On average, the sites were more urban, more African American, and poorer than the U.S. at large (see Saxe et al., 1995).

### MEASURES

Treatment need was assessed using methods similar to those employed by SAMHSA (Epstein & Gfroerer, 1998; SAMHSA, 2003) in their analyses of the National Survey on Drug Use and Health. Four categories of use are examined: (1) DSM IV dependence criteria; (2) heavy drug use identified as any of the following in the past year – heroin at least once, daily marijuana use, or 52+ days or weekly use of any illicit drug; (3) injection drug use; and (4) treatment for substance use in the past year. The Fighting Back survey includes assessments on each of these dimensions, except for frequency of drug use and injection drug use. Relatively few injection drug users would be captured by a general population survey, and those that are most likely to be captured would be categorized into one of the treatment need categories based on the use of heroin and other drug use questions.

### DEPENDENCY

Dependency was defined by three or more affirmative responses to questions assessing decreased functioning due to alcohol or drug use. These questions were drawn from the National Comorbidity Survey (Warner, Kessler, Hughes, Anthony, & Nelson, 1995) and are based on DSM-III-R criteria. Respondents were categorized as dependent if they reported three of the following during the past 12 months:

- having been under the effects of alcohol (drugs) or suffering from its aftereffects while at work or school or while taking care of children

- having used much larger amounts of alcohol (drugs) than intended or having used alcohol for a longer period of time than intended
- having been under the effects of alcohol (drugs) or feeling its aftereffects in a situation which increased chances of getting hurt (e.g., driving a car or boat, using knives or guns or machinery, crossing against traffic, climbing, or swimming)
- having had any emotional or psychological problems from using alcohol (drugs) such as feeling uninterested in things, feeling depressed, being suspicious of people, feeling paranoid, or having strange ideas
- having a strong desire or urge to use alcohol (drugs) that could not be resisted or not being able to think of anything else
- having spent a month or more when a great deal of the time was spent using alcohol (drugs) or getting over its effects
- finding that more alcohol (drugs) than usual was needed to get the same effect or that the same amount had less effect.

Respondents first answered each of these questions with respect to their use of alcohol and then answered with respect to their use of other drugs. Rates of dependence were estimated after screening for alcohol and other drug use. For alcohol use, respondents first must have reported drinking greater than four drinks in any single day during the past 12 months; for drug use, respondents must have reported any illicit use of drugs.

#### *HEAVY DRUG USE*

Heavy use was categorized broadly, including respondents at risk for dependency. Respondents' use was categorized as heavy if they responded affirmatively to any of the following about their use in the past year: (1) use of heroin at least once; (2) daily marijuana use; (3) any illicit drug use in the past year; or (4) four or more drinks on any single day.

#### *TREATMENT*

Respondents indicated whether they had received any AOD treatment in the past year. This included whether they had ever in the past 12 months "attended meetings of any self-help groups such as Alcoholics Anonymous or Cocaine Anonymous for help with alcohol or drug use" or "received counseling for the use of alcohol or any drug, not counting cigarettes." Respondents indicated whether any treatment or counseling received was overnight at a hospital or residential drug or alcohol

## GAP BETWEEN TREATMENT NEED AND TREATMENT UTILIZATION

rehabilitation facility, an outpatient AOD or mental health facility, a private doctor's office, an emergency room, or prison/jail. In addition, they indicated whether they had ever sought treatment and been turned down in the past 12 months.

Those who indicated that they had received treatment in the past 12 months were asked whether this was overnight at a hospital or residential drug or alcohol rehabilitation facility, a drug or alcohol rehabilitation center or mental health facility as an outpatient, a private doctor's office, an emergency room, and/or a prison or jail. The survey did not assess treatment modality (pharmacological, psychological, etc.) as it was expected that in a general population survey, with expected rates of AOD dependence in the general population between 3% and 5%, further breakdown of this small percentage by whether or not they received treatment and then particulars of the type of treatment received would yield too few cases to model program effects reliably. Questions about changes in specific types of treatment would require separate data collections (see also Livert & Winick, 2006).

## RESULTS

It was expected that sites that implemented the Fighting Back program would evidence decreased rates of substance abuse and increased rates of treatment utilization. The overall rates of treatment need in Fighting Back and comparison sites are displayed in Table 1. Two overall measures of treatment need were examined. The first is need as defined by SAMHSA: all those meeting alcohol or drug dependence criteria, heavy AOD use defined as heroin use in the past year, daily marijuana use, any illicit drug use in the past year, or high frequency alcohol use (four or more drinks on any single day). The second measure of need included the dependence criteria, heroin use and daily marijuana use, but omitted the measures of any illicit drug use in the past year and four or more drinks on a single day in the past year, thus providing a more conservative estimate of treatment need.

There is very little change across time in the dependence measures (see Saxe et al., 2006), as well as the conservative estimate of treatment need, with an estimated 7.1% of the population in Fighting Back sites in need of treatment in 1995 in the early stages of the program and 6.4% after four years of program implementation, which is within the confidence limits of the 1995 estimate. The estimated rate of people in need of treatment in the comparison site was 6.1% in 1995 and 6.8% in 1999.

### *TREATMENT NEED AND INDIVIDUAL CHARACTERISTICS*

Overall rates of treatment need by individual characteristics of the sample are displayed in Table 2. These rates are based on the more conservative measure of treatment need described above (i.e., excluding risk variables of any illicit drug use and four or more drinks on a given day). For each variable, the number (and

**TABLE 1**  
**TREATMENT NEED IN FIGHTING BACK AND COMPARISON COMMUNITIES**

	Fighting Back			Comparison		
	1995	1997	1999	1995	1997	1999
<i>Dependence</i>						
Alcohol	242 4.6%	395 4.0%	352 3.7%	215 3.7%	282 4.0%	299 4.1%
Drugs	146 2.6%	279 2.8%	279 2.9%	149 2.6%	175 2.4%	200 2.7%
<i>Heavy use</i>						
Heroin use (12 months)	22 0.4%	19 0.2%	28 0.3%	27 0.5%	28 0.5%	28 0.5%
Daily marijuana use	94 18.8%	174 17.5%	162 17.6%	70 13.6%	99 15.3%	127 19.3%
Use of any illicit drug	1050 14.2%	1652 13.8%	1621 13.6%	1018 13.5%	1120 12.9%	1183 13.3%
At risk for alcohol dependency	1841 32.7%	3138 30.7%	2917 29.8%	1982 34.0%	2388 33.1%	2373 32.6%
Tx need (including risk vars)	2161 37.9%	3697 36.2%	3444 35.4%	2270 38.5%	2739 37.4%	2718 36.8%
Tx need (excluding risk vars)	370 7.1%	632 6.6%	601 6.4%	347 6.1%	442 6.3%	475 6.8%

percentage) of respondents who were categorized as in need of treatment are displayed.

Males were more likely than females to need treatment. Those under 25 years of age were more likely to need treatment than those over 25. African American and non-White Hispanic respondents were less likely to need treatment than White respondents. Educational level and income were also related to treatment need. Those with high school or lower educational levels had higher rates of treatment need than those with some college or greater. Those with lower incomes were more likely to need treatment than those earning higher incomes. In addition, rates of treatment need were higher among blue collar and service workers than white collar workers and higher among those who were unemployed.

Several measures of social stability and connection to the community were also included in the set of individual characteristics that were examined. These were

GAP BETWEEN TREATMENT NEED AND TREATMENT UTILIZATION

TABLE 2  
TREATMENT NEED BY INDIVIDUAL CHARACTERISTICS<sup>a</sup>

	%	N		%	N
<i>Sex</i>					
Males	9.3	1895	<i>Employment</i>		
Females	3.9	972	Not currently employed	8.4	916
			Currently employed	6.3	2017
<i>Age</i>			<i>Employment type<sup>b</sup></i>		
25 and under	10.6	1587	White collar	5.2	1046
Over 25	4.2	1269	Blue collar	7.7	1097
<i>Race</i>			<i>Marital status</i>		
White	7.9	1407	Married	2.5	374
Black	5.4	790	Never married	9.4	1902
Hispanic	5.8	489	Divorced, widowed, separated	7.4	581
Other	5.6	159	<i>Religious participation</i>		
<i>Education</i>			Regularly	3.3	497
High school/GED	7.6	1457	Rarely/never	7.9	1659
College or greater	6.3	1461	<i>Residency</i>		
<i>Income</i>			2 or fewer years	8.3	1571
<\$5K	8.6	155	Greater than 2 years	5.2	1253
\$5-10K	9.0	192			
\$10-15K	9.3	269			
\$15-20K	7.8	228			
\$20-25K	6.6	183			
\$25-35K	6.9	512			
\$35-50K	6.3	494			
\$50-75K	6.0	303			
\$75K+	7.3	301			

Notes: <sup>a</sup>Estimates represent the number of people within the group who were classified as in need of treatment. For example, of all males sampled, 1,895 or 9.3% were classified as needing treatment. <sup>b</sup>“White collar” refers to professional, technical, administrative, managerial, and clerical positions. “Blue collar” refers to craftsman, trade workers, transportation, farmers, service workers, and other positions.

length of time at residence, marital status, and religious affiliation or involvement. All were significantly related to the likelihood of needing treatment. Those who attend religious services rarely or infrequently were more likely to need treatment than those who attend regularly. Married respondents were less likely to need treatment than others, as were those who lived longer in their current place of residence.

RECEIVED TREATMENT

Of those in need of treatment, very few (11.5%) reported receiving treatment in the past year (see Table 3). Only a small number of additional respondents, however,

reported having tried and been unable to obtain treatment (2.8%). The number of those who were unable to obtain treatment is too small to be able to examine reliably any differences across time, communities and groups. Also included in this table is a breakdown across all years of where respondents received treatment. Most received treatment at specialized AOD outpatient facilities. The number of respondents reporting where they received treatment is too few, however, to reliably model the differences between Fighting Back and comparison communities across time.

**TABLE 3**  
**ESTIMATES OF TREATMENT, SELF-HELP MEETINGS, AND TREATMENT SEEKING**  
**AMONG THOSE IN NEED OF TREATMENT**

		Received Treatment			Attended AOD Meetings			Sought, Unable to Obtain <sup>a</sup>		
		FB	Comp.	Overall	FB	Comp.	Overall	FB	Comp.	Overall
	N	199	143	342	224	179	403	26	18	44
	%	12.1	10.9	11.5	14.2	13.7	13.9	3.4	2.3	2.8
<i>Where treatment was received</i>										
Overnight at hospital <sup>a</sup>	N	58	41	99						
	%	38.7	39.8	28.9						
Outpatient AOD Facility <sup>a</sup>	N	85	61	146						
	%	58.3	62	42.7						
Private doctor's office <sup>a</sup>	N	40	28	68						
	%	26.5	26.6	19.9						
Emergency dept. <sup>b</sup>	N	27	20	68						
	%	21.2	19.9	19.9						
Prison/jail <sup>a</sup>	N	25	13	38						
	%	17.3	10	11.1						
<i>Across time</i>										
(1995)	N	46	45	91	51	55	106	-	-	-
	%	12.1	12.4	12.3	13.3	15.1	14.1			
(1997)	N	88	58	146	97	65	162	10	8	18
	%	13.2	12.9	13.0	15.8	13.5	14.6	2.5	2.1	2.3
(1999)	N	65	40	105	76	59	135	15	9	24
	%	10.9	7.6	9.2	13.6	12.6	13.1	3.9	2.2	3.0

Notes: <sup>a</sup>Question was not included in 1995 survey. <sup>b</sup>Estimates based on 1997 and 1999 data for comparison to other treatment locations that were only assessed in these years.

To test whether there were significant changes in rates of people receiving treatment as a function of Fighting Back, the dichotomous outcome of whether the individual received treatment or counseling for alcohol or other drugs in the past 12 months was regressed on individual characteristics associated with treatment need using MLWin for multilevel logistic regression. Multilevel models were used to take into account the nested structure of the data, with individuals nested within matched groups of Fighting Back and comparison communities (see Livert, Rindskopf, Saxe,



& Stirratt, 2001; Saxe et al., 2006). The first level modeled individual variation in treatment utilization. The second level modeled variation between the 41 sites; and the third level represented variation between the 12 matched groups of sites. Also included in the model were indicators for site (Fighting Back/comparison), time (1995, 1997, 1999) and the interaction of site by time. If the Fighting Back program was successful in increasing treatment utilization, one would expect a significant site by time interaction.

There were no significant changes in rates of people in need of treatment receiving treatment across time, nor was the difference in change across time in the Fighting Back and comparison sites significantly different (see Table 4). There were, however, a number of significant individual characteristics associated with the likelihood of receiving treatment. Females were less likely to receive treatment than males. In addition, although African American and Hispanic individuals were less likely to need treatment than others, they were less likely to receive treatment when in need than their White counterparts.

Education, employment status, and income were also related to the likelihood of receiving treatment. Those who had total incomes under \$10,000 and those not currently employed full- or part-time were more likely to receive treatment than those with higher incomes and those currently employed, respectively. Education was negatively related to the likelihood of receiving treatment: the greater the education, the less likely they were to receive treatment when needed. In addition, married individuals in need of treatment were less likely to receive treatment than those who had never been married or were divorced, separated, or widowed.

The model was rerun to explore additional factors predictive of whether those in need of treatment received treatment, omitting the nonsignificant predictors associated with the test of the Fighting Back effect. Added factors included awareness of treatment resources (whether the individual knew of a place for AOD treatment and whether the individual knew people receiving AOD treatment), the visibility of alcohol and drug problems in the individual's neighborhood (see Saxe et al., 2001), and the "substance use system" (Kadushin et al., 1998), which is a measure of the individual's involvement in a social network of AOD use.

The final model indicated that treatment awareness and neighborhood AOD problems were associated with the likelihood of receiving treatment above and beyond the other individual characteristics in the model (see Table 5). Those who knew of a place for treatment and knew others in treatment were four to six times more likely to have received treatment in the past year than others. Those in need of treatment who reported that AOD problems in their neighborhood were highly visible were more likely to receive treatment than those who reported that alcohol and drug use were not highly visible. There was a significant effect of the substance

**TABLE 4**  
**RESULTS FROM MULTILEVEL MODEL TO TEST FIGHTING BACK EFFECTS ON TREATMENT**  
**IN THE PAST YEAR FOR THOSE IN NEED OF TREATMENT**

	Coefficient	SE	Coeff./SE	Odds Ratio <sup>a</sup>
<i>Constant</i>	-3.631	0.209		
<i>Sampling variables</i>				1.000
HHSIZE1 <sup>b</sup>	-0.112	0.114	-0.982	1.119
HHSIZE3 <sup>b</sup>	0.158	0.148	1.068	1.171
HHSIZE4 <sup>b</sup>	0.193	0.181	1.066	1.213
Phones <sup>b</sup>	0.095	0.129	0.736	1.100
<i>Individual characteristics</i>				
Female	-0.916	0.105	-8.724	2.499
Black	-0.298	0.120	-2.483	1.347
Hispanic	-0.804	0.162	-4.963	2.234
Other race	-0.482	0.283	-1.703	1.619
Unemployed	0.491	0.164	2.994	1.634
High school education	-0.299	0.046	-6.500	1.349
Poor	0.459	0.143	3.210	1.582
Age (25 yrs and younger)	-0.425	0.121	-3.512	1.530
Rarely attend religious services	0.183	0.097	1.887	1.201
Married	-0.540	0.140	-3.857	1.716
Divorced, widowed, separated	0.367	0.116	3.164	1.443
2 or fewer years at residence	0.322	0.096	3.354	1.380
Blue collar	0.098	0.103	0.951	1.103
<i>Fighting Back effect</i>				
Site	0.158	0.152	1.039	1.171
Time	-0.098	0.093	-1.054	1.103
Site x time	0.074	0.116	0.638	1.077
<i>Variance components</i>				
Between site	0.019	0.030		
Between site groups	0.036	0.031		

Notes: <sup>a</sup> To simplify interpretation, odds ratios correspond to the absolute value of the coefficients.

<sup>b</sup> Sampling variables: HHSIZE1, HHSIZE3, HHSIZE4 indicate the number of residents aged 16-44 living in a household, with 2 as the reference category and number of phone lines in the household (1 or more).

use system such that those involved with others who use and approve of AOD use were more likely to receive treatment than others, but the magnitude of this effect was very small.

Analysis of the likelihood of attending self-help meetings yielded somewhat different results (see Table 6). The substance use system was significantly negatively related to the likelihood of attending self-help meetings. Those involved with others

TABLE 5  
RESULTS FROM MULTILEVEL MODEL OF TREATMENT IN THE PAST 12 MONTHS  
AMONG THOSE IN NEED OF TREATMENT

	Coefficient	SE	Coeff./SE	Odds Ratio
<i>Constant</i>	-6.779	0.298		
<i>Sampling variables</i>				
HHSize1	-0.072	0.125	-0.576	1.075
HHSize3	0.123	0.160	0.769	1.131
HHSize4	0.000	0.198	0.000	1.000
Phones	0.025	0.137	0.182	1.025
<i>Individual characteristics</i>				
Female	-0.845	0.114	-7.412	2.328
Black	-0.582	0.137	-4.248	1.790
Hispanic	-0.647	0.171	-3.784	1.910
Other race	-0.191	0.251	-0.761	1.210
Unemployed	0.493	0.166	2.970	1.637
High school education	-0.211	0.051	-4.137	1.235
Poor	0.543	0.159	3.415	1.721
Age (25 yrs and younger)	-0.580	0.132	-4.394	1.786
Rarely attend religious srvcies	0.052	0.109	0.477	1.053
Married	-0.329	0.155	-2.123	1.390
Divorced, widowed, separated	0.305	0.125	2.440	1.357
2 or fewer years at residence	0.325	0.104	3.125	1.384
Blue collar	0.016	0.110	0.145	1.016
<i>Treatment awareness and environment</i>				
Know place for treatment	1.472	0.182	8.088	4.358
Know people in treatment	1.839	0.129	14.256	6.290
Visibility of AOD problems	0.383	0.056	6.839	1.467
Substance use system	0.135	0.034	3.971	1.145
<i>Variance components</i>				
Between site	0.028	0.037		
Between site groups	0.073	0.049		

who use and approve of AOD use were less likely to attend self-help meetings than those not involved, though the magnitude of the effect is again very small.

The best predictor of attending self-help meetings was having received AOD treatment in the past year. Those who had received treatment were 74 times more likely to attend self-help meetings than those who had not received treatment. Individual characteristics such as sex, education, income, and employment did not affect the likelihood of attending self-help meetings. Those 25 years and younger,

**TABLE 6**  
**RESULTS FROM MULTILEVEL MODELS OF ATTENDING SELF-HELP MEETINGS IN THE PAST 12 MONTHS**  
**AMONG THOSE IN NEED OF TREATMENT**

	Coefficient	SE	Coeff./SE	Odds Ratio
<i>Constant</i>	-4.737	0.184		
<i>Sampling variables</i>				
HHSize1	-0.005	0.087	-0.057	1.005
HHSize3	-0.090	0.122	-0.738	1.094
HHSize4	0.120	0.144	0.833	1.127
Phones	-0.058	0.097	-0.598	1.060
<i>Individual characteristics</i>				
Female	-0.141	0.075	-0.399	1.151
Black	-0.399	0.094	-4.245	1.490
Hispanic	-0.396	0.121	-3.273	1.486
Other race	-0.152	0.183	-0.831	1.164
Unemployed	0.075	0.137	0.547	1.078
High school education	-0.045	0.036	-1.250	1.046
Poor	0.108	0.132	0.818	1.114
Age (25 yrs and younger)	-0.630	0.100	-6.300	1.878
Rarely attend religious svcs	-0.184	0.078	-2.359	1.202
Married	-0.239	0.103	-2.320	1.270
Divorced, widowed, separated	0.307	0.090	3.411	1.359
2 or fewer years at residence	0.241	0.073	3.301	1.273
Blue collar	0.139	0.079	1.759	1.149
<i>Treatment awareness and environment</i>				
Received specialized AOD Tx	4.297	0.142	30.261	73.479
Know place for treatment	0.969	0.103	9.408	2.635
Know people in treatment	1.630	0.081	20.123	5.104
Visibility of AOD problems	0.291	0.038	7.658	1.338
Involvement in substance use system	-0.143	0.024	-5.958	1.154
<i>Variance components</i>				
Between site	0.017	0.019		
Between site groups	0.033	0.023		

however, were less likely to attend self-help meetings than older individuals. In addition, those who attend religious services rarely and married people were also less likely to attend self-help meetings than others.

## DISCUSSION

The present findings have potentially important implications for strategies designed to increase treatment utilization in the community. The most important

finding is the documentation of the substantial gap between AOD problems and the utilization of treatment resources across a broad range of communities. Substantially fewer people report using treatment resources than are identified as potentially needing treatment. In addition, among those in need of treatment, there are a number of factors associated with the likelihood of receiving treatment.

The likelihood of needing treatment for alcohol and drug problems was associated with a number of factors such as age, sex, and ethnicity, and this is consistent with previous estimates of treatment need (SAMHSA, 2003). Although treatment need is observed within and across all demographic groups, males were more likely than females to need treatment. Those under 25 years of age were more likely to need treatment than those over 25, and African Americans and Hispanics were less likely than others to need treatment.

Employment, education, and income were also related to the likelihood of needing treatment. Those not currently employed were more likely to need treatment than those currently employed. Those with a high school education or lower exhibited a greater need for treatment than those with higher levels of education. This is true also for income. Treatment need is exhibited across all levels, but it is higher among those of lower income.

Treatment need also exists across all levels of relationships, residential status, and religiosity. It appears, however, that the rates are higher among those who are less connected or tied to others in the community in terms of attendance/participation in religious groups, marital status, and length of time at one residence. Those who never or rarely attended religious services exhibited the highest rates of need. Those who were never married also exhibited higher rates of treatment need, although divorced and separated individuals also had higher rates than married couples. Further, those who report having changed residences in the past three years were more likely to need treatment than those who had not. These data provide some indication of where one might focus a strategy to contact hard to reach groups of people who are in need of treatment.

Among those who received treatment, the results are not at all consistent with those observed for treatment need. For example, although females, African Americans, and Hispanics are less likely to need treatment, they are also less likely to receive treatment when it is needed. Similarly, those with social connections such as marriage, religion, and length of time in their homes are less likely to need treatment, but they are also less likely to get treatment when it is needed. Conversely, younger people (25 years and under) and those with lower education are more likely to need treatment, but they are less likely to receive it. Those who are unemployed were both more likely to need and more likely to receive treatment. Those working

in blue collar occupations are more likely to need treatment, but the type of work (blue collar/white collar) is unrelated to the likelihood of receiving treatment.

These results are, for the most part, consistent with other major studies of treatment for serious mental health problems (Wang, Dember, & Kessler, 2002), but they differ in significant ways. Wang and colleagues demonstrated (using data from the National Comorbidity Survey) that non-Hispanic Whites, those with higher incomes and educational attainment, and the unemployed were more likely to receive treatment for serious mental illness than others. They also found that females and married individuals were more likely to receive treatment, a finding contradicted in the present study. Wang and colleagues examined mental illness broadly, whereas this study focuses solely on treatment for substance use problems. The finding that women were less likely to receive specialized treatment for substance abuse problems, though inconsistent with mental health treatment broadly, is consistent with other studies that have examined treatment seeking among women. For example, in one study, women were less likely than men to receive treatment for drug abuse, particularly when they have children (Thomas, Winkel, Suchman, & Luthar, 2002), perhaps because of concerns about risks of having the children removed from the home or the inability to care for the children while in treatment.

In terms of the likelihood of attending AOD self-help meetings, however, women were just as likely as men to attend. There were also no differences in employment status, education, or income in the likelihood of attending self-help meetings, suggesting that self-help services may offer some means for offering treatment services to those who might otherwise go untreated. Those who are married are less likely to both receive specialized treatment as well as to attend self-help meetings. In addition, while involvement in religion is unrelated to the likelihood of receiving specialized treatment, it is positively related to the likelihood of attending self-help meetings.

There are a number of possible reasons for why results associated with treatment utilization for substance abuse would differ from treatment for other mental health conditions. For example, it might take longer for those with higher incomes and educational levels to acknowledge that their substance use problems require treatment. They might have broader social safety nets that actually buffer them so that they are able to maintain a high level of functioning despite substance use. It is not until safety nets have been exhausted and use interferes with functioning that treatment will be seen as necessary. There are no data in the present investigation that would enable assessment of safety nets in terms of whether the individual has relied on help from others to overcome problems experienced because of their substance use (for example, borrowing from family, friends, and banks to pay off debts incurred from problem use; debts that threaten one losing one's home; and

one's ability to provide for one's children). More needs to be done to understand the lack of treatment utilization among those in need and the discrepancies between treatment utilization for substance use problems and treatment for other serious mental illnesses.

There are limitations to the data presented in this report. These data do not, for example, speak to particular issues associated with hard-core drug use that is undetected in a general population survey. Despite this particular limitation, the results do provide a glimpse of the issues that affect the general population across these urban areas. Even within this general population, the gap between treatment need and treatment utilization is clear.

An additional limitation is the reliance on self-report data. With the exception of emergency room visits and arrests, self-reports of the utilization of substance abuse treatment resources appear to be highly reliable (Killeen, Brady, Gold, Tyson, & Simpson, 2004). Thus, there is little reason to suspect that the results are biased by misreporting of treatment in the past year. This is also the case with reports of substance misuse. Particularly when assurances of confidentiality and anonymity are established and assessments are made outside the context of criminal arrests where social desirability issues would be highly salient, self-reports of substance use can be highly reliable (cf. Ensminger, Anthony, & McCord, 1997; Newman et al., 2002). If there is bias, it should be toward overall underreporting of stigmatized behavior. It does not explain, however, why among those who openly reported problem substance use behavior, rates of treatment utilization were so low.

The relatively low frequency of people receiving treatment (12 step or other) suggests that while much may have been done to try to increase access to treatment within these communities, there remains a substantial gap between treatment need and treatment utilization within the general population. This has important policy implications. Much has been invested in increasing access to treatment through the criminal justice system through, for example, increased funding for drug courts nationwide (Cooper, 2003; Turner et al., 2002) and initiatives such as proposition 36 in California, which orders treatment rather than incarceration for first- and second-time drug possession offenders (Longshore et al., 2003). Such efforts may increase treatment utilization among those involved in the criminal justice system. These efforts fail, however, at reaching those who have not been arrested or are not otherwise involved in the criminal justice system. The evidence provided from this examination of substance use problems and treatment across 41 communities highlights the need to develop alternative strategies to remedy the unmet need among those not involved in the criminal justice system, which is a majority of those with serious substance use problems.

ACKNOWLEDGMENTS

This research was supported by a grant from the Robert Wood Johnson Foundation, with Leonard Saxe as the principal investigator. The authors thank Charles Kadushin for his comments and suggestions, and Jane Callahan and Vallejo Fighting Back for their initial interests in this research.

REFERENCES

- Cooper, C.  
2003 Drug courts: Current issues and future perspectives. *Substance Use and Misuse*, 38, 1671-1711.
- D'Onofrio, G.  
2003 Treatment for alcohol and other drug problems: Closing the gap. *Annals of Emergency Medicine*, 41, 814-817.
- Ensminger, M.E., Anthony, J.C., & McCord, J.  
1997 The inner city and drug use: Initial findings from an epidemiological study. *Drug and Alcohol Dependence*, 148, 175-184.
- Epstein, J., & Gfroerer, J.  
1998 Changes affecting NHSDA estimates of treatment need for 1994-1996. Office of Applied Studies Working Paper. Retrieved October 6, 1998, from <http://www.samhsa.gov/OAS/nhsda/chngs96/index.htm>.
- Kadushin, C., Reber, E., Saxe, L., & Livert, D.  
1998 The substance use system: Social and neighborhood environments associated with substance use and misuse. *Substance Use and Misuse [formerly the International Journal of the Addictions]*, 33, 1681-1710.
- Killeen, T.K., Brady, K.T., Gold, P.B., Tyson, C., & Simpson, K.N.  
2004 Comparison of self-report versus agency records of service utilization in a community sample of individuals with alcohol use disorders. *Drug and Alcohol Dependence*, 73, 141-148.
- Lamb, S., Greenlick, M.R., & McCarty, D. (Eds.).  
1998 *Bridging the gap between practice and research: Forging partnerships with community-based drug and alcohol treatment*. Washington, D.C.: National Academy Press.
- Lindholm, M., Ryan, D., Kadushin, C., Saxe, L., & Brodsky, A.  
2004 "Fighting Back" against substance abuse: The structure and function of community partnerships. *Human Organization*, 63(3), 265-276.
- Livert D., & Winick, C.  
2006 Changes in the number of methadone maintenance slots as a measure of program effectiveness: Findings from the Fighting Back evaluation. *Journal of Drug Issues*, this issue.



## GAP BETWEEN TREATMENT NEED AND TREATMENT UTILIZATION

- Livert D., Rindskopf, D., Saxe, L., & Stirratt, M.  
2001 Using multilevel modeling in the evaluation of community-based treatment programs. *Multivariate Behavioral Research*, 36, 155-183.
- Longshore, D., Evans, E., Urada, D., Teruya, C., Hardy, M., Hser, Y., Prendergast, M., & Ettner, S.  
2003 *Evaluation of the Substance Abuse and Crime Prevention Act, 2002 report*. Sacramento, CA: Department of Alcohol and Drug Programs, California Health and Human Services Agency.
- Newman, J.C., Des Jarlais, D.C., Turner, C.F., Gribble, J., Cooley, D.P., & Paone, D.  
2002 The differential effects of face-to-face and computer interview modes. *American Journal of Public Health*, 92, 294-298.
- Saxe, L., Reber, E., Kadushin, C., Beveridge, A., Larson, M. J., Rindskopf, D., Livert, D., Marchese, J., Stirratt, M., & Weber S.  
1995 *Fighting Back evaluation: Interim report*. Report submitted to the Robert Wood Johnson Foundation.
- Saxe, L., Reber, E., Hallfors, D., Kadushin, C., Jones, D., Rindskopf, D., & Beveridge, A.  
1997 Think globally, act locally: Assessing the impact of community based substance abuse prevention. *Evaluation and Program Planning*, 20, 357-366.
- Saxe, L., Kadushin, C., Beveridge, A., Livert, D., Tighe, E., Rindskopf, D., Ford, J., & Brodsky, A.  
2001 The visibility of illicit drugs: Implications for community-based drug control strategies. *American Journal of Public Health*, 91, 1987-1994.
- Saxe, L., Kadushin, C., Tighe, E., Beveridge, A., Brodsky, A., Livert, D., & Rindskopf, D.  
2006 The front lines of the war against drugs: Can research help direct policy? *Journal of Drug Issues*, this issue.
- Spickard, W.A., Dixon, G.L., & Sarver, F.W.  
1994 Fighting Back against America's public health enemy number one. *Bulletin of the New York Academy of Medicine*, 71, 111-135.
- Substance Abuse and Mental Health Services Administration  
2003 *Results from the 2002 national survey on drug use and health: National findings* (Office of Applied Studies, NHSDA Series H-22, DHHS Publication No. SMA 03-3836). Rockville, MD.
- Thomas, J., Winkel, J.D., Suchman, N.E., & Luthar, S.S.  
2002 Drug dependence, parenting responsibilities, and treatment history: Why doesn't mom go for help? *Drug and Alcohol Dependence*, 65, 105-115.

Thompson, B.R.

2001 *Fighting Back: The first eight years*. Nashville, TN: Vanderbilt University Medical Center.

Turner, S., Longshore, D., Wenzel, S., Deschenes, E., Greenwood, P., Fain, T., Harrel, A., Morral, A., Taxman, F., Iguchi, M., Greene, J., & McBride, D.

2002 A decade of drug treatment court research. *Substance Use and Misuse*, 37, 1489-1527.

Wang, P.S., Demler, O., & Kessler, R.C.

2002 Adequacy of treatment for serious mental illness in the United States. *American Journal of Public Health*, 92, 92-98.

Warner, L., Kessler, R., Hughes, M., Anthony, J., & Nelson, C.

1995 Prevalence and correlates of drug use dependence in the United States: Results from the National Comorbidity Survey. *Archives of General Psychiatry*, 52, 219-229.

Woodward, A., Epstein, J., Gfroerer, J., Melnick, D., Thoreson, R., & Willson, D.

1997 The drug abuse treatment gap: Recent estimates. *Health Care Financing Review*, 18, 5-17.

Copyright of *Journal of Drug Issues* is the property of Florida State University / School of Criminology & Criminal Justice and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.