

Use of Mental Health and Substance Abuse Treatment Services by Female Injection Drug Users

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ABSTRACT

This article examines whether female injection drug users (IDUs) who have a history of using mental health services (i.e., one or more psychiatric hospitalizations or counseling) enter types of drug treatment different from those of female IDUs who do not have a history of using mental health services. Data used for this exploration originate from a statewide drug-treatment database covering all women who entered drug treatment in the state of Massachusetts from 1996 to 2001. A total of 7776 women were included in the study. Through the use of logistic regression analysis, the study determined that those female IDUs who had a mental health service history, compared with female IDUs who had no such history, were about two-thirds more

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likely to enter substance abuse treatment other than detoxification only. Specifically, women with a mental health service history were about 66% more likely to enter substance abuse treatment modalities such as drug-free outpatient counseling, methadone maintenance, and/or long-term residential services rather than detoxification alone. This is a positive result, indicating that female IDUs who have mental health problems and therefore have high needs for effective substance abuse treatment are entering the more intensive and/or longer term modalities likely to lead to better outcomes. Possible factors accounting for this, including the referral process within detoxification centers, the role of community referral agents, and the experience women gain as a consequence of receiving services in more than one service system, are discussed.

Key Words: IDUs; Mental health services; Detoxification.

BACKGROUND

Chronic substance abusers who have a co-occurring psychiatric disorder (i.e., dually diagnosed clients) have both special treatment needs and special problems in accessing treatment (1–3). One estimate is that approximately 64% of clients seeking treatment for substance abuse have one or more co-occurring psychiatric disorders (4). Dually diagnosed clients are more difficult to assess and treat, have more complex health service needs, and often require services from a variety of systems (e.g., mental health, substance abuse, medical) that are generally not connected (3). Such clients are more expensive to treat (5), in part because they need more complex and costly interventions, they relapse more frequently, and their care is more episodic (6). Their treatment is complicated by the lack of psychiatrists to prescribe and monitor necessary medications within addiction agencies, changes in client medications, multiple prescribed medications, agency difficulty in accessing prior medical records as clients move from one treatment setting to the next, the possibility of toxic interactions between prescribed and illicit drugs and alcohol if the client relapses, and resistance in some addiction agencies to the prescribing and/or dispensing of some psychotropic drugs. Further, dually diagnosed clients are often unable to utilize traditional support systems such as Alcoholics Anonymous or Narcotics Anonymous for a variety of reasons, including bias among some members of 12-step groups against clients who use psychotropic drugs, and the dually diagnosed client's difficulty relating to others in unstructured interpersonal situations (7,8).



Women and Substance Abuse

Compared with men, women enter substance abuse treatment at a younger age, are more likely to be unemployed and have few marketable skills (9), and have more young children for whom they are responsible and have more concerns (10). Weisner (11) also found gender differences in alcohol use, drug use, and criminal behavior in a sample from both alcohol and drug treatment settings. Brown and Weissman (12) found that women injection drug users (IDUs) were more likely than men to report daily injection of heroin and speedball (heroin and cocaine).

Women's Mental Health Needs

Comorbid psychiatric problems are more prevalent in women than in men, and women typically have more psychiatric problems than men (13). Many drug-dependent women have been sexually abused as children, suffer from post-traumatic stress disorder, and have significant problems forming healthy relationships with men (10,12,14). Studies over the past 20 years have documented the connection between depression and opiate abuse, including both lifetime rates and current rates. Comorbid depression in these women is seen as resulting in poor long-term prognosis in terms of continued drug use, failure to enter treatment, and relapse rates (15).

Women's Health, Financial, and Social Service Needs

The health consequences of drug abuse can be more serious for women than for men. Injecting drugs, needle sharing, having sex with infected, drug-using partners, and engaging in prostitution to purchase drugs all increase the likelihood that women will contract HIV infection, and, once infected, will facilitate the rapid spread of the infection. Maternal drug use can result in transmitting HIV disease to the fetus, premature delivery with serious complications, and impairments in parenting (16). Participation in abusive relationships with drug-abusing men is common, with the men controlling the women by providing drugs (16,17). The societally reinforced idea that women should conform to the stereotypic female role makes it extremely difficult for these women to assert themselves with male partners to demand safe sex practices (17,18), and if the women become pregnant, they often decide to have the baby and attempt to raise it because childbearing is positively valued.



Women's financial and employment needs also are high. In one study, women reported lower incomes and more lower-status jobs than men, and many of these women were single mothers with primary or sole responsibility for children (19). Women entering methadone treatment, many of them IDUs, often lack employment skills and need job training (20,21).

Split Systems of Care for Women

When women receive services, they encounter service agencies that focus on separate pieces of the problem (e.g., housing, domestic violence, health, mental health, childcare, job training, criminal involvement). Women must apply separately for these services and often have separate case managers in each agency, sometimes as many as five to 10 separate case managers at the same time. Medical and psychiatric reimbursement mechanisms do not respond to the need to provide "family care" (22), a system that might bring some of these services together, at least for mother and child.

Receiving services in separate care systems is particularly true for women with mental health and substance abuse problems. Grella (23) points out that the substance abuse and mental health service systems historically developed independently and have divergent philosophies and approaches (e.g., nonmedication-oriented vs. medication-oriented; confrontational vs. supportive). In many states and communities, the systems are administered through separate bodies and funding mechanisms, and the flow of information may be made more difficult by confidentiality concerns. Staff from one system often have misconceptions about the treatment approaches and outcomes of the other system. Thus, the dually diagnosed woman must find a way to navigate these systems to secure adequate care.

Women's Use of Substance Abuse Treatment

A study of more than 12,000 clients in substance abuse treatment found that women tended to drop out of treatment at higher rates than men (24). Research indicates that women and men have different perceptions about treatment and different treatment utilization patterns (25,26). For example, Beckman (27) found that women alcoholics were more likely to delay treatment initiation and encounter resistance to their treatment entry from family and friends, and were less likely to receive referrals from physicians and the legal system. Weisner, Greenfield, and Room (28) found that, as the specialized addiction treatment network expanded over a period of years, women's use of such programs did not increase accordingly; however,



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men's use did. Instead, female problem drinkers were more likely than male problem drinkers to use mental health and primary care clinics.

Women benefit as much as men when they remain in treatment (29–31). Methadone maintenance programs for pregnant women are the best studied, but outcomes in many other settings indicate that women benefit at least as much as men. Because of the dearth of women-only programs, most women are still treated in mixed-gender settings. Many of these have a male-oriented treatment approach (32), which some authors (33,34) feel impedes women's ability to benefit fully.

Use of Various Substance Abuse Treatment Modalities

Given the chronic nature of drug dependence, detoxification is viewed by many treatment providers and researchers as a critically important step in treatment initiation but, by itself, unlikely to lead to lasting changes. When compared with detoxification only, utilization of any other substance abuse treatment modality (e.g., drug-free outpatient, methadone maintenance, long-term residential) is associated with more positive outcomes (35–37). The use of detoxification alone appears to offer only limited benefit, and recent reductions in the length of detoxification stays (35) serve to reinforce the view that the value of detoxification alone is very limited when not combined with additional follow-up treatments.

Study Rationale and Purpose

The purpose of the study described here is to explore, for female IDUs, whether having a history of mental health service use is associated with entry into detoxification only. Such a relationship might be found because these women have mental health problems in addition to substance abuse problems and therefore, might find it more difficult than single-diagnosis substance abusers to engage in more long-term, intensive, or ongoing treatment (i.e., detoxification plus additional treatments such as drug-free out-patient, methadone maintenance, or long-term residential) and might instead cycle and recycle through detoxification only.

Specific study questions are: “Do female IDUs with and without a history of mental health service use differ in their use of substance abuse treatment modalities?” And, “Is there an association between having a history of mental health service use and type of substance abuse treatment modality entered?” Through the use of logistic regression modeling, study questions were examined for female IDUs, all of whom had entered substance abuse treatment in the Commonwealth of Massachusetts.



METHODS

Participants

The study population included a total of 7776 women between the ages of 18 and 75 who utilized the statewide substance abuse treatment system from 1996 through June 2001, who reported that heroin was their primary drug, and who reported that they had injected drugs in the past year. With respect to the racial/ethnic distribution of the population, 565 were African-American, 1443 were Latina, and nearly three-quarters of the population (5768) were of white-European background.

Measures

The examination was conducted through analyses of data on admissions to all substance abuse treatment programs licensed by the State of Massachusetts, Department of Public Health, Bureau of Substance Abuse Services (Mass-BSAS). The Mass-BSAS database includes 32 different categories of treatment modalities. The list is exhaustive and modalities are mutually exclusive: there is no overlap due to definitions and instructions provided to participating agencies for coding admissions. However, this study examined the four most frequently utilized modalities: detoxification, outpatient drug-free, long-term residential, and methadone maintenance. Although women IDUs in Massachusetts utilized other treatment modalities as well (e.g., acupuncture, short-term inpatient, drinking-driver programs), the samples were so small (less than 3% altogether) that analysis would not have been fruitful. The modalities examined here reflect typical, stable drug treatment programs not dissimilar to those providing services to drug abusing clients in other states across the country. The data were collected by drug treatment staff via personal interview with clients enrolling in these programs. The Massachusetts treatment system has served as a national model of program development and innovation and represents close to the state's total financial investment in substance abuse treatment programs. The Mass-BSAS database has been recognized as one of the few statewide substance abuse treatment databases comprehensive and accurate enough to permit detailed exploration of substance abuse treatment utilization (38,39). McCarty and colleagues (38) note that "A major strength of the Massachusetts information system is that it is a claims-type database..." and therefore "...requires complete client data on the admissions record before a claim can be paid" (p. 1097). As a result, there is little missing information in each case file. The research data set was constructed from each drug treatment agency's separate management information system and covers client admissions over a 5 1/2-year period, 1996-June 2001.



Procedures

Variable Coding

This database was originally organized by admission date with a unique record for each time a client was admitted to the treatment system. In this admissions level database, the state provided a unique, randomly assigned nonidentifying number (i.e., not a social security number, for example) for each individual. The unique individual-based ID was confirmed based on characteristics such as race, ethnicity, gender, date of birth, and primary language. Each individual, while identified with the state-assigned random ID, also had multiple records that provided treatment-services data and also demographic and drug-use history data. A first step of the analysis was to create a new individual-level database. For the analysis conducted for this study, some variables had to be recoded into summary variables (see description below). This step had to be conducted since the majority of IDUs who had utilized the substance abuse treatment system between 1996 and 2001 had used it multiple times: an average of 5.1 (SD = 6.2) treatment episodes per individual over the life of the study.

Initially, in order to identify the most appropriate manner for developing these variable coding schemes, a number of bivariate statistical models were developed. Further, individual-level models were compared with models based on each treatment admission event. Using these different methods of statistical analysis, it was established that the individual-level summary variables used in the analysis below had close to identical intercorrelation and directionality as the variables measuring interactions at each admission.

Independent Variables in the Model

The primary independent variable measured whether a woman was ever in mental health treatment during the course of the study. The independent variable was coded as: (0) never had prior mental health treatment (35.8%); and (1) reported prior mental health treatment, including mental health outpatient counseling or one or more psychiatric hospitalizations, at any admission (64.2%).

This model controlled for drug use and number of times in treatment as well as sociodemographic characteristics, many of which are known to influence substance abuse treatment outcomes.

Various ethnic groups use different types of substance abuse treatment (40,41), and women who are younger, have lower education, are unemployed, are homeless, and have a higher intensity of drug use tend to have less positive



treatment outcomes (42). Further, studies have generally found that clients who have lower severity of drug use, less criminal involvement, and are employed, have a better response to treatment (43–45).

In this study, the race/ethnicity of the woman was coded as reported by the woman at her first treatment admission. The race/ethnic categories used were those developed by Mass–BSAS. Education was recoded as a three-category variable: 1) less than high school, 2) high school graduate, and 3) more than high school, based on information on highest number of years of education. For virtually all participants, this value remained constant since most had completed their education prior to entry into the Mass–BSAS substance abuse treatment system. Interestingly, nearly a third of the women (30.7%) had some college education.

Homeless status was coded as having ever reported being homeless at any treatment admission for the years of the study. Almost a third of the women (31.3%) reported that they were homeless at some point between 1996 and June of 2001. Employment was coded as having ever reported being employed, either full- or part-time, at any substance abuse treatment admission for the years of the study. By this definition, one-fourth (25.5%) of the population reported having been employed.

Age is another factor associated with treatment outcomes. In national treatment outcome studies, younger adults, when compared with older adults, have poorer outcomes on measures of drug use and employment (46,47). They also have poorer treatment retention rates (48). In this study, age was coded as the mean age reported over a period of 5 1/2 years. Most study participants were in their mid-thirties, with a mean age of 33.1 (SD = 8.2).

Greater severity of drug dependence has repeatedly been associated with poor post-treatment outcomes (49,50). The variable “injected in the past month” vs. “did not inject in the past month” was used as a control measure for drug use. Given limitations of the data set, this was the most reliable measure of frequency of drug use. The variable “injected in the past month” measured whether, for the years of the study, a woman IDU had ever reported injecting drugs in the month prior to any treatment admission. Nearly 80% of the women had reported injecting drugs in the month prior to any treatment admission.

Dependent Variable in the Model

The dependent variable in the model is dichotomous, describing whether a woman had used detoxification between 1996 and 2001 as her sole substance abuse treatment modality, or instead, entered other substance abuse treatment modalities in addition to detoxification. The dependent variable was coded as: (0) having entered detoxification and other types of



substance abuse treatment between 1996 and June 2001, and (1) having only entered detoxification between 1996 and June 2001. Slightly less than one-fourth (24.9%) of the women had only used detoxification during this time period.

Data Analysis

As a first step, bivariate analysis was conducted to describe the female IDUs and the type of substance abuse treatment they entered. Logistic regression methods were utilized to control simultaneously for the relationships between variables. In order to test for possible interaction effects of the independent variables, several stratified logistic regression models were created. Stratified models were run for the primary independent variable, mental health treatment history, and for race. These models suggested that there are no interactions in the model between mental health history and the other independent variables, or between race and the other variables. An interaction term for race and homelessness was created to check minor variations in the odds ratios in one of the stratified models. The results clearly suggest no interaction effects among the independent variables.

Binomial logistic regression was used to examine the associations between the independent variables and whether or not a woman IDU had entered detoxification only. In each model, the variables were entered in a single block. Criterion categories among the categorical independent variables are indicated in the Results section below, showing the odds-ratio results.

RESULTS

Of the 7776 women included in this study, close to three-quarters (74%) were white. Most were in their early thirties, with 70% having a high school degree or less as their highest educational achievement. All the women had reported that they had injected heroin in the past year and close to 80% reported having injected in the month prior to entering treatment. For the years covered by this study, these women had entered the Massachusetts substance abuse treatment system an average of five times (see Table 1). The results of this study support the general finding that many women drug users also have mental health problems for which they have received treatment. Out of the study's 7776 female IDUs, 64.2% reported having used mental health services.

Tables 1 and 2 describe the bivariate statistics for both groups of women: those who only entered detoxification between 1996 and 2001, and



Table 1. Variables used in logistic regression model for treatment admissions, 1996–June 2001 for women heroin users who injected drugs in the past year (N = 7776).

Variable	N	% or Mean (SD)
Race		
1 = White ^a	5,768	74.2
2 = African-American	565	7.3
3 = Latina	1,443	18.6
Mean age in years over all treatment admissions	7,776	33.1 (8.2)
Highest level of education reported during all admissions		
1 = Less than high school	1,986	25.5
2 = High school graduate	3,401	43.7
3 = More than high school ^a	2,289	30.7
Employment (full- or part-time)		
0 = Never reported being employed at any admission ^a	5,795	74.5
1 = Reported being employed at any admission	1,981	25.5
Homelessness		
0 = Never reported being homeless at any admission ^a	5,339	68.7
1 = Reported being homeless at any admission	2,437	31.3
Mental health treatment history		
0 = Never reported being in any mental health treatment ^a	2,783	35.8
1 = Reported being in prior mental health treatment at any admission	4,993	64.2
Injected in the past month		
0 = Never reported injecting drugs during prior month at any admission ^a	1,682	20.9
1 = Reported injecting drugs during month prior to any admission	6,154	79.1
Mean number of admissions to treatment	7,776	5.1 (6.2)

^aReference category.

those who used other treatment modalities. This table highlights that the use of only detoxification differs quite dramatically for different population groups. Women who used prior mental health services are more likely to use additional drug treatment modalities beyond detoxification. Specifically, of the women who reported being in prior mental health treatment, 87.4% had entered additional drug treatment beyond detoxification. In contrast, of



Table 2. Percentages of each category.^a

In detoxification only		In other treatments	
N	% or Mean (SD)	N	% or Mean (SD)
1,309	22.7	4,459	77.3
179	31.7	386	68.3
448	31.0	995	69.0
1,936	32.5 (8.8)	5,840	33.3 (8.0)
623	31.4	1,363	68.6
892	26.2	2,509	73.8
421	17.6	1,968	82.4
1,693	29.2	4,102	70.8
243	12.3	1,738	87.7
1,497	28.0	3,842	72.0
439	18.0	1,998	82.0
1,307	47.0	1476	53.0
629	12.6	4,364	87.4
104	6.4	1,518	93.6
1,832	29.8	4,322	70.2
1,936	1.8 (2.0)	5,840	6.2 (6.7)

^ap = 0.000.

the women who had *never* used mental health treatment, 53.0% had entered additional drug treatment beyond detoxification. Further, results in Table 2 indicate that among white women, 22.7% had entered detoxification only, compared to 31.7% of African-American women, and 31.0% of Latina women. For those with less than a high school education, 31.4% had entered detoxification only, compared to 26.2% of high school graduates, and 17.6% of those who had education beyond high school. There was also a difference in using detoxification only for those who were employed compared to those who were not employed. Among women who reported being employed, 12.3% had entered detoxification only, while among women who had never been employed, 29.2% had entered detoxification only. Eighteen percent of women who reported being homeless had only entered detoxification, while 28.0% of women who had never reported being homeless had entered detoxification only. Finally, Table 2 shows that women who had used only detoxification had far fewer treatment admissions of any kind (mean number of treatments = 1.8) than women who had used other kinds of drug treatment (mean number of treatments = 6.25).

To untangle the relationships identified in the bivariate analyses between mental health service use, race/ethnicity, education, prior drug use, homeless

Table 3. Logistic regression: characteristics associated with likelihood of entrance into detox treatment only of Massachusetts female IDUs whose primary drug is heroin and who injected in the past year, 1996–June 2001 (N = 7776).

IDU characteristics	Entered detox only (detxonly), Odds ratio (95% CI: lower, upper)
Race	
White ^a	1.000
African-American	1.302 (1.033, 1.643) ^c
Latina	1.027 (0.854, 1.114)
Age	0.975 (0.967, 0.982) ^d
Education	
Less than high school	1.043 (0.875, 1.244)
High school graduate	1.112 (0.953, 1.298)
More than high school ^a	1.000
Employed ^b	0.600 (0.505, 0.713) ^d
Homeless ^b	1.804 (1.538, 2.116) ^d
Injected in the past month ^b	6.760 (5.431, 8.416) ^d
Prior Mental Health Treatment ^b	0.335 (0.295, 0.380) ^d
Number of drug treatment admissions	0.690 (0.665, 0.715) ^d

Note: See Table 1 for full description of variable categories.
Model Chi Square $X^2 = 2447.270$, $df = 10$, $p < 0.000$.

^aReference category.

^bReference category is (1) “no”; yes group is compared to the no group.

^c $p < 0.050$.

^d $p < 0.001$.

status, having injected drugs in the past month, and number of drug treatment admissions, a logistic regression model was developed. The logistic regression reported in Table 3 measures the association between mental health status (prior use of mental health services) and use of detoxification only, controlling for race/ethnicity, education, having injected in the past month, homeless status, employment status, number of drug treatment admissions of any kind (residential, counseling, methadone maintenance, or detoxification), and age at admission. This model identifies that female IDUs who had reported receiving mental health services, when compared to female IDUs who had not reported using mental health services, were about two-thirds less likely to enter only detoxification after controlling for all the above variables. Specifically, female IDUs who reported having used some type of mental health service were close to 66% more likely to use additional substance abuse treatment modalities beyond detoxification than women who did not report any type of mental health service use.



Additional results worthy of note from this logistic regression model which support findings from previous research (41,51), are that African-American female IDUs (regardless of their mental health service use) were about 30% more likely than white female IDUs to use detoxification only; homeless female IDUs were about 80% more likely than nonhomeless female IDUs to use detoxification only; and women who were active IDUs (i.e., reported having injected in the past month) were close to 70% more likely to use detoxification only than women who had never reported injecting in the month prior to treatment entry.

DISCUSSION

In examining the substance abuse treatment entry of female IDUs who had previously received mental health services, this study provides information on the patterns of treatment entry of one of the highest risk populations involved in substance abuse treatment. Contrary to what was expected, female IDUs with prior mental health service use entered what could be considered more effective treatment in that they combined detoxification with other modalities within the substance abuse treatment system, rather than entering detoxification only, which is less likely to reduce drug use.

What might account for this finding? One possibility is that staff within the substance abuse treatment system influence the behavior of these women. For example, it may be that detoxification counselors who work with women who have used mental health services see them as a high-need group that will not be well served by detoxification alone. Thus, counselors may urge these women, more than women without a dual-diagnosis, to continue treatment and may effect a successful referral. If this is so, it would argue for the maintenance of the type of counselor hiring and/or training that has resulted in such outcomes.

Another possibility is that the linkage with further treatment is facilitated by community providers such as mental health, social service, medical, and/or legal professionals who may have referred these women to drug treatment and have determined that, by virtue of their mental health histories, the women require more than detoxification. Since women often have family and friends who are not supportive of substance abuse treatment (17,52,53), these community providers would play an important role in reducing the “revolving door” phenomenon when clients use detoxification only, and likely reducing substance abuse relapse and associated mental health rehospitalization. The issue of mandated treatment may be a related factor influencing this finding. It may be that dually diagnosed female IDUs are more likely to be mandated to treatment than



are women with a single diagnosis, and the systems mandating treatment may specify that treatment must be more intensive or longer term than detoxification only.

A third possibility is that women with mental health problems gravitate to modalities that are more likely to have the resources they need such as psychiatrists who can prescribe psychotropic drugs, and psychiatrically trained professionals such as social workers, psychologists, and psychiatric nurses. Historically, outpatient substance abuse programs generally provided such resources as part of their services; to a lesser degree, such resources were also available in methadone maintenance and long-term residential programs, either through in-house services or more commonly, through referral of clients to outside programs, with care coordinated by the substance abuse treatment program.

Alternatively, it may be that women who use more than one service system (i.e., mental health plus substance abuse) over time become more sophisticated about which services to use and how to use them effectively. Finally, it may be that a combination of the explanations above, or factors not yet considered, explain this service use pattern.

The finding that African-American women were about a third more likely than white women to use detoxification only is consistent with prior research (41,54) showing a negative association between minority group membership and drug users' treatment utilization. It reflects an area of considerable concern lately to the National Institute on Drug Abuse and the National Institute on Alcohol Abuse and Alcoholism: disparities in treatment use by race, in part reflecting differential access to services by race (41). Possible other factors influencing treatment utilization by African-American women include limited access to support services (e.g., childcare, transportation, ability to take time from work if employed in an hourly wage job) needed to utilize additional treatment, negative experiences related to race when previously using more intensive or long-term treatment, low expectations of treatment or personal recovery related to race, and prejudice on the part of detoxification program staff about the motivation or capacity of African-American women to utilize additional treatment.

Homeless women and those who reported injecting in the past month were more likely to use less effective treatment (e.g., detoxification without follow-up treatment), when compared with those who were not homeless and did not report injecting in the past month. This is not surprising since utilization of outpatient and methadone maintenance services, involving daily or weekly appointments at a regularly scheduled time, can be difficult for women who are homeless. And, while homeless women might benefit greatly from long-term residential programs that meet both their housing and substance abuse treatment needs, slots for such services are limited and



may require remaining on a waiting list for days or weeks. Wenzel, Koegel, and Gelberg (53) list several barriers to treatment for homeless women (e.g., lack of money to pay for childcare, fear of child custody problems, health insurance less available to women than men, a substance abusing partner who undermines treatment, inaccessible treatment locations), and these factors may make continued treatment extremely difficult.

Implications for Research, Policy, and Practice

The study raises questions about factors that might be influencing women with a history of mental health problems to use additional modalities beyond detoxification only. A qualitative analysis, examining factors such as the role of the detoxification counselor, the contribution of community health and social service providers in referral and provision of ongoing support, and the likelihood that women who use multiple treatment systems become “systems savvy,” could be quite informative. Two additional areas for future investigation are the type, frequency, and impact of mandated treatment on this dually diagnosed population, and the location and accessibility of psychiatric resources for women in the substance abuse treatment system and the relationship between these factors and women’s utilization of more extensive treatment beyond detoxification.

Similarly, the finding that African-American women were about a third more likely than white women to use only detoxification warrants qualitative investigation to tease out the possible role played by systems problems related to availability and accessibility, attitudinal biases and/or discriminatory behavior on the part of treatment staff, and self-limiting attitudes and behavior on the part of these often multiple-diagnosed (e.g., HIV positive, homeless, IDUs with psychiatric and substance abuse problems) African-American women. With such information, interventions could be structured to increase treatment utilization.

The study raises policy and practice questions as well. The substance abuse and mental health treatment systems are, for the most part, structurally separate in Massachusetts, as they are in many states across the country, although both fields have been working toward more coordination and integration. Findings here can be viewed as quite positive in terms of “integrated services”: women with mental health histories were accommodated by the substance abuse treatment system and were likely to receive more than the basic treatment of detoxification. However, the data do not provide a picture of the extent to which services were actually “integrated.” We do not know the extent to which staff in these programs were equipped to assess and treat the dual nature of these women’s problems. Given that more than 60% of this female IDU population using



the state's substance abuse treatment network did have a history of mental health services, ensuring the availability of such "integrated" care becomes an important hiring, training, and supervision issue for program planners and policy makers.

Study Limitations

These findings should be viewed in light of the following limitations: The sample is limited to clients using substance abuse treatment in Massachusetts; thus, findings may reflect a statewide or regional pattern of treatment not characteristic of the country as a whole. Further, there may be women in the sample who suffered from mental health problems but were never treated for these problems; thus, this study offers no insight into their substance abuse treatment use. The data on mental health service use does not inform us about the volume of mental health services used by women in this population; thus, some women may have been frequent or constant users of such services, and others may have been episodic or one-time users.

Nevertheless, findings provide important information on the service utilization patterns of a population at high risk for a range of negative outcomes, including continued or increased substance abuse and social problems, as well as medical and mental health problems due to their status as female IDUs. The finding that those with co-occurring drug abuse and mental health problems use more effective drug treatment (i.e., detoxification combined with other modalities) is a hopeful sign that some members of this population may be receiving the help they need to change long-term negative patterns.

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