RESEARCH REPORT

WHO IS SERVED AND WHO IS MISSED BY JUVENILE DRUG COURTS IMPLEMENTING EVIDENCE-BASED TREATMENT

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Juvenile drug courts play a crucial role in meeting the treatment needs of youth with substance use problems. Juvenile drug courts implementing Juvenile Drug Court: Strategies in Practice *and Reclaiming Futures (JDC/RF) programs address treatment needs by providing evidence-based substance use treatment. Using data from the National Cross-Site Evaluation of Juvenile Drug Courts and Reclaiming Futures, we examined who is and is not served by these programs. The majority of youth served by JDC/RF programs were males 15 to 16 years old with substance abuse or dependence problems and multiple-year histories of substance use. The majority have numerous co-occurring problems. Compared to the general population of youth in need, JDC/RF clients were significantly younger, more likely to be male, nonwhite, and to have started using substances before the age of 15, but they had significantly lower rates of weekly substance use. In addition, JDC/RF clients were more likely to have been on probation, parole, or in jail/detention, but were less likely to have been arrested in the past year. Findings indicate that certain youth who are in need of the evidence-based substance use treatment offered through JDC/RF programs, including females and Caucasians, are not receiving these services at rates similar to other youth.*

DESPITE THE ALARMINGLY HIGH RATE of substance use disorders (SUDs) among adolescents and the focus of multiple state and national initiatives on engaging youth with SUDs in treatment programs, the majority of adolescents in need of treatment never receive it (Dennis, Baumer, & Stevens, 2016; Substance Abuse and Mental Health Services Administration [SAMHSA], 2014b; Wu,

Hoven, & Fuller, 2003). Clinical research indicates that intervention during adolescence is associated with reductions in lifetime SUDs (Dennis, Scott, Funk, & Foss, 2005) and that the earlier an individual starts using illicit substances, the more probable that the SUD will progress into adulthood (Dennis, Clark, & Huang, 2014; Lynskey et al., 2003). Therefore, early intervention for SUDs and commonly co-occurring mental health disorders is critical to achieving positive outcomes for at-risk youth.

Data from the 2013 National Survey on Drug Use and Health (SAMHSA, 2014b) indicate that the rate of unmet need for substance use treatment (92.3% overall) is similar by gender, but differs significantly by race and ethnicity. By race, the rate of SUDs was highest among American Indians and Alaskan Natives (14.9%), followed by Native Hawaiians and other Pacific Islanders (11.3%), Hispanics (8.6%), Caucasians (8.4%), and African Americans (7.4%) (SAMHSA, 2014b). However, research highlights low treatment rates for minority youth, with African American and Hispanic youth experiencing the lowest treatment rates across all racial/ethnic groups (Dennis, Baumer, & Stevens, 2014). Consistent with these findings, Cummings, Wen, and Druss (2011) found that the adjusted percentage of adolescents who received treatment for SUDs was 6.9% for African Americans and 8.5% for Hispanic youth, as compared to 10.7% among their white counterparts. Expanding on this finding, by examining the availability of SUD treatment by county in the United States, Cummings, Wen, Ko, and Druss (2014) found that counties in the South and Midwest, as well as counties with more African American, rural, and uninsured residents, were less likely to have at least one substance use treatment facility that accepted Medicaid. Therefore, not only do youth of different racial/ethnic backgrounds with SUDs not receive treatment at the same rate, but not all youth have the same access to treatment.

Many of the youth who receive the substance use treatment they need receive it as a result of their involvement in the justice system. As noted by Dennis, Baumer, and Stevens (2016), the juvenile justice system has a high concentration of youth with substance use problems. An estimated 50% of juvenile justice-involved youth have sub-

stance-related problems (Office of Juvenile Justice and Delinquency Prevention [OJJDP], 2003; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002). As a result of their involvement in the justice system, these youth are identified and referred to treatment.

The development of the juvenile drug court (JDC) model was prompted by a considerable increase in substance use–related cases in juvenile courts and the recognition that this setting did not effectively address the complex needs of juvenile offenders (Bureau of Justice Assistance, 2003; National Drug Court Institute [NDCI] & National Council of Juvenile and Family Court Judges [NCJFCJ], 2003). Current practice in many JDCs is to implement comprehensive, higher-level models—such as the *Juvenile Drug Court: Strategies in Practice* (JDC:SIP; NDCI & NCJFCJ, 2003; NCJFCJ, 2014) and Reclaiming Futures (RF; reclaimingfutures.org)—to increase effectiveness and produce better outcomes for the youth they serve (see Dennis et al., 2016). Research has found that JDC:SIP is effective at reducing consumer drug use and recidivism and results in significant cost savings compared to that for youth participating in traditional treatment settings (Carey, Allen, Perkins, & Waller, 2013). RF, a system of care approach, aims to improve clinical care by specifically focusing on access to treatment; quality of treatment, including implementation of evidenced-based substance use treatment; and continuing care linkages. Evaluations of the RF model have found it is associated with positive outcomes for youth and their families (Dennis et al., 2016).

Because of the importance of early intervention for SUDs in achieving positive outcomes for at-risk youth, along with the high rate of unmet need for substance use treatment, it is important to examine who is being served by and who is in need of services but not receiving them from (i.e., being missed by) JDC/RF programs—a major route by which youth receive evidenced-based substance use treatment. To examine youth being served by JDC/RF programs—and, thus, receiving needed substance use treatment—in this study we describe the demographic characteristics, substance use, mental health, illegal and violent behavior, and justice involvement of clients of JDC/RF programs. To examine youth who are missed by the JDC/RF programs (and thus not receiving needed evidence-based substance

use treatment from these programs—and perhaps not at all), we examine the same demographic and behavioral characteristics of youth in the general population who meet the eligibility criteria for JDC, which includes being criminally involved and having substance use problems for which they need treatment. We then compare the demographics of these two groups.

METHODS

Participants

JDC/RF participants were 784 clients of eight JDC/RF programs implemented in eight different JDCs involved in the National Cross-Site Evaluation of Juvenile Drug Courts and Reclaiming Futures (JDC/RF National Evaluation; see Dennis et al., 2016) who were admitted to the JDC/RF programs between January 2010 and March 2015.

The general population of youth who met the criteria for JDCs were 354,537 youth (weighted *N*) from randomly selected households across the United States who completed the National Survey on Drug Use and Health (NSDUH) in 2013.

Measures and Procedure

Characteristics and behavior of JDC/RF clients at intake into the JDC/RF program

Data were collected as part of the standard clinical practice of the JDC/RF sites involved in the four-year JDC/RF National Evaluation. Data from youth enrolled in the JDC/RF programs were obtained from self-report interviews using the Global Appraisal of Individual Needs (GAIN; Dennis, Titus, White, Unsicker, & Hodgkins, 2003). The GAIN integrates clinical and research measures into one comprehensive structured interview with eight main sections: background, substance use, physical health, risk behaviors, mental health, environmental risk, legal involvement, and vocational correlates (see Dennis et al., 2016). The instrument has been used in more than 300 published studies and has normative data available for

over 43,000 adolescents entering substance use treatment throughout the United States. A detailed list of validation studies using multiple methods (e.g., urine tests, collateral reports, Rasch measurement models, timeline follow-back), copies of the actual GAIN instruments, and detailed information about the scales and other calculated variables are publicly available at www.gaincc.org.

As part of the SAMHSA/OJJDP and SAMHSA grant awards to the eight JDC/RF sites, the programs were either required or strongly encouraged to use the GAIN instrument to assess client needs and program outcomes. All GAIN data were collected as part of general clinical practice or specific research studies under each JDC/RF program's respective voluntary consent procedures. The local site evaluators submitted these GAIN data to a central data repository housed at and maintained by Chestnut Health Systems GAIN Coordinating Center. With approval from all eight of the JDC/RF programs, the JDC/RF National Evaluation obtained access to their client-level GAIN data. The GAIN data collected at intake into the JDC/RF programs were used for the present study.

Data pooled for secondary analysis are under the terms of data sharing agreements and the supervision of Chestnut Health Systems' Institutional Review Board. In addition, all data and proceedures related to the JDC/RF National Evaluation were reviewed and approved by the University of Arizona's Human Subjects Institutional Review Board.

Characteristics and behaviors of the general population of youth who met the criteria for JDC

Based on the eligibility criteria of the programs involved in the JDC/RF National Evaluation, we defined the general population of youth who met the criteria for JDC as youth who have substance use problems for which they need treatment and who are criminally involved. This general population was identified using data collected as part of the 2013 NSDUH (SAMHSA, 2014a). The NSDUH is an annual nationwide survey involving interviews with approximately 70,000 randomly selected individuals aged 12 and older. Data from the NSDUH provide national- and state-level estimates on the use of

tobacco products, alcohol, illicit drugs (including nonmedical use of prescription drugs), and mental health in the United States. Specifically, the general population of youth who met the criteria for JDC was defined as adolescents aged 12 to 18 who were criminally involved (i.e., those adolescents who had been arrested, were on probation or parole, or were in detention/jail in the past year) with substance use problems (i.e., those adolescents who had at least three substance dependence or abuse symptoms, including weekly use of alcohol or any drug in the past year). These latter criteria are used on the GAIN screening assessments to identify youth with a high probability of being diagnosed with substance use problems.

Analysis

Descriptive statistics were used to describe characteristics and behaviors of clients at intake into the JDC/RF programs. We summarize GAIN data reflecting JDC/RF clients' demographic characteristics, custody situation, homelessness, mental health, victimization, violent behavior, vocational situation, substance use, and justice system involvement. All percentages are reported as the portion of the number of valid responses to the particular item.

For the comparison of JDC/RF clients to the general population of youth who met the criteria for JDC, the GAIN data were compared to available data from the NSDUH. First, we weighted the NSDUH data according to standard procedure using weights supplied by NSDUH to represent a national sample (SAMHSA, 2014a). Next, we selected a set of equivalent variables available in both data sets representing demographic characteristics, vocational situation, substance use, and justice system involvement. Most of these variables could be matched directly, though a few were matched conceptually, due to lack of an identical time frame or variable definition.

The most notable difference concerns the measure of depression. In the GAIN, past-year depression is indicated by the respondent reporting at least 5 of 12 possible depression symptoms and at least one of three required items: (1) feeling very trapped, lonely, sad, blue, depressed, or hopeless about the future; (2) feeling easily annoyed and irritated, or having trouble controlling your temper; or (3) losing

interest or pleasure in work, school, friends, sex, or other things you cared about. However, in the NSDUH, depression is indicated by the respondent reporting at least one major depressive episode in a lifetime, and being bothered by one or more depression symptom(s) for two or more weeks in the past year. The major depressive episode requirement in the NSDUH makes its definition a bit more stringent and hence may result in lower reported rates of depression than would result from the GAIN's definition of depression.

The means and frequencies of the JDC/RF GAIN responses were compared to those from the NSDUH sample using a series of independent sample *t*-tests. The results of these tests indicate for which variables the JDC/RF clients differed from the general population of youth who met the criteria for JDC and thus might benefit from JDC/RF programs and the evidence-based substance use treatment they provide.

RESULTS

JDC/RF Clients

Three-quarters (76%) of JDC/RF program clients were male, 36% were Caucasian/white, 33% were Hispanic, 14% were African American/black, and 17% were of mixed/other race (Table 1). Clients were all between 12 and 19 years old, with the majority (68%) aged 16 to 19 years and an average age of 16.0 (Table 1). About 1 in 10 JDC/RF clients under the age of 18 were in foster care or otherwise not under the custody of their parents.

As shown in Table 2, at intake into the JDC/RF programs, clients experienced numerous problems of clinical relevance. The majority (90%) of JDC/RF program clients started using substances before the age of 15, with 31% having used for five or more years. Almost two-thirds (62%) of JDC/RF program clients reported current symptoms that could be defined as substance dependence, and another 26% reported substance abuse. In addition, 25% of JDC/RF program clients had been in detention/jail at least 14 of the past 90 days, and another 54% had been on probation or parole at least 14 of the past 90 days with one or more positive drug screens. Furthermore, half (50%) of

TABLE 1 DEMOGRAPHIC CHARACTERISTICS OF JDC/RF CLIENTS (N = 784) AND THE GENERAL POPULATION OF COMPARABLE YOUTH ($N_{WEIGHTED}$ = 354,537)

Participant Characteristics	JDC/RF Clients (% or mean [SD])	General Population of Comparable Youth[a] (% or mean [SD])	*t*	*p*
Gender				
Male	76%	61%	10.05	<.001
Female	24%	39%		
Race/Ethnicity				
African American/black	14%	10%	3.16	.002
Caucasian/white	36%	59%	–13.60	<.001
Hispanic	33%	21%	7.30	<.001
Mixed/other	17%	10%	5.11	<.001
Age	16.0 (1.14)	16.6 (1.39)	–15.68	<.001
12–15	32%	23%		
16–19	68%	77%	–5.62	<.001
Custody[b]				
In foster care	1%			
Other out of home (other family/emancipated/ runaway)	9%			
	83%			
Living with parents (single, multi, adopted)	1%			
Other custody situation	6%			
Age 18 or older				

[a]The general population of comparable youth are those youth in the general population who meet the criteria for juvenile drug court and who are in need of substance abuse treatment. [b]Data not available in the NSDUH 2013 dataset (SAMHSA, 2014a) for the general population of comparable youth.

JDC/RF program clients had been homeless or runaway at some point in their lives. The majority (66%) reported symptoms of externalizing (e.g., conduct disorder) and/or internalizing (e.g., depression) mental health problems, 29% reported experiencing depression during the past year, and 61% reported having been victimized. Recent (past-year) engagement in physical violence was also common, having been reported by 69% of JDC/RF clients. Although the majority of

TABLE 2 CHARACTERISTICS AND BEHAVIORS OF JDC/RF CLIENTS AT INTAKE INTO THE JDC/RF PROGRAM (N = 784) AND OF THE GENERAL POPULATION OF COMPARABLE YOUTH ($N_{WEIGHTED}$ = 354,537)

	JDC/RF Clients (% or mean [SD])	General Population of Comparable Youth[a] (% or mean [SD])	*t*	*p*
Substance Use				
Weekly substance use	72%	88%	–9.91	<.001
Age				
<15	90%	84%	5.66	<.001
15–17	10%	16%		
Years of substance use[b]				
< 1 year	2%			
1–2 years	28%			
3–4 years	41%			
5 or more years	31%			
Past-year substance severity				
Use	11%			
Abuse	26%	4%	14.10	<.001
Dependence	62%	96%	–19.30	<.001
Justice System Involvement				
Past-year arrests	84%	91%	–25.52	<.001
Any past-year probation, parole, or jail/detention	95%	60%	45.22	<.001
Intensity of Justice System Involvement				
Time in detention/jail[b]				
30 or more days in detention/jail[b]	13%			
14–29 days in detention/jail[b]	12%			
Time in probation/parole				
14 or more days with 1 or more positive drug screens	54%			

TABLE 2	CHARACTERISTICS AND BEHAVIORS OF JDC/RF CLIENTS AT INTAKE INTO THE JDC/RF PROGRAM (N = 784) AND OF THE GENERAL POPULATION OF COMPARABLE YOUTH ($N_{WEIGHTED}$ = 354,537) (cont.)			
	JDC/RF Clients (% or mean [SD])	General Population of Comparable Youth[a] (% or mean [SD])	*t*	*p*
Homelessness				
Ever homeless/runaway[b]	50%			
Mental Health				
Externalizing problems only[b]	27%			
Internalizing problems only[b]	8%			
Both externalizing and internalizing problems[b]	31%			
Depression	29%	19%	6.16	<.001
Victimization				
Lifetime history[b]	61%			
Violence				
Engaged in physical violence in past year[b]	69%			
Vocational Situation				
Currently vocationally engaged (school or work)	91%	85%	5.99	<.001
Behind 1 or more years in school[b]	55%			
Expelled or dropped out of school[b]	19%			

[a]The general population of comparable youth are those youth in the general population who meet the criteria for juvenile drug court and who are in need of substance abuse treatment. [b]Data not available in the NSDUH 2013 dataset (SAMHSA, 2014a) for the general population of comparable youth.

JDC/RF clients (91%) were working or in school, 55% reported being behind one or more grades in school, and 19% reported being expelled from or having dropped out of school.

JDC/RF Clients Compared to the General Population of Youth Who Met the Criteria for JDC

As shown in Table 1, JDC/RF program clients were significantly more likely than the general population of youth who met the criteria for JDC to be male (76% vs. 61%), younger (age 16 to 19: 68% vs. 77%), African American (14% vs. 10%), Hispanic (33% vs. 21%), and of mixed/other race (17% vs. 10%). Conversely, they were less likely to be Caucasian/white (36% vs. 59%).

As shown in Table 2, the general population of youth who met the criteria for JDC experienced higher rates of problems compared to JDC/RF program clients in numerous ways. A greater percentage of the general population reported weekly substance use (88% vs. 72%), as well as symptoms equivalent to substance dependence (96% vs. 62%). A greater percentage of the general population also reported past-year arrest (91% vs. 84%). Finally, fewer of the general population of youth were currently vocationally engaged compared to JDC/RF clients (85% vs. 91%).

As shown in Table 2, the general population of youth who met the criteria for JDC experienced lower rates of problems compared to JDC/RF program clients in terms of depression within the past year, with 19% reporting having suffered from depression versus 29% of JDC/RF clients. Furthermore, fewer of the general population compared to JDC/RF clients reported first use of substances before the age of 15 (84% vs. 90%). In addition, fewer of the general population of youth have been on probation, parole, or in jail/detention in the past year (60% vs. 95%).

DISCUSSION

These results provide a picture not just of who the JDC/RF programs are serving but also of those the programs are missing from the general population of adolescents who meet the criteria for JDC.

Missed youth are adolescents in the general population who have substance use problems for which they need treatment and who are criminally involved: those who would likely benefit from JDC/RF programs and the evidence-based substance use treatment they provide.

Results indicate that JDC/RF program clients are primarily male and nonwhite, and are disproportionately so compared to the general population of youth who met the criteria for JDC. This finding is not surprising, given the preponderance of data showing that criminal justice system involvement is higher for these two groups nationally (Belenko, Sprott, & Petersen, 2004; National Council on Crime and Delinquency, 2007; Piquero, 2008). This finding suggests that JDC/RF programs are missing female and Caucasian youth who could benefit from being in JDC and receiving evidence-based substance use treatment. Given the evidence that involvement in the juvenile justice system is the predominant way that adolescents are referred to substance use treatment, the findings from the current study suggest that identification of youth in need of treatment needs to go beyond the juvenile justice system to other systems of care (e.g., schools, primary care providers) to identify and provide treatment for youth with substance use problems, especially those disproportionately underserved in the context of JDCs, such as females and Caucasians.

The finding that the JDC/RF programs are serving youth who are younger than those in the general population of youth who met the criteria for JDC is encouraging, given past research that indicates that (1) achieving abstinence is more likely for youth when an early intervention occurs (Dennis et al., 2005), and (2) when the onset of substance use occurs before the age of 15, there is a higher likelihood of a SUD continuing into adulthood (Dennis et al., 2014; Lynskey et al., 2003). Thus, identifying and engaging youth at a younger age is important.

All of the youth in the sample from the general population of youth who met the criteria for JDC reported symptoms indicative of either substance abuse (4%) or substance dependence (96%). However, only 88% of JDC/RF clients met criteria for abuse or dependence (26% and 62%, respectively). Therefore, 12% of clients in JDC/RF programs reported symptoms of substance use that are not sufficient

to qualify them for a DSM-IV substance use diagnosis.[1] These data, in combination with the significantly lower rates of weekly substance use for JDC/RF clients compared to the general population of youth who met the criteria for JDC, suggest that JDC/RF clients have less severe substance problems overall than the general population of youth who met the criteria for JDC.

This finding might be due to how we selected the general population of youth who met the criteria for JDC for the present study. We selected youth with substance problems (abuse or dependence) because this is the population that was targeted by the JDC/RF programs, as well as many other JDCs. To identify adolescents in the general population who met the criteria for JDC, the definition of a high likelihood of substance problems from the GAIN Short Screener was used; that is, the youth reported at least three substance dependence or abuse symptoms, including weekly use of alcohol or any drug in the past year (Dennis, Chan, & Funk, 2006). The DSM-IV requires reporting of three or more of seven SUD symptoms for a diagnosis of substance dependence, or reporting one or more of four possible SUD symptoms for a diagnosis of substance abuse in the past year. By definition then, selecting youth from the general population who reported at least three dependence or abuse symptoms guaranteed a diagnosis of abuse or dependence.

In contrast, JDC/RF program clients have higher rates of co-occurring mental health disorders than the general population of youth who met the criteria for JDC, with 29% reporting having suffered from depression in the past year compared to 19% of the general population. When interpreting this result, the difference in the definition of *depression* should be considered. The definition used to identify depressed youth in the general population required reporting a major depressive episode, which is a more severe manifestation of depression than would result from the definition used to identify JDC/RF clients with depression (reporting 5 of 12 symptoms of depression in the past year). This difference in definition makes depres-

[1] Both the GAIN and the NSDUH data available at the time of this evaluation contained only items relevant to a DSM-IV substance use diagnosis. Items required for a DSM-5 diagnosis were not available for the purposes of this evaluation.

sion relatively less likely to be identified in the general population of youth who met the criteria for JDC, and therefore it could be one of the reasons for the higher rate of depression among JDC/RF clients.

A second consideration, when interpreting the difference in rates of depression among the two study groups, is that many of the JDC/RF programs actively recruited individuals with co-occurring mental health disorders, which increased the likelihood of their clients having and reporting depression. Consequently, the finding of a higher rate of depression among JDC/RF program clients than among the general population of youth who met the criteria for JDC could reflect an actual difference between the groups, and might indicate that youth with co-occurring disorders are more likely to be funneled through the juvenile justice system than youth without co-occurring disorders. This finding and interpretation are consistent with previous research that has identified a link between JDC admission decisions and a client's mental health history (Barnes, Miller, & Miller, 2009; Miller, Miller, & Barnes, 2007). Barnes and colleagues (2009) speculate that clients with a history of mental health problems might be more likely to be enrolled in JDC because a history of mental health problems may be seen as a factor mitigating their criminal behavior, leading to an increased likelihood that the juvenile will be received favorably by JDC program staff.

JDC/RF programs also served clients with more severe justice system involvement than that found in the general population of youth who met the criteria for JDC. While 60% of the general population had been on probation, parole, or in jail/detention in the past year, 95% of JDC/RF program clients fit this description. And, while the proportion of JDC/RF program clients reporting a past-year arrest was significantly lower than among the general population, proportions among both groups were very high. The smaller proportion of JDC/RF program clients who reported arrest might be the result of the higher rates of involvement in probation, parole, jail, and detention.

Treatment and Policy Implications

The results of this study have a number of treatment and policy implications. The literature suggests that early intervention is an im-

portant factor in improving substance use outcomes (Dennis et al., 2005). JDC/RF programs should continue to target younger substance-using populations to increase the likelihood of positive outcomes for SUD in this high-risk group. In addition, given the complexity of co-occurring issues of youth involved in the JDC/RF programs (e.g., substance, mental health, vocational, and family problems), they are likely to benefit from the implementation of evidence-based clinical assessments to determine the array of service needs for each adolescent and to direct collaboration with a variety of service agencies to meet these needs.

Research is needed on systemic factors that might result in the overuse of the juvenile justice system for male and nonwhite populations, and the failure to identify and serve the treatment needs of female and Caucasian adolescent populations. One such factor is the selection criteria for JDC and JDC/RF programs. Similarly, the effects of self-selection into the program might be pertinent. Participation in JDCs is almost always voluntary, with the youth having the option to accept traditional punitive sentencing instead of entering the JDC program. Through the investigation of these and other such factors, JDC/RF programs and JDCs in general might better address these disparities through expanded strategies to reach a greater percentage of the general population of youth who are appropriate for and who would benefit from these programs.

Additionally, each of the JDC/RF programs was the recipient of a grant, along with which came requirements for the types of clients that were to be recruited (e.g., all programs were to recruit nonviolent offenders). Even where there were no grant requirements to serve a certain population, most JDC/RF programs reported similar criteria for client recruitment as part of the JDC/RF National Evaluation, including clients identified as having a substance use disorder and clients reporting co-occurring mental health problems. In light of the present findings, it is advisable to carefully consider the selection criteria for JDC programs to make certain that all receive these needed services.

Limitations

This study has a few limitations. First, we utilized self-report data, which are vulnerable to memory lapses and participants' decisions about what information to disclose. These possibly influential factors, however, applied to both the JDC/RF clients and the general population of youth who met the criteria for JDC. Thus, this is unlikely to account for the differences between these study groups.

Second, the data were drawn from different data sets. Differences in data collection procedures could have created differences between the study groups. While every effort was made to precisely match properties of measurements used for the JDC/RF clients (the GAIN instrument) and for the general population of youth who met the criteria for JDC (the NSDUH instrument), this was not always possible. Therefore, some of the differences between groups found in this study might be at least partially the result of differences in measures. We considered these limitations when interpreting the results.

CONCLUSION

Combined, results indicate that the JDC/RF programs are serving their target populations of high-risk clients. The general description of JDC/RF program clients shows that they are heavy substance users who have been using for a long time and from a young age. They are also likely to report a number of co-occurring problems, including mental health disorders, problems at school, and problems at home. Compared to clients in the general population who met the criteria for JDC, and thus might benefit from the services offered by these programs, JDC/RF program clients have more severe problems (or higher risk) across multiple domains. However, the JDC/RF programs are missing some youth who would benefit from being in JDC and receiving evidence-based substance use treatment. The most notable groups from the general population of youth who met the criteria for JDC that are underrepresented in JDC/RF programs are females and Caucasians. These are two groups traditionally underrepresented in the justice system for a variety of reasons, and JDC/RF programs appear to be no exception.

Given existing evidence that the JDC:SIP and RF are effective approaches to treating substance use and reducing criminal behavior (Altschuler, 2011; Carey et al., 2013; Dennis, 2013; Dennis, Baumer, Moritz, Nissen, & Stevens, 2016; Korchmaros, Baumer, & Valdez, 2016; Nissen, 2011), the evidence that these JDC/RF programs are effectively reaching and serving high-risk clients is encouraging. Findings suggest that, to reduce disparities in receipt of these services by gender and race, additional effort is required to identify and recruit female and Caucasian clients who demonstrate need for JDC/RF services.

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