Title
Predictors of detention among juveniles referred for a court clinic forensic evaluation.

Journal
The journal of the American Academy of Psychiatry and the Law, 42(1)

ISSN
1093-6793

Authors
Tolou-Shams, Marina
Rizzo, Christie J
Conrad, Selby M
et al.

Publication Date
2014

Peer reviewed

HHS Public Access

Author manuscript

J Am Acad Psychiatry Law. Author manuscript; available in PMC 2020 May 28.

Published in final edited form as:

J Am Acad Psychiatry Law. 2014 ; 42(1): 56–65.

Predictors of Detention Among Juveniles Referred for a Court Clinic Forensic Evaluation

Marina Tolou-Shams, PhD,
Assistant Professor (Research), Warren Alpert Medical School of Brown University, Providence, RI.

Staff Psychologists, Bradley Hasbro Children's Research Center, Rhode Island Hospital, Providence, RI.

Christie J. Rizzo, PhD,
Assistant Professor (Research), Warren Alpert Medical School of Brown University, Providence, RI.

Staff Psychologists, Bradley Hasbro Children's Research Center, Rhode Island Hospital, Providence, RI.

Selby M. Conrad, PhD,
Staff Psychologists, Bradley Hasbro Children's Research Center, Rhode Island Hospital, Providence, RI.

Sarah Johnson, MA,
graduate student, Bouve College of Health Sciences Graduate School, Northeastern University, Boston, MA.

Cassandra Oliveira, BA,
graduate student, MCPHS University, Worcester, MA.

Larry K. Brown, MD
Professor, Warren Alpert Medical School of Brown University, Providence, RI.

Director of Child, Adolescent and Young Adult Psychiatry Research, Department of Psychiatry, Rhode Island Hospital, Providence, RI.

Abstract

Juvenile offenders have disproportionately high rates of psychiatric and substance use disorders relative to their nonoffending counterparts. Less is known about the impact of psychiatric and substance use disorders on repeat juvenile justice involvement among juveniles specifically referred for forensic mental health evaluations. We describe the demographic, psychiatric, and legal history background of 404 juveniles who underwent a court clinic forensic mental health evaluation, and we examine the association between these factors and detention rates of 20 percent over a 12-month postevaluation period. After accounting for known predictors of reoffending, such

Address correspondence to: Marina Tolou-Shams, PhD, Bradley/Hasbro Children's Research Center, One Hoppin Street, Suite 204, Providence RI 02903. mtoloushams@lifespan.org.

Disclosures of financial or other potential conflicts of interest: None.

as prior offense history and externalizing disorders, dual diagnosis (i.e., co-occurring psychiatric and substance use disorders) remained a salient predictor of future detention. Consistent with prior literature on juvenile offending, substance use may greatly enhance the likelihood of subsequent detention.

A substantial number of adolescents are involved in the juvenile justice system each year. Recent estimates report that 2.11 million youths under the age of 18 are arrested annually,[1] and more than 31 million adolescents are under the jurisdiction of juvenile courts.[2] These youths are at increased risk of a variety of negative outcomes, including high rates of substance use[3] and psychiatric problems.[4]

Much of the research exploring the intersection of juvenile justice involvement, psychiatric concerns, and substance use has been conducted among juveniles in detention. It has been estimated that 70 to 90 percent of incarcerated youths have psychiatric problems[4–6] and that 70 percent of those have a diagnosis that may require further intervention.[5] Studies of detained youths have found that, excluding conduct disorder, 60 percent of males and 75 percent of females met diagnostic criteria for one or more psychiatric disorders.[4] Although disproportionately high rates of oppositional defiant disorder (ODD), attention deficit hyperactivity disorder (ADHD), and conduct disorder are not surprising (near 90% for conduct disorder in one study[7]), significant rates of depression and dysthymia (17% of males and 26% of females) have also been found.[4,8]

Detained juvenile offenders also have substantially higher rates of substance use disorders than do their nonoffending peers.[4,9] Rates of dual diagnosis (co-occurring psychiatric and substance use disorders) are also high among detained youths, ranging from 50 to 73 percent of those studied.[4,10,11] Dual diagnosis among detained youths has been linked with increased delinquent behavior[4,12] and continued legal consequences, including higher rates of recidivism and future incarceration than those in counterparts with nondual diagnoses.[13,14] This trajectory of legal involvement places youths at increased risk of a variety of other negative outcomes, such as continued substance use, academic problems, and risky sexual behavior.[15,16] A growing body of literature therefore suggests that dual diagnosis affects psychosocial outcomes and justice system involvement among detained youths. Yet, few studies have explored these associations in court-involved, nonincarcerated (CINI) youths who are not typically included in samples of detained or incarcerated juveniles, but who may possess similar risk factors and associated negative outcomes.

Court-involved, nonincarcerated juveniles comprise approximately two-thirds of the juvenile justice population.[17] It has been estimated that between one-half and one-third of this population has a diagnosable psychiatric condition.[18] Most of these youths present with symptoms of conduct and substance use disorders.[19] However, other diagnoses, including mood and anxiety disorders and ADHD, are also disproportionately represented among child and adolescent arrestees.[16,19,20] Studies have found that juveniles with substance use disorders and psychiatric problems are at increased risk for substance-related recidivism,[13] persistent reoffending,[20] and self-reported antisocial activity.[16] However, the impact of psychiatric diagnosis and substance use on reoffending, specifically among CINI juveniles, remains understudied. Understanding the prospective associations among psychiatric

diagnosis, substance use, and rates of future detention may provide important information about what types of screening measures and evidence-based interventions may be important to consider in attempting to offset a trajectory of continued legal involvement.

Many juvenile and family court systems use diversion programs, such as specialty courts (e.g., juvenile drug courts and mental health courts) to address a variety of concerns including substance use and mental health (and dual diagnosis).[21] These specialty courts divert youths from detention by requiring that they participate in substance use therapy or mental health treatment or both to reduce their likelihood of reoffending. Some juvenile courts also rely on in-house juvenile court clinics (the first established in 1899 in Chicago) to provide forensic evaluation and consultation to the bench regarding the needs of detained and nondetained juveniles and their families. These clinics provide the court with forensic mental health expertise, timely evaluations, and comprehensive recommendations for intervention.[22] Court mental health clinics vary in the services and interventions offered; however, most are designed to aid and support juveniles through a rehabilitation model that encourages identification and treatment of substance use problems and co-occurring psychiatric diagnosis, with the goal of preventing future justice system involvement.[22]

Court mental health clinics serve youths who are at increased risk for recidivism due to their mental health concerns that draw the attention of the judges. Repeat legal involvement is typically associated with a host of poorer health and behavioral outcomes, such as substance use and increased psychiatric distress. As studies of detained youths have consistently illustrated, incarceration places youths at risk for on-going substance use, academic problems, increased risky sexual behavior, and involvement in the adult criminal justice system.[13,15,16] Thus, understanding the factors that place juveniles referred specifically for mental health clinic evaluations at increased risk for future detention may facilitate the development of preventive interventions that offset this pernicious course of legal involvement and associated consequences.

The current study represents one of the first to explore the intersection of juvenile justice involvement, psychiatric problems, and substance use in a juvenile court clinic (JCC) sample referred from a statewide family court. The study's goals were two-fold: to provide descriptive information (demographic, legal, and psychiatric) regarding 404 nondetained juveniles referred for forensic mental health evaluation and to identify predictors of detention over a 12-month follow-up period among this referred sample of court-involved youths. Based on the extant literature, we hypothesized that JCC youths who are dually diagnosed (comorbid substance use disorder and psychiatric disorder) are at increased risk of future detention when compared with those without this diagnostic profile.

Method

Participants

This study was a retrospective chart review of 454 juvenile offenders who were referred for a brief forensic mental health evaluation at a juvenile court clinic in the Northeast between 2006 and 2008. The court clinic serves status and criminal juvenile of-fenders ages 11 to 17 who are ordered by judges and magistrates to receive a brief, focused forensic mental health

evaluation. Judges and magistrates who preside over specialty court proceedings, such as truancy and juvenile drug court (diversion and postadjudication) hearings and formal delinquency hearings, ordered all evaluations. Sample referral questions included whether the juvenile was experiencing depression, what level of care was appropriate, and whether the juvenile was a danger to self. Evaluations varied in the length of time they took to complete, depending on the referral question. Given that this court clinic's model for evaluations is brief and focused on a primary referral question, the evaluation visits did not typically last more than 3 to 4 hours. They included the following: a brief forensic interview of the juvenile (45–60 minutes); a forensic interview of the parent or guardian (45–60 minutes); and completion of evidence-based, self-report psychological assessment measures by both the caregiver (regarding the juvenile's symptoms and behavior) and the juvenile (self-report of symptoms and behavior) (45–60 minutes). When English was not the juvenile's or caregiver's primary language, a court-based interpreter assisted in completing the evaluation, which typically increased the time required for the evaluation visit. In addition to the evaluation visit, time was spent conducting a relevant records review (legal and other relevant records, such as school, and outside treatment providers) and obtaining any other relevant collateral information (e.g., through interview of collateral informants). Time spent obtaining collateral information ranged from 1 to 3 hours, depending on the case. All forensic evaluations were conducted by licensed mental health professionals (psychologists, psychiatrists, and social workers), and the families incurred no costs for the evaluation.

Study Design and Procedures

Between 2006 and 2008, 454 juveniles were referred for a mental health evaluation at the clinic. Of those, 404 received a brief, focused mental health evaluation and were included in this chart review study. Fifty referred juveniles missed their appointments and were not evaluated. There were no differences between those evaluated ($n = 404$) and those not evaluated ($n = 50$) in any of the demographic or legal history variables under study ($p > .05$ for all). For this study, court mental health clinic records were reviewed to obtain demographic, psychiatric, and substance use data on the juveniles. These data were collected from both adolescent and caregiver in clinical interviews conducted by a licensed mental health professional using standardized measures. The institutional review board (Lifespan—The Miriam Hospital IRB, applicable to Rhode Island Hospital) approved this study as a retrospective chart review and authorized a waiver of the usual requirement for informed consent.

Chart Data

Predictors

Demographics: Demographic information including age, gender, race and ethnicity, and health insurance status were collected with a standard intake form. This form was completed by legal guardian(s) before the mental health assessment.

Legal: The court clinic maintains a database of legal information relevant to each juvenile referred for evaluation that is extracted from a larger statewide court database of all juveniles

processed through the family court. Data examined for this study included source of referral (e.g., truancy, drug, or delinquency petition), number and type of charges (criminal versus status), and history of social service involvement.

Psychiatric: Forensic Interviews: Separate forensic interviews were conducted by licensed mental health professionals (i.e., psychologists, psychiatrists, and social workers) with the parent/guardian(s) and the adolescent. These interviews yielded information regarding number and type of diagnosis and comorbidity, as well as history of out-of-home placement, mental health treatment, and psychiatric hospitalization. All diagnoses were made by the evaluating clinician, using Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR) criteria.[23]

Psychiatric: Standardized Measures: Clinician interviews were also informed by standardized assessment measures; however, not all juveniles received all measures. Choice of measures was driven by clinical decision-making unrelated to chart review study; questions and measures were available only to English-speaking juveniles and their caregivers. Juveniles could complete the Diagnostic Interview Schedule for Children: Present State Voice Version[24] or the Youth Inventory-4[25] or both, and all caregivers completed the Adolescent Symptom Inventory-4.[26] Details regarding the standardized measures available to court clinic clinicians are as follows:

The Diagnostic Interview Schedule for Children: Present State Voice Version, the Voice DISC (V-DISC) is a self-administered, computerized interview that assesses more than 30 diagnoses from DSM-IV-TR. Each juvenile gets a unique interview based on his pattern of responses about his symptoms and behaviors. The V-DISC generates provisional DSM-IV-TR diagnoses according to computer-assisted scoring that can then inform clinicians about the juvenile's mental health needs. It has been validated for use in juvenile justice samples.[24]

The Adolescent Symptom Inventory-4 (ASI-4) is a 120-item, parent-completed questionnaire on adolescent behavior based on DSM-IV-TR[23] criteria. ASI-4 items cluster into subscales corresponding to DSM-IV-TR Axis I diagnoses. The ASI has demonstrated good evidence of internal consistency, test-retest reliability, and convergent validity.[26]

The Youth Inventory-4 (YI-4) is a 128-item, self-report rating scale for children and adolescents, ages 12 to 18 years, parallel to the ASI-4 parent measure. It screens for symptoms of psychiatric disorders contained in the DSM-IV-TR. It has satisfactory internal consistency (α = 0.66–0.87), test-retest reliability (r = 0.54–0.92), and convergent and discriminant validity.[25,27]

Detention—The main outcome of the evaluation, detention, was assessed through a statewide court computer database and did not include juvenile arrestees waived to the adult system. Classified according to computerized legal records, detention was defined as being ordered by a judge to reside in the state's juvenile detention facility at least once, at either 3, 6, 9 or 12 months after evaluation (n = 82). Length of time in detention was unavailable for the current study.

Data analysis

Before conducting group comparisons, we calculated descriptive statistics for the main study variables. Bivariate analyses were then conducted to compare detainees (detained at any point over a 12-month follow-up; $n = 82$) to nondetainees (not detained at any point over a 12-month follow-up; $n = 322$) on demographics (age, gender, race and ethnicity), legal history (e.g., prior status and criminal offenses), psychiatric history, and current DSM-IV-TR psychiatric diagnoses including dual diagnoses (co-occurring psychiatric problems and substance abuse). To understand more about the impact of prior offending on future detention in this sample, we conducted parallel comparisons of baseline first-time ($n = 287$; 72%) and repeat-offending juveniles ($n = 111$; 28%). Bivariate analyses guided the development and testing of logistic regression models to determine the most salient prospective demographic, legal, and psychiatric factors of detention.

Results

Baseline Descriptive Data

Demographics—Of the 404 juveniles who underwent a mental health evaluation, the majority were male (241 males, 163 females) with an average age of 15 years (SD 1.6; range, 10–18). Juveniles self-identified primarily as white (64%), with the remainder identifying as African American (7%), Hispanic/Latino (17%), or other (e.g., Asian Pacific Islander or Native American; 4%); 7 percent of the juveniles' records were missing race and ethnicity data. Eighty-five percent ($n = 343$) of juveniles had some form of health insurance (49% private and 43% public/state insurance; some reported having both).

The majority (72%) of the juveniles evaluated had completed up to the ninth grade at the time of the evaluation (range of education, 4th to 12th grade). Five juveniles (1%) had graduated from high school and 16 (4%) had withdrawn from school ($n = 12$) or earned a GED ($n = 4$). Thirty-one percent endorsed a current special education plan (individualized education or a 504 plan). The majority (68%) of evaluation referrals came from wayward or truancy petitions, with the remainder court ordered for evaluation from the juvenile drug court (21%) and juvenile delinquency court (11%). Nine percent of the juveniles were in out-of-home placement at the time of the evaluation.

Psychiatric History—The majority (61%) of the juveniles reported prior mental health treatment, 14 percent reported at least one prior psychiatric hospitalization, and 37 percent reported a history of psychotropic medication. Some proportion of juveniles may have undergone a psychiatric evaluation elsewhere, but those data were not coded for the current study.

Legal History—Slightly more than two-thirds of the juveniles referred were status offenders (e.g., truant, disorderly conduct, or elopement), and 31 percent were criminal offenders (reflecting the referral source noted above). For 72 percent of the juveniles, the petition open at the time of the evaluation represented the first offense. Almost one-quarter of the sample had prior status offenses (range, one to four) and 15 percent of the sample had

prior criminal offenses (range, one to four; offenders could have one petition filed with multiple charges or offenses).

Psychiatric and Substance Use Disorders—Eighty-three percent ($n = 337$) of the juveniles were given a primary Axis I diagnosis, with the three most common being oppositional defiant disorder (ODD; 23%), mood disorders (major depression, dysthymia, or bipolar; 16%), and anxiety disorders (11%). Figure 1 presents proportions of specific psychiatric diagnoses. Approximately 10 percent of the juveniles received a primary substance use disorder diagnosis (most commonly cannabis abuse or dependence). The majority (62%) received a diagnosis of a primary externalizing disorder. The most common secondary diagnoses were mood disorders (the secondary diagnosis in 12% of the sample) and cannabis abuse/dependence (the secondary diagnosis in 10% of the sample). Forty-three percent of the sample was diagnosed with a single disorder, 30 percent received two diagnoses, 12 percent received three diagnoses, and 4 percent received four to five diagnoses (average number of diagnoses at time of court clinic evaluation was 1.4; SD 1.02). Almost one-quarter of the sample had dual diagnoses (co-occurring psychiatric and substance use disorder).

Baseline Bivariate Analyses: First-Time Versus Repeat Offenders

Group comparisons are presented in Table 1. First-time and repeat offenders did not differ with respect to gender and race or ethnicity. The repeat offenders were more likely to be older (mean (M), 15.32 years) than the first-time offenders (M 14.51 years) ($t_{(230)} = 5.07$, $p < .0001$) and were also more likely to have a new criminal (versus status) offense at the time of referral for evaluation. In terms of the psychiatric variables, a higher proportion of the repeat offenders had a history of out-of-home placement, inpatient psychiatric hospitalization, and mental health treatment. More of the repeat offenders were also given a dual (substance use and psychiatric disorder) diagnosis by the court clinic evaluator. Repeat offenders also met DSM-IV-TR criteria for a higher average number of Axis I psychiatric diagnoses (M 1.67; SD 1.10) relative to their first-time offending counterparts (M 1.34; SD 0.98; $t_{(397)} = 2.98$, $p = .003$).

Longitudinal Outcomes

Descriptive Data

Detention: Over the 12-month follow-up period, 20 percent of the juveniles ($n = 82$) were detained at least once. Cumulative detention rates were 10, 16, 18, and 20 percent across 3-, 6-, 9-, and 12-month follow-ups. Seven percent of the young offenders were detained two or more times (range, 2–4) over the 12-month period. The most common charges over time were larceny, breaking and entering, and destruction of property (representing, on average, approximately 25% of all crimes accrued) followed by vagrancy or disorderly conduct (approximately 20% of all crimes accrued). Substance-related crimes represented only a small proportion of the offenses (range, 7–12% of the total committed during the 12-month follow-up period).

Bivariate Analyses

Detained Versus Nondetained Offenders: Group comparisons are presented in Table 2. Detention at any time during 12-month follow-up was associated with being older (15.33 versus 14.6 years; $t_{(402)} = 3.86$; $p < .0001$) and with being male, belonging to a racial or ethnic minority group, and residing in out-of-home placement at the time ofthe court clinic evaluation. A legal history (before the charge related to the court clinic evaluation referral) of status and criminal offending was also associated with incidence of detention. In terms of psychiatric variables, a history of inpatient psychiatric hospitalization with co-occurring substance use and a psychiatric disorder (i.e., a dual diagnosis made by the court clinic evaluator) was associated with future detention. Those detained over the 12-month period also met DSM-IV-TR criteria for a higher average number of psychiatric diagnoses (M 1.67; SD 1.09) than did the nondetained juveniles (M 1.34; SD 0.99), $t_{(401)} = 2.63$, $p = .01$.

Logistic regression—We tested the associations between multiple baseline variables and future detention while accounting for well-established predictors of detention, such as prior offense history, and for externalizing diagnoses made at the time of the evaluation, such as conduct disorder. Variables were entered into the model in three different steps as three distinct groups of variables: demographics (age, gender, race and ethnicity, and out-of-home placement), legal history (prior status and criminal offending), and psychiatric variables (inpatient psychiatric hospitalization, number of diagnoses made by court clinic clinician, and dual-diagnosis status). Table 3 reflects the unadjusted and adjusted odds ratios of these associations. The overall model resulted in an 81 percent correct classification. After accounting for relevant demographics (age, gender, race, and ethnicity), legal history (prior offense type), and other psychiatric factors (history of hospitalization, externalizing diagnosis, and number of diagnoses), those juveniles who had a co-occurring psychiatric and substance use (i.e., dual diagnosis) disorders were approximately six times more likely than their non-dually diagnosed peers to have been detained over the 12-month follow-up period (odds ratio (OR) 5.83; Wald = 12.90; $p < .0001$).

Discussion

Overall rates of psychiatric diagnosis (87%) found in this juvenile population are fairly consistent with those reported in prior studies of mental health disorders in youths in the juvenile justice system.[4,28] Rates are slightly higher than in some other general population detention samples, but the difference may be explained by the fact that juveniles in this study were specifically identified (and referred to the court clinic) by the judge's questions about psychiatric difficulties. Rates of detention increased over time and, consistent with our hypotheses, receiving a dual diagnosis of substance use and other psychiatric disorders substantially heightened the risk of future juvenile detention for these young offenders. This strong prospective association remained, even after we accounted for known demographic predictors, such as older age, male gender, repeat offender status, and primary externalizing diagnosis, all of which are commonly linked to reoffending and detention. Thus, severe substance use (sufficient to warrant an abuse or dependency diagnosis) that co-occurs with an Axis I psychiatric disorder may be associated with an increased risk of committing another offense that results in detention.

Those in juvenile justice settings should consider expanding their concern about status or criminal offending juveniles with co-occurring substance use and mental health problems, to reduce the risk of future detention. Within 48 hours of detention, many U.S. and international juvenile detention settings implement a brief mental health and substance use screening measure (i.e., the Massachusetts Youth Screening Inventory; MAYSI[29]). This type of measure assists unit staff and correctional clinicians in identifying whether the juvenile requires substance use or psychiatric intervention or both. The MAYSI-2, for example, has been widely disseminated in detention and probation settings. To our knowledge, however, neither the MAYSI-2 nor any similar measure has been tested or implemented in court-involved, nonincarcerated juveniles supervised in the community who may never be detained or on probation. Implementation and testing of a brief measure that screens for substance use and other psychiatric concerns (at the time of first court contact) could be useful in triaging juveniles to the appropriate treatment referral opportunities and thereby perhaps in reducing the risk of future detention. Our data suggest that repeat offenders referred for forensic evaluation have higher rates of psychiatric impairment and co-occurring substance use than those referred at the time of the first offense. Therefore, screening and possibly intervention at the time of the first offense could be critical in preventing entrenched behavioral problems, psychiatric difficulties, and repeat legal involvement. Paraprofessional court staff can be trained to conduct mental health and substance use diagnostic screenings on juveniles (e.g., at the time of intake for the first offense) before the youths accumulate a history of status or criminal offenses. Licensed court clinicians could then provide consultation on results and referrals, as needed.

From a prevention standpoint, assisting these juveniles in receiving the appropriate treatment at the earliest point of court contact, particularly for substance use, could divert them from their course toward detention and result in positive outcomes for the juveniles and families as well as cost savings for mental health, legal, school, and health systems. From a legal and justice system standpoint, however, it should be considered that improved surveillance of dual-diagnosis offenders can actually lead to more detention than treatment. This possibility could be realized if our findings reflect the negative attitudes of the juvenile justice system toward substance-using young offenders (i.e., that judges are likely to impose harsher sanctions on juvenile substance abusers) versus the individual factors that we hypothesized are associated with detention. Likewise, judges may impose detention on these young substance abusers to mandate them to treatment within the detention setting, independent of the severity of the offense (e.g., if a juvenile has been repeatedly noncompliant with community-based treatment). The current chart review study was limited to the available clinical data, but future study designs may consider inclusion of data on the attitudes of the juvenile justice system toward substance-abusing young offenders, to understand more about these complex associations.

It is also noteworthy that in a sample of juveniles with high rates of mental health disorders, most did not get detained. Thus, psychiatric disorders may not be indicative of the worst future legal outcomes for these youths. Specific psychiatric diagnoses, profiles, or comorbidities (with the exception of substance use) also may not be so useful in determining risk of detention among a group of adolescent offenders with severe mental health needs. Consistent with the small body of literature in this area, understanding more about specific

mental health profiles or attempting to identify particular diagnoses with risk for detention may not be as helpful in understanding the prospective course of risk for these juveniles. Instead, identifying specific symptoms, symptom constellations, and differences in degree versus kind of symptomatology (e.g., more or less depressed versus depressed or not depressed) may be more relevant. Taking a more dimensional versus categorical approach to understanding psychiatric presentation and tailoring recommendations for screenings and interventions based on this dimensional approach may be more predictive of criterion outcomes (e.g., recidivism or incarceration), as has been demonstrated for the construct of juvenile psychopathy.[30]

Finally, juvenile court clinics should perhaps consider ways to implement brief substance abuse treatment interventions to divert juveniles from future detention. Evidence-based, brief interventions for substance abuse, particularly those that involve motivational interviewing approaches, have achieved great success in reducing alcohol and drug use and associated negative consequences among those in the adolescent community and in clinical samples. However, such brief interventions have rarely been implemented and tested in juvenile detention or juvenile intake settings (see Dembo and colleagues[31] and Rosengard and colleagues[32] for exceptions). To our knowledge, no such brief interventions have been developed or tested for juveniles referred to court clinics. However, our pattern of results suggests that enrolling juveniles and their families in a brief, evidence-based intervention at the point where the family is already referred for court clinic assessment services could be efficient, timely, and perhaps effective in reducing the likelihood of juvenile detention and other negative outcomes.

Limitations

These data were part of a chart review study and were not collected for the purposes of research. Therefore, although rigorous chart and database review procedures were implemented, patterns of missing data were inconsistent, and measures used to arrive at certain diagnoses differed, depending on clinical need. These data were also collected from only one juvenile court clinic in the northeastern United States, thereby limiting generalizability. Generalizability may also be limited, in that these data do not necessarily extend to the larger juvenile justice population, because the juveniles under study here have raised attention or concern from the judge related to more readily apparent emotional, behavioral, and psychological concerns. Study strengths, however, include access to a large sample size (i.e., more than 400 juveniles), a focus on a severely mentally ill juvenile subsample not commonly studied in the literature, and reliance on detention outcome data collected directly from a statewide court database (versus self-report), thereby ensuring greater accuracy in prospective outcomes. Despite notable strengths, our findings require replication in other court clinic settings, particularly through *a priori* studies that examine these associations.

Conclusions

Our study uniquely expands prior findings among detained juvenile offenders that substance use heightens risk for future legal involvement to a court-involved, nonincarcerated juvenile

offender sample identified by the court as having psychiatric difficulties. Screenings for substance use and mental health occurring earlier in the court involvement process (ideally at the time of first court contact) may assist with appropriate, early treatment referrals that could then reduce the chances of future detention. If resources are available, juvenile court clinics might also consider how to implement brief, evidence-based, dual-diagnosis interventions on site and shortly after screening. The pros and cons of implementing treatment interventions within court clinic settings developed for forensic assessments require careful consideration. If appropriately implemented, treatment engagement could be greatly enhanced (i.e., less likelihood that a family does not follow up with community-based referral). Greater treatment engagement could lead to decreased rates of detention and related negative outcomes that are associated with considerable costs to the legal, health, mental health, and school systems. Future research that replicates these findings and also focuses on understanding system-related attitudes toward dually diagnosed juveniles is necessary to provide more definitive guidance of screening and intervention recommendations for these high-risk youths.

Acknowledgments

We are grateful for the collaboration of the judges, court administrators, and court clinic staff, who enabled the successful completion of this chart review study.

Supported by National Institute on Drug Abuse (NIDA) grant K23 DA051232 to Rhode Island Hospital; National Institute of Mental Health (NIMH) grant K23 MH 086328, and the Lifespan/Brown/Tufts Center for AIDS Research grant P30 AI042853.

References

1. Puzzanchera C: Juvenile arrests 2008. Juvenile Justice Bulletin. 12 2009, pp 1–12
2. Puzzanchera C, Adams B, Sickmund M: Juvenile court statistics 2008. Pittsburgh: National Center for Juvenile Justice, 2011
3. Dembo R, Jainchill N, Turner C, et al.: Levels of psychopathy and its correlates: a study of incarcerated youths in three states. Behav Sci Law 25:717–38, 2007 [PubMed: 17899531]
4. Teplin L, Abram K, McClelland G, et al.: Psychiatric disorders in youth in juvenile detention. Arch Gen Psychiatry 59:1133–43, 2002 [PubMed: 12470130]
5. Cauffman E: A statewide screening of mental health symptoms among juvenile offenders in detention. J Am Acad Child Adolesc Psychiatry 43:430–9, 2004 [PubMed: 15187803]
6. Plattner B, Abei M, Steinhausen H, et al.: Psychopathologische und komorbide Storungen inhaftierter Jugendlicher in (Österreich [Psychological and comorbid disorders of incarcerated adolescents in Austria]. Z Kinder Jugendpsychiatr Psychother 39:231–40, 2011 [PubMed: 21667448]
7. Milin R, Halikas JA, Meller JE, et al.: Psychopathology among substance abusing juvenile offenders. J Am Acad Child Adolesc Psychiatry 30:569–74, 1991 [PubMed: 1890090]
8. Abram K, Teplin L, McClelland G, et al.: Comorbid psychiatric disorders in youth in juvenile detention. Arch Gen Psychiatry 60:1097–108, 2003 [PubMed: 14609885]
9. Romero EG, Teplin LA, McClelland GM, et al.: A longitudinal study of the prevalence, development, and persistence of HIV/sexually transmitted infection risk behaviors in delinquent youth: implications for health care in the community. Pediatrics 119: e1126–41, 2007 [PubMed: 17473083]
10. Fazel S, Doll H, Langström N: Mental disorders among adolescents in juvenile detention and correctional facilities: a systematic review and metaregression analysis of25 surveys. J Am Acad Child Adolesc Psychiatry 47:1010–19, 2008 [PubMed: 18664994]

11. Wasserman G, Ko S, McReynolds L: Assessing the mental health status of youth in juvenile justice settings. Juvenile Justice Bulletin 8 2004, 1–7
12. Mauricio A, Little M, Chassin L, et al.: Juvenile offenders' alcohol and marijuana trajectories: risk and protective factor effects in the context of time in a supervised facility. J Youth Adolesc 38:440–53, 2009 [PubMed: 19636756]
13. Colins O, Vermeiren R, Vahl P, et al.: Psychiatric disorder in detained male adolescents as risk factor for serious recidivism. Can J Psychiatry 56:44–50, 2011 [PubMed: 21324242]
14. Randall J, Henggeler SW, Pickrel SG, et al.: Psychiatric comorbidity and the 16-month trajectory of substance-abusing and sub-stance-dependent juvenile offenders. J Am Acad Child Adolesc Psychiatry 38:1118–24, 1999 [PubMed: 10504810]
15. Elkington KS, Teplin LA, Mericle AA, et al.: HIV/sexually transmitted infection risk behaviors in delinquent youth with psychiatric disorders: a longitudinal study. J Am Acad Child Adolesc Psychiatry 47:901–11, 2008 [PubMed: 18645421]
16. Schubert CA, Mulvey EP, Glasheen C: Influence of mental health and substance use problems and criminogenic risk on outcomes in serious juvenile offenders. J Am Acad Child Adolesc Psychiatry 50:925–37, 2011 [PubMed: 21871374]
17. Puzzanchera C, Adams B, Sickmund M: Juvenile court statistics 2006–2007. Pittsburgh: National Center for Juvenile Justice, 2010
18. Gavazzi S, Yarcheck C, Sullivan J, et al.: Global risk factors and the prediction of recidivism rates in a sample of first-time midemeanant offenders. Int J Offend Ther Comp Criminol 52:330–45, 2008
19. Vermeiren R, Jespers I, Moffitt T: Mental health problems in juvenile justice populations. Child Adolesc Psychiatr Clin North Am 15:333–51, 2006
20. Cohn M, van Domburgh L, Vermeiren R, et al.: Externalizing psychopathology and persistence of offending in childhood first-time arrestees. Eur Child Adolesc Psychiatry 21:243–51, 2012 [PubMed: 22362128]
21. Penn J, Thomas C: Mental health care in juvenile in juvenile detention facilities: a review. J Am Acad Psychiatry Law 34:204–14, 2006 [PubMed: 16844801]
22. Grisso T: Progress and perils in the juvenile justice and mental health movement. J Am Acad Psychiatry Law 35:158–67, 2007 [PubMed: 17592160]
23. American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision. Washington, DC: American Psychiatric Association, 2000
24. Wasserman G, McReynolds L, Fisher P, et al.: Diagnostic interview schedule for children: present state voice version, in Mental Health Screening and Assessment in Juvenile Justice. New York: Guilford Press, 2005, pp 224–39
25. Gadow K, Sprafkin J: Youth's Inventory 4 Manual. Stony Brook, NY: Checkmate Plus, 1999
26. Gadow K, Sprafkin J: Adolescent Symptom Inventory 4 Norms Manual. Stony Brook, NY: Checkmate Plus, 1998
27. Gadow KD, Sprafkin J, Carlson GA, et al.: A DSM-IV-referenced, adolescent self-report rating scale. J Am Acad Child Adolesc Psychiatry 41:671–9, 2002 [PubMed: 12049441]
28. Grisso T, Vincent G, Seagrave D: Mental Health Screening and Assessment in Juvenile Justice. New York: The Guilford Press, 2005
29. Grisso T, Quinlan J: Massachusetts youth screening instrument (version 2), in Mental Health Screening and Assessment in Juvenile Justice. Edited by Grisso T, Vincent G, Seagrave D. New York: The Guilford Press, 2005, pp 99–111
30. Edens J, Marcus D, Vaughn M: Exploring the taxometric status of psychopathy among youthful offender: is there a juvenile psychopath taxon? Law Hum Behav 35:13–24, 2011 [PubMed: 20431928]
31. Dembo R, Gulledge L, Briones Robinson R, et al.: Enrolling and engaging high-risk youth and families in community-based, brief intervention services. J Child Adolesc Subst Abuse 20:330–5, 2011 [PubMed: 22003280]
32. Rosengard C, Stein L, Barnett N, et al.: Randomized clinical trial of motivational enhancement of substance use treatment among incarcerated adolescents: post-release condom non-use. J HIV/AIDS Prevent Child Youth 8:45–64, 2008

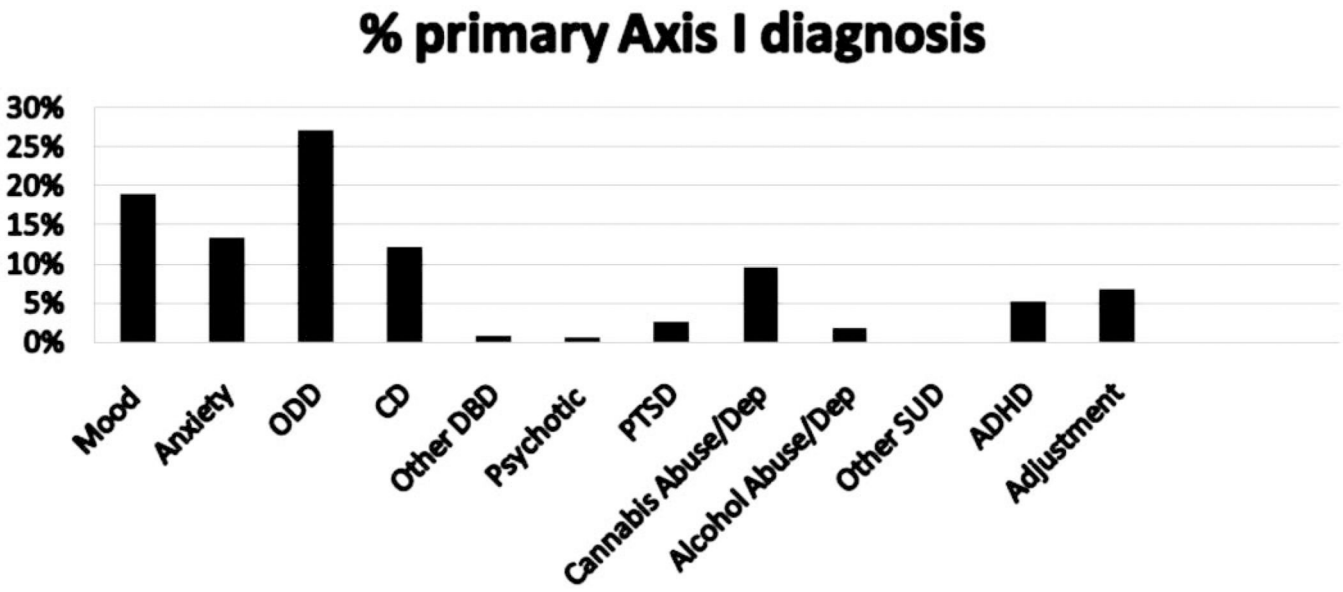

Figure 1.
Rates of primary Axis I diagnoses given at the time of the court clinic evaluation (n = 337).

Table 1

Baseline Comparisons of First-Time and Repeat Offending Juveniles

	Repeat (*n* = 111) *n* (%)	**First Time (*n* = 287) *n* (%)**	χ^2	***p***
Demographics				
Gender (% male)	67 (60)	169 (59)	0.07	79
Out of home (% yes)	17 (15)	18 (6)	8.10	.004
Race/ethnicity (% minority)	39 (35)	102 (36)	0.006	.94
Health insurance (% yes)	91 (82)	249 (87)	1.47	.23
Legal factors				
Offense type at evaluation (% criminal)	62 (56)	63 (22)	42.71	<.0001
Psychiatric factors				
History of inpatient hospitalization	26 (24)	26 (9)	14.24	<.0001
History of mental health treatment	85 (77)	153 (55)	17.00	<.0001
Any diagnosis (% yes)	97 (87)	254 (89)	0.10	76
Primary externalizing diagnosis	50 (45)	102 (36)	3.06	08
Dual diagnosis	39 (40)	47 (19)	17.87	<.0001

n = 398. This information was missing in the records of six juveniles in the database (*N* = 404).

J Am Acad Psychiatry Law. Author manuscript; available in PMC 2020 May 28.

Table 2

Baseline Comparisons of Detained and Nondetained Juveniles

	Detained (*n* = 82) *n* (%)	**Nondetained (*n* = 322) *n* (%)**	χ^2	***p***
Demographics				
Gender (% male)	63 (77)	178 (55)	12.61	<.0001
Out of home (% yes)	14 (17)	21 (7)	9.07	.003
Race/ethnicity (% minority)	31 (38)	113 (35)	0.21	.65
Health insurance (% yes)	70 (85)	273 (85)	0.02	.90
Legal factors				
First time offender (% yes)	39 (48)	248 (78)	29.04	<.0001
Prior status offender (% yes)	27 (34)	50 (16)	12.78	<.0001
Prior criminal offender (% yes)	29 (36)	30 (10)	34.97	<.0001
Psychiatric factors				
History of inpatient hospitalization	18 (23)	35 (11)	7.62	.006
History of mental health treatment	54 (68)	187 (60)	1.62	0.20
Any diagnosis (% yes)	69 (84)	284 (88)	0.97	0.32
Primary externalizing diagnosis	33 (40)	121 (38)	0.20	0.66
Dual diagnosis	38 (55)	48 (17)	43.89	<.0001

N = 404.

Table 3

Prospective Predictors of Juvenile Detention Within 12 Months

Variables	*β*	S.E.	Wald	Odds Ratio
Demographics				
Age	0.04 (0.33)	0.12 (0.09)	0.11 (13.88)	1.04 (1.39***)
Gender	0.88 (0.99)	0.34 (0.29)	60.61 (12.01)	2.42** (2.68***)
Out-of-home	0.31 (1.08)	0.58 (0.37)	0.29 (8.44)	1.37 (2.93*)
Race and ethnicity	0.27 (0.12)	0.33 (0.26)	0.67 (0.21)	1.31 (1.12)
Legal history				
Prior status offender	0.69 (0.99)	0.37 (0.28)	3.44 (12.19)	2.00 (2.68***)
Prior criminal offender	1.10 (1.67)	0.40 (0.30)	7.70 (3.61)	3.01** (5.31***)
Psychiatric factors				
Prior inpatient hospitalization	0.68 (0.87)	0.42 (0.32)	2.62 (70.30)	1.98 (2.40**)
Disruptive behavior disorder	−0.21 (0.11)	0.32 (0.25)	0.42 (0.20)	0.81 (1.12)
Dual diagnosis	1.76 (1.80)	0.49 (0.29)	12.90 (38.57)	5.83*** (6.03***)
Number of diagnoses	−0.21 (0.31)	0.23 (0.12)	0.79 (6.69)	0.81 (1.36**)

n = 336; 68 cases were missing due to the listwise deletion inherent in least regression procedures. Data in parentheses represent unadjusted statistics.

* $p < .05$

** $p < .01$

*** $p < .0001$.

J Am Acad Psychiatry Law. Author manuscript; available in PMC 2020 May 28.