Published in final edited form as:
J Am Acad Child Adolesc Psychiatry. 2008 March ; 47(3): 301–308. doi:10.1097/CHI.0b013e318160b3bb.

Perceived Barriers to Mental Health Services Among Youth in Detention

Dr. Karen M. Abram, Ph.D. and **Ms. Leah D. Paskar, B.A.**
Department of Psychiatry and Behavioral Sciences, Northwestern University Feinberg School of Medicine, Chicago, IL

Dr. Jason J. Washburn, Ph.D., ABPP
Department of Psychiatry and Behavioral Sciences, Northwestern University Feinberg School of Medicine, Chicago, IL

Alexian Brothers Behavioral Health Hospital, Hoffman Estates, IL.

Dr. Linda A. Teplin, Ph.D.
Department of Psychiatry and Behavioral Sciences, Northwestern University Feinberg School of Medicine, Chicago, IL

Abstract

Objective—To examine perceived barriers to mental health service use among male and female juvenile detainees.

Methods—The sample included 1829 juveniles newly detained in Chicago, IL. The Diagnostic Interview Schedule for Children and Child Global Assessment Scale were used to determine need for services. Service use and barriers to services were assessed with the Service Utilization and Risk Factors interview.

Results—Approximately 85% of youth with psychiatric disorders reported at least 1 perceived barrier to services. Most common was the belief that problems would go away without help. Generally, the attitudes towards services were remarkably similar across gender and race. Among females, significantly more youth with past service use or referral to services reported this barrier than did youth who had never received or been referred to services. Among males, significantly more youth who had been referred, but never received, services were unsure about where to go for help than youth with past service use. Significantly more youth with no past service use or referrals were concerned about the cost of services than youth with past service use.

Conclusions—Despite pervasive need for mental health services, findings from this study suggest that detained youth do not perceive the mental health system as an important or accessible resource. Youth who believe their problems can be solved without assistance are unlikely to cooperate with referrals or to independently seek mental health services. Service providers must be sensitive to clients' perceived barriers to mental health services and work to reduce negative perceptions of services.

Keywords

juvenile detainee; perceived barriers; mental health service use

Correspondence to: Linda A. Teplin, PhD Owen L. Coon Professor of Psychiatry and Behavioral Sciences Northwestern University Feinberg School of Medicine 710 N. Lake Shore Drive, Suite 900 Chicago, Illinois 60611 L-Teplin@northwestern.edu.

INTRODUCTION

Over 2 million juveniles are arrested each year[1] and nearly 100,000 juveniles are in custody on any given day.[2] Of the many youth involved in the juvenile justice system, the majority meet criteria for psychiatric disorders that warrant mental health treatment.[3-5] Recent estimates indicate that nearly 70% of female detainees and 60% of male detainees have a psychiatric disorder other than conduct disorder;[4] approximately half have 2 or more disorders.[6] Rates of psychiatric disorder among youth in the juvenile justice system are substantially higher than rates in the general population.

Jails are required to provide a minimum of psychiatric care to inmates,[7] yet recent reports issued by the Surgeon General[8] and the President's New Freedom Commission on Mental Health[9] suggest that youth in custody are profoundly underserved. Although over 70% of detention centers now screen for mental disorders,[10] one study found that only 15.4% of detainees with major mental disorders received treatment.[11] Males, older youth, and racial/ethnic minorities with major mental disorders were significantly less likely to receive treatment than were females, younger detainees, and non-Hispanic whites with major mental disorders.[11]

Even with increased attention to the mental health needs of juvenile detainees,[10] barriers to service use remain. Youth in the juvenile justice system have many of the characteristics associated with lower rates of service use: poverty and poor education,[12-14] inadequate health insurance and ineligibility for Medicaid,[15-17] racial/ethnic minority status,[14, 18] a history of arrest,[4, 19] and small social networks.[20, 21]

Although much is known about these external barriers to mental health service use, less is known about youths' perceived barriers and attitudes toward service use. How youth perceive or think about service use may be as important, if not more important, in determining whether or not youth cooperate with referrals or remain in treatment. To date, 3 studies have examined perceived barriers to substance abuse treatment among detained youth.[22-24] Kim and Fendrich[22] and Lopez[23] found that seeking services for substance abuse was determined by the perceived need for treatment, regardless of race/ethnicity. Johnson and colleagues[24] found that beliefs that one could handle one's own problems or that problems would simply go away were associated with lower rates of service use among juvenile detainees. However, these studies examined only services for substance abuse. To our knowledge, no study has investigated perceived barriers to mental health service use among juvenile detainees.

The current study is designed to address this omission in the literature. It has a stratified random sample of 1829 juvenile detainees; sample of sufficient size and diversity to examine differences in rates of and barriers to mental health service use among key sociodemographic subgroups. We examined the following questions:

(1) What are the attitudes and perceived barriers to mental health services among youth who need services?

(2) Does a history of mental health service use influence attitudes and perceived barriers?

(3) Are there differences in attitudes and perceived barriers to services by gender or race/ethnicity?

METHODS

Participants and Sampling Procedures

Participants were sampled from the Cook County Juvenile Temporary Detention Center (CCJTDC) in Chicago, IL, from November 1995 through June 1998. The sample of 1829 male

and female detainees (aged 10-18 years) was randomly selected and stratified by gender, race/ethnicity (African American, non-Hispanic white, Hispanic), age (10-13 years or 14 years and older), and legal status (processed as a juvenile or as an adult). Stratification ensured that we had enough participants in key subgroups (e.g., females, Hispanics, younger children) to make comparisons between and within the subgroups. The sample is composed of 1172 males (64.1%) and 657 females (35.9%), 1005 African Americans (54.9%), 296 non-Hispanic whites (16.2%), 524 Hispanics (28.6%), and 4 who self-identified as "other" (0.2 %). The mean age of participants was 14.9 years (median age, 15.0 years).

The demographic make-up of CCJTDC is similar to other juvenile detention centers nationwide in that almost 90% of detainees are male and most are racial/ethnic minorities. The population of CCJTDC is 77.9% African American, 5.6% non-Hispanic white, 16.0% Hispanic, and 0.5% other racial/ethnic group. Age and offense distribution at CCJTDC are similar to other detention centers in the nation. The CCJTDC is used for pretrial detention and for offenders sentenced to less than 30 days. Youth younger than 18 years are held at CCJTDC, as are youth processed as adults. Additionally, youth as old as 21 years may be held at CCJTDC if they are being prosecuted for an arrest that occurred before they were 17 years old.

We chose CCJTDC in Cook County for 3 reasons: (1) most juvenile detainees live in and are detained in urban areas, (2) Cook County is ethnically diverse and has the third largest concentration of Hispanics in the nation, and (3) the detention center's size (daily census of approximately 650 youth and intake of 20 youth per day) guaranteed enough participants for our study. The demographic similarity of CCJTDC to other detention centers in the nation suggests that our results will be generalizable to other large cities in the United States.

Studying detained youth requires special procedures because they are minors, they are detained, and many do not have a parent or guardian who can provide appropriate consent. Project staff approached participants on their units, explained the project, and assured them that anything they told us (except comments implying imminent danger to self or others) would remain confidential. Detainees who agreed to participate signed an *assent* form (if they were younger than 18 years) or *consent* form (if they were older than 18 years). Federal regulations allow parental consent to be waived if the research involves minimal risk (45 CFR 46.116(c), 45 CFR 46.116(d), and 45 CFR 46.408(c)). The Northwestern University Institutional Review Board, the Centers for Disease Control and Prevention Institutional Review Board, and the US Office of Protection from Research Risks waived parental consent. However, as ethicists recommend, we nevertheless tried to contact parents to provide them an opportunity to decline participation and to offer them additional information (45 CFR46.116(d)[4]). Despite repeated attempts to contact the parent or guardian, none could be found for 43.8% of participants. In lieu of parental consent, youth *assent* was overseen by a *Participant Advocate* representing the interests of the participants. Federal regulations allow for a Participant Advocate when parental consent is not feasible (45 CFR 46.116[d]).

Detainees were eligible to be sampled for the study regardless of their psychiatric morbidity, state of drug or alcohol intoxication, or fitness to stand trial. Of the 2275 names selected, 4.2% (34 youth and 62 parents or guardians) refused to participate. There were no significant differences in refusal rates by gender, race/ethnicity, or age. Of youth processed as adults, 7.1% (26 of 368) refused participation. Twenty-seven youth left the detention center before we could schedule an interview; 312 were not interviewed because they left while we were locating their caretaker for consent. Nine participants were excluded because they were too ill to complete the interview, 1 participant was excluded due to extreme cognitive impairment, and 1 participant was excluded for suspected untruthfulness during the interview. Our final sample included 1829 detained youth, a sample large enough to reliably detect disorders (i.e.,

distinguish them from zero) that have a base rate in the general population of 1.0% or greater with a power of .80.

Participants were administered a face-to-face structured interview in a private area lasting approximately 2 to 3 hours, depending on the number of symptoms endorsed. Interviews took place usually within 2 days of intake. Every interviewer was trained for over 1 month, had a master's degree in psychology or a related field, and had experience with high-risk youth. Over 30% of the interviewers were fluent in Spanish. Interviewers were both male and female; all female participants were interviewed by a female interviewer. Additional information on our methods is published elsewhere.[4]

Need for Mental Health Treatment

As described in previous articles,[4, 11, 25] the need for mental health services was determined by presence of a psychiatric diagnosis and functional impairment.

Psychiatric Diagnosis—We used the Diagnostic Interview Schedule for Children, version 2.3 (DISC 2.3), to measure alcohol, drug, and mental (ADM) disorders,[26, 27] the most recent versions then available. The DISC 2.3 assesses the presence of disorders in the past 6 months. It is a highly structured interview with detailed probes. It requires brief training and yields acceptably reliable and valid results.[26, 28, 29] We measured affective disorders (major depression, dysthymia, mania, hypomania), anxiety disorders (panic, generalized anxiety, separation anxiety, obsessive-compulsive, over-anxious), behavior disorders (conduct disorder, attention-deficit/hyperactivity, oppositional defiant disorder), psychosis (including schizophrenia), and substance use disorders (alcohol, marijuana, and other substance disorders).

Functional Impairment—We used the Children's Global Assessment Scale (CGAS) to measure functional impairment. The CGAS is widely used and has excellent reliability and validity.[30] The CGAS measures a child's lowest level of functioning within a specified time period, the past 6 months for this study. This instrument summarized the interviewer's impression of the lowest level of the subject's functioning at home, at school and/or work, and in other social environments. Scores range from 1 (most impaired) to 100 (healthiest). Bird and colleagues31 suggest that CGAS scores below 61 in conjunction with presence of a diagnosis should be used to identify those children in need of services; therefore, we used the cutoff of 61 to determine functional impairment.31

Service Use and Barriers to Services

To assess service use and barriers to services, we used the National Institute of Mental Health Epidemiology of Child and Adolescent Mental Disorders Service Utilization and Risk Factors (SURF) interview.[32] Items query services received in school for educational, behavioral, emotional, or substance use problems, non-school services received for emotional, behavior, or substance use problems, type of service received (inpatient, outpatient, residential), treatment provider, length of treatment, and satisfaction with services.

The SURF assesses potential barriers to services and asks participants to suggest additional barriers. Those currently in treatment or with a history of using mental health services were asked why they had stopped treatment or whether various factors had made them think about stopping treatment. Those who had been referred but had never received treatment were asked why they had not gone for help when it was suggested. Finally, those who had never been referred for services nor received services were asked what factors might impede them from getting help if they needed help. Questions probed barriers to non-school services only.

Statistical Analysis

Because selected strata were oversampled, we used sample weights, based on the CCJTDC population, to estimate descriptive statistics and model parameters that reflect the CCJTDC population. All statistical estimates (e.g. prevalences, odds ratios) were subsequently adjusted by the sample weights to represent the detention center population.33 Weighted analyses were conducted using Stata, version 9.0. Taylor series linearization was used to estimate associated standard errors.34, 35 Logistic regression was used to assess demographic differences in perceived barriers to service use. The dependent variables were past service use (yes, referral only, no) and type of perceived barrier to services. The independent variables were gender and race/ethnicity. Comparisons were made only among participants who had a diagnosable mental disorder.

RESULTS

Table 1 shows that among participants with any mental disorder, most reported at least one barrier to services received outside of school; the most common was the belief that the problem would go away or that it could be solved on one's own. The second most common barrier was uncertainty of the appropriate person or place to get help. Nearly one-fifth of the sample reported that it was too difficult to obtain help. There were no significant racial/ethnic or gender differences in the prevalence of these barriers.

Over one-fourth (27%) of the sample with ADM disorders volunteered “other” barriers. Denial that a problem exists, disinterest in treatment, and dissatisfaction with their therapist or treatment were the most common barriers volunteered by youth with any ADM disorder. The prevalence of these “other” barriers varied by gender and race/ethnicity. Significantly more males than females volunteered that they did not have a problem (31.8% vs. 19.1%) (Odds Ratio [OR] = 1.98, 95% Confidence Interval [CI] = 1.03 - 3.80). Significantly more females than males were afraid of labeling or other negative consequences of treatment (17.3% vs. 3.8%) (OR = 5.26, CI = 1.28 – 21.60). Significantly more African American (OR = 3.56, CI = 1.45 - 8.72) and Hispanic youth (OR = 4.24, CI = 1.61 – 11.19) than non-Hispanic white youth volunteered that they did not have a problem (31.9% and 35.9% vs. 11.7%). Significantly more non-Hispanic white youth than Hispanic youth reported that they feared labeling or other consequences of treatment (7.7% vs. 1.5%) (OR = 5.53, CI = 1.60 - 19.10).

We next examined whether a history of service use influenced perceived barriers to services among detainees with any ADM disorder. History of service use varied by gender and race/ethnicity. Significantly more females (70.0%) than males (49.1%) had received services outside of school (e.g., medication, residential treatment, and professional outpatient services) prior to detention (OR = 2.42, CI = 1.76 - 3.34). Most non-Hispanic white males had received out of school services prior to detention (83.1%), contrasted with fewer than half of African American (48.4%; OR = 5.24, CI = 3.10 - 8.85) and Hispanic (40.0%; OR = 7.35, CI = 4.20 - 12.87) males. Among females, significantly more non-Hispanic whites received services outside of school (87.0%) than African Americans (64.7%; OR= 3.65, CI = 1.73 - 7.70).

Table 1 shows that although the most common barrier reported was the belief that problems would go away or be solved on one's own, significantly more females who had *received* services prior to detention (OR = 2.79, CI = 1.62 - 4.80) or who had been *referred* for services but had never received (OR = 2.34, CI = 1.14 - 4.80) them endorsed this belief than females who had *neither* been referred nor received services. Compared with males who had received services, significantly more males who had never received services worried about cost (OR = 4.54, CI = 2.12 - 9.74). Similarly, compared with females who had received services, significantly more females who had never received services (OR = 6.29, CI = 3.16 - 12.50) or who had been referred but had never received services (OR = 4.41, CI = 2.00 - 9.69) worried about cost.

Significantly more males who had never received services reported concern about what others might think than males who had received services (OR = 3.57, CI = 1.77 - 7.21). Significantly more males who had been referred but never received services reported uncertainty about the appropriate person or place to get help than males who had received services (OR = 2.81, CI = 1.39 - 5.66).

We also examined the prevalence of "other" barriers by history of service use among those with any ADM disorder. Among youth with an ADM disorder who volunteered an "other" barrier to treatment, significantly more youth who had never received services prior to detention (both those who had never been referred and those who had) denied having a problem than those who had received past services (never referred, never received: 53.7% (OR = 5.24, CI = 1.04 - 26.31); referred, never received: 71.2%; received: 18.1%) (OR = 11.16, CI = 3.31 - 37.66).

DISCUSSION

There are many reasons why a young person might not seek services for mental health problems. Our study shows that most detained youth with mental disorders report at least 1 perceived barrier to mental health services. The belief that problems would go away without outside help was the most common barrier, regardless of gender, race/ethnicity, or (among females) prior experience with mental health services. This perception is also common among youth in the general population with self-identified mental health needs[36] and among youth receiving substance use services.24 Parents of children with mental illness also frequently report this barrier,37 indicating the possibility of an intergenerational pathway for this belief.

Despite meeting criteria for a mental disorder, many youth stated that they did not have a mental health problem. Detained youth who do not recognize their mental health problems or feel that they can solve such problems independently are unlikely to cooperate with referrals. Perceiving a need for mental health services is fundamental to both seeking services[22, 23] and staying in treatment.[38]

The common barriers reported by juvenile detainees in this study may reflect perceptions about the state of the mental health service system in the United States. It is encouraging that the majority of youth did not express concern about how to access services; however, a substantial minority was uncertain. Nearly 1 of every 3 detained youth with ADM disorders in our study reported uncertainty about where to get help, and nearly 1 of 5 felt that it was too difficult to access services. Recent national reports and research support the belief that services are, indeed, too difficult to access.8, [39] Fragmented systems of care (e.g., child welfare, juvenile justice, school sectors) likely contribute to confusion about where to seek needed services.[10, 39]

African American and Hispanic detainees had received significantly fewer past services than non-Hispanic white youth, similar to patterns among youth in the general population and public sectors of care.[40-44] Compared with females, male detainees also had received significantly fewer past services.

Yet, despite disparities in service utilization, attitudes toward services were remarkably similar across gender and race. These findings suggest that individual perceptions and attitudes toward mental health services do not explain disparities in service use among juvenile detainees. Racial and ethnic disparities in service use more likely stem from external factors, such as poverty, lack of sufficient minority service providers, and socio-cultural barriers.[45] Gender disparities may be due to greater help-seeking behaviors among females than males[46] and the higher likelihood of females being be referred to mental health services.[44]

Nearly three-fourths of youth had received services (including school services) prior to being detained, rates significantly higher than among youth in the community[47-49] and comparable to rates of service use among youth receiving services in public service sectors.[42, 43, 50, 51] Past service use was associated with attitudes toward services. Compared with detained youth who had received services, those who had never received services were, in general, more likely to be concerned about what others might think about them, to be uncertain about where to seek services, and to be unsure if they could afford services. These barriers are also common among untreated youth[37] and adults[52] with mental health disorders in the general population. We also found, however, that females who *had* received services in the past were more likely to be skeptical about using services in the future than those who had never received services. Those who received services prior to detention were more likely than untreated youth to believe that problems would go away on their own without treatment. There was a similar trend among males. Any attempt to increase mental health service delivery to detained youth must address how past experiences influence youths' receptivity to referrals.

Several limitations to the study are noteworthy. Because our findings are drawn from a single site, they may pertain only to youth in urban detention centers with a similar demographic composition. Prevalence rates of service need may differ if diagnoses were based on *DSM-IV* instead of *DSM-III-R* criteria. Because it was not feasible to interview caretakers (few would have been available), our data are subject to the reliability and validity of the youth's self-report. Although our self-report instrument may have included services not captured by official records (e.g., non-reimbursed and informal services), our rates of service use may be affected by the turmoil of a recent detention, memory loss, differing rates of service use over time, or omissions.[53] Adolescents who had not received services in the past and who did not perceive themselves as having problems were asked to “imagine” perceived barriers if they did have a problem. Such abstraction may not correspond to how the adolescent would behave if confronted with an actual problem. In addition, the SURF probes only 5 barriers to services; many of our participants reported an “other” barrier to treatment. Finally, we were not able to assess the quality or appropriateness of services; it is unknown if past treatment was appropriate for participants' needs.

We recommend three areas for future research:

1. Investigate characteristics of and satisfaction with mental health services received by high-risk youth. Why does past service use predict poor attitudes toward treatment among high-risk youth? How do characteristics of services – length of treatment, type of treatment, caregiver characteristics – affect perceptions of services?
2. Investigate gender and racial/ethnic differences in service use. Disparities in service use are well known; however, the mechanisms by which service use varies by gender or race/ethnicity are less clear. The current study suggests that disparities are unlikely to originate from differences in cognitive and affective barriers to service use.
3. Study the role of social networks in youths' attitudes toward services. Because youth rarely have the capability to seek services on their own and may be resistant to help-seeking,[36, 54] understanding the influence of social networks on service use is critical. Social interactions may be the most important mechanism through which people recognize their problems and seek mental health services.[55] Improving our understanding of how parents, extended family members, and other influential members of social networks facilitate or limit treatment-seeking behaviors among youth will help to tailor outreach services to maximize acceptance.

Our findings have implications for clinical services. First, we must engage youth in the referral process. Findings from this study underscore the importance of understanding youths' past experiences with mental health services before referring them to new services. Experiences

with past services may contribute to negative perceptions of future services and decrease the willingness of youth to seek services in the future. Candid exploration of past experiences offers youth an opportunity to express negative perceptions and choose service options that will maximize their likelihood of engaging in treatment.

Second, we must provide educational outreach. To close the gap between service need and service delivery, the mental health and correctional systems must collaborate to educate high-risk youth and their families. Educational outreach programs should provide information about the nature of mental health problems and available treatment options, as well as address myths and stigma of mental health problems. Furthermore, education is needed to improve juvenile detainees' understanding of how best to navigate the complex and fragmented mental health system in the United States.

Despite pervasive need for mental health services, findings from this study suggest that detained youth do not see the mental health system as an important or accessible resource. Improving service delivery to these high-risk youth must include finding ways to inspire their confidence.

Acknowledgments

This work was supported by National Institute of Mental Health grants R01MH54197 and R01MH59463 (Division of Services and Intervention Research and Center for Mental Health Research on AIDS) and grants 1999-JE-FX-1001 and 2005-JL-FX-0288 from the Office of Juvenile Justice and Delinquency Prevention. Major funding was also provided by the National Institute on Drug Abuse, the Substance Abuse and Mental Health Services Administration (Center for Mental Health Services, Center for Substance Abuse Prevention, Center for Substance Abuse Treatment), the NIH Center on Minority Health and Health Disparities, the Centers for Disease Control and Prevention (National Center on Injury Prevention and Control and National Center for HIV, STD and TB Prevention), the National Institute on Alcohol Abuse and Alcoholism, the NIH Office of Research on Women's Health, the NIH Office on Rare Diseases, Department of Labor, The William T. Grant Foundation, and The Robert Wood Johnson Foundation. Additional funds were provided by The John D. and Catherine T. MacArthur Foundation, The Open Society Institute, and The Chicago Community Trust.

Thank you to Ann Hohmann, Ph.D., Kimberly Hoagwood, Ph.D., and Heather Ringeisen, Ph.D., for indispensable advice, and Grayson Norquist, M.D., and Delores Parron, Ph.D., for their support. Celia Fisher, Ph.D., guided our human subject procedures. We thank project staff, especially Amy Mericle, Ph.D., Lynda Carey, M.A., and our field interviewers. Without the cooperation of the Cook County and State of Illinois systems, this study would not have been possible. Finally, we thank the participants for their time and willingness to participate.

References

1. Snyder, HN. Juvenile Arrests 2003. Office of Juvenile Justice and Delinquency Prevention; Washington, DC: Aug. 2005 p. NCJ209735
2. Sickmund, M.; Sladky, TJ.; Kang, W. Census of Juveniles in Residential Placement Databook. http://www.ojjdp.ncjrs.org/ojstatbb/cjrp/. Accessed September 28, 2007
3. Wasserman GA, McReynolds LS, Lucas CP, Fisher P, Santos L. The voice DISC-IV with incarcerated male youths: prevalence of disorder. J Am Acad Child Adolesc Psychiatry Mar;2002 41(3):314–321. [PubMed: 11886026]
4. Teplin LA, Abram KM, McClelland GM, Dulcan MK, Mericle AA. Psychiatric disorders in youth in juvenile detention. Arch Gen Psychiatry Dec;2002 59(12):1133–1143. [PubMed: 12470130]
5. Vermeiren R, Jespers I, Moffit T. Mental Health Problems in Juvenile Justice Populations. Child Adolesc Psychiatr Clin N Am 2006;15(2):333–351. [PubMed: 16527659]
6. Abram KM, Teplin LA, Charles DR, Longworth SL, McClelland GM, Dulcan MK. Posttraumatic stress disorder and trauma in youth in juvenile detention. Arch Gen Psychiatry Apr;2004 61(4):403–410. [PubMed: 15066899]
7. American Association of Correctional Psychology. Standards for psychology services in jails, prisons, correctional facilities, and agencies. Crim Justice Behav Aug;2000 27(4):433–494.

8. US Department of Health and Human Services. Report of the Surgeon General's Conference on Children's Mental Health: A National Action Agenda. US Department of Health and Human Services; Washington, DC: 2000.
9. The President's New Freedom Commission on Mental Health. Subcommittee on Criminal Justice: Background Paper. http://www.mentalhealthcommission.gov/reports/FinalReport/downloads/FinalReport.pdf. Accessed September 28, 2007
10. Goldstrom, I.; Jaiquan, F.; Henderson, M.; Male, A.; Manderscheid, R. The availability of mental health services to young people in juvenile justice facilities: a national study. In: Manderscheid, RW.; Henderson, MJ., editors. Mental Health, United States, 2000 (DHHS Publication No. SMA-01-3537). US Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration; Washington, DC: 2000. p. 248-268.
11. Teplin LA, Abram KM, McClelland GM, Washburn JJ, Pikus AK. Detecting mental disorder in juvenile detainees: who receives services. Am J Public Health 2005;95(10):1773–1780. [PubMed: 16186454]
12. Pumariega AJ, Glover S, Holzer CE, Nguyen H. Utilization of mental health services in a tri-ethnic sample of adolescents. Community Ment Health J Apr;1998 34(2):145–156. [PubMed: 9620159]
13. Buckner JC, Bassuk EL. Mental disorders and service utilization among youths from homeless and low-income housed families. J Am Acad Child Adolesc Psychiatry Jul;1997 36(7):890–900. [PubMed: 9204666]
14. Heflinger CA, Chatman J, Saunders RC. Racial and gender differences in utilization of Medicaid substance abuse services among adolescents. Psychiatr Serv Apr;2006 57(4):504–511. [PubMed: 16603746]
15. Flores G, Fuentes-Afflick E, Barbot O, et al. The health of Latino children: urgent priorities, unanswered questions, and a research agenda. JAMA 2002;288(1):82–90. [PubMed: 12090866]
16. Holl JL, Szilagyi PG, Rodewald LE, Byrd RS, Weitzman ML. Profile of uninsured children in the United States. Arch Pediatr Adolesc Med 1995;149(4):398–406. [PubMed: 7704168]
17. Moffitt RA, Slade EP. Health care coverage for children who are on and off welfare. Future Child 1997;7(1):87–98. [PubMed: 9170735]
18. McMiller WP, Weisz JR. Help-seeking preceding mental health clinic intake among African-American, Latino, and Caucasian youths. J Am Acad Child Adolesc Psychiatry Aug;1996 35(8): 1086–1094. [PubMed: 8755806]
19. Rogers KM, Zima B, Powell E, Pumariega AJ. Who is referred to mental health services in the juvenile justice system? J Child Fam Stud Dec;2001 10(4):485–494.
20. Harrison ME, McKay MM, Bannon WM Jr. Inner-city child mental health service use: the real question is why youth and families do not use services. Community Ment Health J Apr;2004 40(2): 119–131. [PubMed: 15206637]
21. McKay MM, McCadam K, Gonzales J. Addressing the barriers to mental health services for inner city children and their caretakers. Community Ment Health J Aug;1996 32(4):353–361. [PubMed: 8840078]
22. Kim JYS, Fendrich M. Gender differences in juvenile arrestees' drug use, self-reported dependence, and perceived need for treatment. Psychiatr Serv Jan;2002 53(1):70–75. [PubMed: 11773652]
23. Lopez VA. Perceived need for substance abuse treatment among white, Hispanic, and black juvenile arrestees. J Ethn Subst Abuse 2003;2(4):1–17.
24. Johnson SD, Stiffman A, Hadley-Ives E, Elze D. An analysis of stressors and co-morbid mental health problems that contribute to youths' paths to substance-specific services. J Behav Health Serv Res Nov;2001 28(4):412–426. [PubMed: 11732244]
25. Abram KM, Teplin LA, McClelland GM, Dulcan MK. Comorbid psychiatric disorders in youth in juvenile detention. Arch Gen Psychiatry Nov;2003 60(11):1097–1108. [PubMed: 14609885]
26. Shaffer D, Fisher P, Dulcan MK, Davies M. The NIMH Diagnostic Interview Schedule for Children version 2.3 (DISC-2.3): description, acceptability, prevalence rates, and performance in the MECA study. J Am Acad Child Adolesc Psychiatry Jul;1996 35(7):865–877. [PubMed: 8768346]

27. Bravo M, Woodbury-Farina M, Canino GJ, Rubio-Stipec M. The Spanish translation and cultural adaptation of the Diagnostic Interview Schedule for Children (DISC) in Puerto Rico. Cult Med Psychiatry Sep;1993 17(3):329–344. [PubMed: 8269713]
28. Schwab-Stone M, Fisher PW, Piacentini J, Shaffer D, Davies M, Briggs M. The Diagnostic Interview Schedule for Children--Revised version (DISC--R): II. test-retest reliability. J Am Acad Child Adolesc Psychiatry May;1993 32(3):651–657. [PubMed: 8496129]
29. Piacentini J, Shaffer D, Fisher P, Schwab-Stone M, Davies M, Gioia P. The Diagnostic Interview Schedule for Children--Revised Version (DISC-R): III. concurrent criterion validity. J Am Acad Child Adolesc Psychiatry 1993;32(3):658–665. 1993. [PubMed: 8496130]
30. Shaffer D, Gould MS, Brasic J, et al. A children's global assessment scale (CGAS). Arch Gen Psychiatry November 1;1983 40(11):1228–1231. 1983. [PubMed: 6639293]
31. Bird HR, Yager TJ, Staghezza B, Gould MS, Canino G, Rubio-Stipec M. Impairment in the epidemiological measurement of childhood psychopathology in the community. J Am Acad Child Adolesc Psychiatry 1990;29(5):796–803. 1990. [PubMed: 2228936]
32. Lahey BB, Flagg EW, Bird HR, Schwab-Stone ME. The NIMH methods for the Epidemiology of Child and Adolescent Mental Disorders (MECA) study: background and methodology. J Am Acad Child Adolesc Psychiatry Jul;35(7):855–864. 1996. [PubMed: 8768345]
33. Korn, EL.; Grubbard, BI. Analysis of Health Surveys. Wiley; New York: 1999.
34. Cochran, WG. Sampling Techniques. John Wiley & Sons; New York, NY: 1997.
35. Levy, PS.; Lemeshow, S. Sampling of Populations: Methods and Applications. John Wiley & Sons; New York, NY: 1999.
36. Samargia LA, Saewyc EM, Elliott BA. Foregone mental health care and self-reported access barriers among adolescents. J Sch Nurs Feb;2006 22(1):17–24. [PubMed: 16435926]
37. Flisher AJ, Kramer RA, Grosser RC, et al. Correlates of unmet need for mental health services by children and adolescents. Psychol Med Sep;1997 27(5):1145–1154. [PubMed: 9300518]
38. Ortega AN, Alegria M. Denial and its association with mental health care use: a study of island Puerto Ricans. J Behav Health Serv Res 2005;32(3):320–331. [PubMed: 16010187]
39. US Department of Health and Human Services. Mental Health: A Report of the Surgeon General. US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institutes of Mental Health; Rockville, MD: 1999.
40. Angold A, Erkanli A, Farmer EMZ, et al. Psychiatric disorder, impairment, and service use in rural African American and white youth. Arch Gen Psychiatry Oct;2002 59(10):893–904. [PubMed: 12365876]
41. Cuffe SP, McKeown RE, Addy CL, Garrison CZ. Family and psychosocial risk factors in a longitudinal epidemiological study of adolescents. J Am Acad Child Adolesc Psychiatry 2005;44(2): 121–129. [PubMed: 15689725]
42. Garland AF, Lau AS, Yeh M, McCabe KM, Hough RL, Landsverk JA. Racial and ethnic differences in utilization of mental health services among high-risk youths. Am J Psychiatry Jul;2005 162(7): 1336–1343. [PubMed: 15994717]
43. Hazen AL, Hough RL, Landsverk JA, Wood PA. Use of mental health services by youths in public sectors of care. Ment Health Serv Res Dec;2004 6(4):213–226. [PubMed: 15588032]
44. Lopez-Williams A, Stoep AV, Kuo E, Stewart DG. Predictors of mental health service enrollment among juvenile offenders. Youth Violence Juv Justice 2006;4(3):266–280.
45. US Department of Health and Human Services. Mental Health: Culture, Race, and Ethnicity -- A Supplement to Mental Health: A Report of the Surgeon General. US Government Printing Office; Washington, DC: 2001.
46. Garland AF, Zigler E. Psychological correlates of help-seeking attitudes among children and adolescents. Am J Orthopsychiatry 1994;64(4):586–593. 1994. [PubMed: 7847574]
47. Kataoka SH, Zhang L, Wells KB. Unmet need for mental health care among U.S. children: variation by ethnicity and insurance status. Am J Psychiatry Sep;2002 159(9):1548–1555. [PubMed: 12202276]

48. Leaf PJ, Alegria M, Cohen P, Goodman SH, et al. Mental health service use in the community and schools: results from the four-community MECA study. J Am Acad Child Adolesc Psychiatry Jul; 1996 35(7):889–897. [PubMed: 8768348]

49. Zahner GE, Daskalakis C. Factors associated with mental health, general health, and school-based service use for child psychopathology. Am J Public Health Sep;1997 87(9):1440–1448. [PubMed: 9314794]

50. Rosenblatt JA, Rosenblatt A, Biggs EE. Criminal behavior and emotional disorder: comparing youth served by the mental health and juvenile justice systems. J Behav Health Serv Res May;2000 27(2): 227–237. [PubMed: 10795131]

51. Pumariega AJ, Atkins D, Rogers K, et al. Mental health and incarcerated youth. II: service utilization. J Child Fam Stud Jun;1999 8(2):205–215.

52. Wang J. Perceived barriers to mental health service use among individuals with mental disorders in the Canadian general population. Med Care Feb;2006 44(2):192–195. [PubMed: 16434920]

53. Burns BJ, Angold A, Costello EJ. Measuring child, adolescent, and family service use. New Dir Program Eval 1992;54:17–29.

54. Boldero J, Fallon B. Adolescent help-seeking: what do they get help for and from whom? J Adolesc Apr;1995 18(2):193–209.

55. Pescosolido BA, Gardner CB, Lubell KM. How people get into mental health services: stories of choice, coercion and "muddling through" from "first-timers.". Soc Sci Med Jan;1998 46(2):275–286. [PubMed: 9447648]

Table 1

Prevalence of Barriers to Non-School Services Among Juvenile Detainees with ADM[1] Disorder by History of Service Use and Gender[2]

Barriers	Total (N=1216)	Males						Females					
		Total (n=752)[3]	Received (Past Services) (n=403)	Referred (Never Received) (n=128)	Never Referred, Never Received (n=202)	Analysis Comparing Groups		Total (n=464)[4]	Received (Past Services) (n=329)	Referred (Never Received) (n=58)	Never Referred, Never Received (n=72)	Analysis Comparing Groups	
	%	%	%	%	%	P Value		%	%	%	%		
Any Barrier	84.6	84.2	84.0	92.7	81.8	p = .71		88.7	90.2	93.1	77.7	p < .01	Received; Referred > Never Referred
Belief that problem would go away or could solve it on own	56.5	56.3	64.1	46.8	52.4	p = .07		59.3	64.4	60.2	39.3	p < .01	Received; Referred > Never Referred
Unsure it was the right person/ place to get help	31.7	31.0	24.4	47.5	34.9	p < .05	Referred > Received	40.4	40.8	41.7	37.5	p = .86	
It was too difficult to obtain help	19.1	19.4	19.7	15.0	20.8	p = .72		16.5	13.5	23.5	22.5	p = .057	
Concern about what others might think	16.4	16.3	10.0	12.4	28.4	p < .01	Never Referred > Received	17.8	17.2	9.2	26.0	p = .054	
Worry about cost	13.2	13.3	6.4	10.0	23.7	p < .001	Never Referred > Received	12.1	6.1	22.2	28.9	p < .001	Referred; Never Referred > Received Services
Other[5]	26.5	25.3	37.2	27.8	6.8	p < .001	Received; Referred > Never Referred	39.5	48.3	26.8	11.0	p < .001	Received; Referred > Never Referred; Received > Referred

[1] Any alcohol, drug or mental (ADM) disorder. Any ADM disorder includes major depression, mania, dysthymia, hypomania, obsessive-compulsive disorder, overanxious disorder, generalized anxiety disorder, separation-anxiety disorder, panic disorder, psychosis, alcohol use disorder, marijuana use disorder, other substance use disorder, attention-deficit/hyperactivity disorder, conduct disorder, and oppositional defiant disorder.

[2] Data are weighted to reflect the actual population of the Cook County Juvenile Temporary Detention Center.

[3] Nineteen males did not receive all or part of the services section from the Service Utilization and Risk Factors (SURF) interview; they were excluded from these analyses.

[4] Five female participants were missing data from services section of the SURF and were excluded from these analyses.

[5] Participants were asked if there were “other” barriers to services that were not already listed.