Adolescents' and Providers' Perspectives on the Need for and Use of Mental Health Services

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Purpose: This study examines need for and use of services from both the adolescent's and the service provider's viewpoints.

Methods: The Youth Services Project interviewed 792 youths from the juvenile justice, education, primary health care, and child welfare sectors (200 each); gathered anonymous tallies of the mental health of youthful clients at each sector; and conducted focus groups with providers.

Results: A high percentage of youths (12–15%) met DSM-IV criteria for a mental health disorder, yet the sector clients were not identified as having mental health problems. Juvenile justice and child welfare sectors identified the highest percentage of adolescent clients as having mental health problems, and provided the most services (50–80%). The primary health care sector recorded no mental health disorders among the tallied clients, and provided the fewest mental health services (<20%). Providers' complaints that they lacked knowledge concerning mental health assessment and lacked referral or treatment resources closely paralleled the degree to which their sector underserved youths.

Conclusion: Lack of knowledge about the extent of need in adolescents, methods for assessing or treating, and referral resources handicap service providers and explain the gap between need and service. © Society for Adolescent Medicine, 1997

Key Words: Adolescents, Mental health services, Primary health care, Education, Juvenile justice, Child welfare

This study examined the need for and use of mental health services from both adolescents' and service providers' perspectives. We know that the need for adolescent mental health services is high (1). In fact, most studies show that the estimated prevalence of mental health disorders in youths ranges from 14% to 25% (2–10). The estimated rates of mental health problems vary widely depending upon the instrument or reporter, and whether the problem is defined according to clinically significant symptoms or DSM diagnostic criteria (11). Estimates on depression range from 5% to 9% (12–16); estimates for conduct disorder range from 6% to 31% (11,15,17); estimates for drug and alcohol abuse/dependence range from 5% to 9% (11,16).

Despite the obvious need for adolescent mental health services, only a small proportion of youths receive needed services (4,8,10,13,18,19). Among youths with mental health problems, those with conduct problems are most likely, and those with depression least likely, to obtain services (20,22). Perhaps this is a reflection of the different impact of these two disorders on adults. The lack of active service seeking by either the youths or their families explains in part the low rates of mental health services. Even among youths whose problems are severe enough to meet diagnostic criteria, fewer than
half seek professional mental health consultation (3,9). One study found that only 56% of parents whose children had severe psychiatric problems consulted with a mental health professional (20).

Given that youths themselves infrequently seek help from mental health professionals, how might they be helped or connected with services? Those individuals who might provide entry to services must be able to identify the youths' problems and be knowledgeable about services. In the public sector, four types of service sectors function as potential gateways to mental health services: child welfare, juvenile justice, health, and education. Their role is not, however, to provide psychiatric services themselves (23).

From among those four gateway sectors, teachers are the professionals most likely to be consulted about the troubled child (4). Although primary health care providers are the second most likely to be consulted, parents and youths seldom discuss emotional or behavioral problems (20). Despite the acceptance of the role of primary care physicians as the gatekeepers to mental health services for youths, they often fail to identify their mental health needs (4,21,24–26). The juvenile justice and child welfare systems provide services to an even smaller segment of needy youths (<1%) than do the education or primary care sectors (4).

Adolescent mental health service use is predicted in part by the perception/assessment/knowledge of the gateway providers (27,28).

Our study examined gaps between the need for and use of mental health services by a sample of adolescents who use the four gateway service sectors that typically link youths with mental health services. We compared three sources of data: estimates of the need for mental health services obtained in interviews with the youths themselves, tallies of the mental health needs of gateway service users kept by the providers, and comments made in focus groups by the gateway service providers concerning their understanding of mental health service issues. In comparing these three sets of data, we examined the relationship among services offered to youths, the youths' need for services, and the understanding of that need by the providers.

**Methods**

**Design**

The Youth Services Project, funded by the National Institute of Mental Health, examined adolescents' mental health needs and use of mental health services. The Youth Services Project interviewed 792 youths from the juvenile justice, education, primary health care, and child welfare sectors (approximately 200 each), gathered anonymous tallies of the mental health of youths using data from each sector, and conducted focus groups with providers from each sector. Four group participants from the health sector consisted of one family practice M.D., one adolescent health specialist M.D., three nurses, and one social worker. All youths were from the city of St. Louis. All four gateway service sectors were in a position to screen youths for mental health problems and to either provide some mental health services or refer to services elsewhere.

**Interviews**

*Interview sample.* The Youth Services Project recruited subjects with the aid of service providers by having interviewers approach youths in the service sector waiting rooms and by letters and posters requesting volunteers from each sector's service users. Unfortunately, no records were kept concerning the response rates from the varying recruitment methods. Trained professional interviewers administered individual interviews averaging 55 min in length to each respondent. The Internal Review Board at Washington University approved all methods, and the National Institute of Mental Health issued a Certificate of Confidentiality. Interviewers obtained informed consent from all subjects and their guardians. When possible, the interviewer completed the interview on site, immediately before or after services were obtained. Otherwise, the interviewer arranged an appointment for a future interview in the youth's home or at a mutually acceptable site.

The 792 subjects were all between 13 and 17 years of age, with a mean age of 15.3 years. Thirteen percent were white, 86% black, and 1% other. Forty-three percent were male, and 57% female. The occupation of the parent who provided the most financial support to the family in the last 6 months determined the youth's socioeconomic status. Accordingly, 15% were welfare recipients, 39% laborers or semiskilled workers, 23% blue collar, 14% white collar, and 8% professional. Fifty-three percent of the children lived in families headed by a mother only, 14% in two-parent families, 15% in foster or group care, 12% with nonparent relatives, and 6% elsewhere.
Interview instruments. Structured interview protocols yielded data concerning demographics; social and academic behaviors; mental health; service use; as well as family, social, and community environments.

Measures of depression, conduct disorder, and substance (alcohol and drug) abuse or dependence came from the Diagnostic Interview Schedule for Children–Revised (DISC-R) (5,29). The DISC-R allows two separate operationalizations of mental health problems: (1) a diagnosis of disorder based on computer algorithms that combine symptoms according to the criteria in DSM-IV; and (2) a count of serious symptoms (e.g., those lasting ≥2 weeks or those which interfere significantly with the youth’s life).

Information about suicidality was derived from questions in the DISC Depression section that asked about thoughts of death, suicide plans, and suicide attempts in the last 6 months. Use of mental health services was broadly defined. Data on such service use came from youths’ reports that any professional (psychiatrist, M.D., social worker, teacher, counselor, etc., depending upon the sector) helped them for one of the following problems: sadness/depression, feeling suicidal, fears/stress, misbehavior/getting in trouble, alcohol or drug use, or other emotional or social problems.

Anonymous Tallies

The second source of data was tallies of the adolescent clients from each sector. For a 1-month period during the 6-month interview fieldwork, service providers at each sector (except primary health) completed an anonymous tally sheet indicating the age, gender, race, and type of mental health problem of each consecutive youthful client. The health care sector provided us with the data from their billing records for that 1-month period. Unlike the anonymous tallies completed by the other sectors, they coded their mental health problems under ICD codes. We requested data on the demographics of adolescents seen by public health clinics and their ICD codes corresponding to depression problems, conduct disorder and behavioral problems, suicide attempts, alcohol and drug abuse or dependence, and other major diagnoses. Note that the tallies were obtained only to verify that the volunteer subjects were representative of youths from that sector. Because the tallies were under the control of the sectors, we have no information about their reliability or validity. However, preprinted tally sheets were distributed to sector providers to maximize the ease and accuracy of tally keeping by the service providers.

Comparisons between the interview sample and the anonymous tallies from the four gateway sectors showed that the interview sample was quite representative of adolescent clients from each sector. Those youths interviewed from the child welfare or educational sectors did not differ in race, gender, or age from teenagers using the respective public sectors. However, our health interviewees averaged 3 months younger than teenagers using the health sector, and our juvenile justice interview sample had fewer males (60% vs. 75%) and averaged 2 months younger than teenagers using the juvenile justice sector. Teenage clients from the public sectors and our interviewed sample are not ethnically representative of the population of St. Louis city, which is closer to 50% black and 50% white. However, they are representative of public sector clients.

Focus Groups

The third source of data came from focus groups held with providers from each sector. We asked a series of standardized questions, prepared summaries of their comments, and report those that may help shed light on the differential identification of problems and provision of mental health services.

Analyses

Univariate analyses describe rates of problem behavior and rates of mental health services use. Then bivariate Chi-square analyses and analyses of variance explore differences in rates within sectors.

Results

Table 1 compares percentages for the following: (1) interviewees identified as meeting criteria for diagnoses of a mental health problem, (2) interviewees who were having significant symptoms of such a problem, (3) interviewees with diagnoses who reported that they received mental health services at the sector for that problem, and (4) each sector’s adolescent clients who were identified through the anonymous tallies as having similar problems.

Interviews

Youths’ problems. In general, regardless of the sector, in the last 6 months half or more youths experi-
Table 1. Comparison of data sources concerning youths' mental health problems and mental health services

<table>
<thead>
<tr>
<th>Mental Health Problem</th>
<th>Diagnosed in Interviews (%)</th>
<th>Significant Symptoms (%)</th>
<th>Mental Health Problem</th>
<th>Diagnosed in Anonymous Tally (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n = 196)</td>
<td>(n = 209)</td>
<td>(n = 200)</td>
<td>(n = 227)</td>
</tr>
<tr>
<td></td>
<td>Diagnosis</td>
<td>% Youths with Self-reported Problems (%)</td>
<td>% Youths with a Problem Who Received Mental Health Services from sector (%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Significance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child welfare sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug/alcohol</td>
<td>16.3</td>
<td>25.4</td>
<td>54.6</td>
<td>1.0</td>
</tr>
<tr>
<td>Conduct disorder</td>
<td>16.8</td>
<td>53.6</td>
<td>54.6</td>
<td>45.5</td>
</tr>
<tr>
<td>Suicide</td>
<td>NA</td>
<td>17.3</td>
<td>NA</td>
<td>17.7</td>
</tr>
<tr>
<td>Depression</td>
<td>16.8</td>
<td>72.4</td>
<td>63.6</td>
<td>18.7</td>
</tr>
<tr>
<td>Other</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>24.9</td>
</tr>
<tr>
<td>Health sector</td>
<td>(n = 200)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug/alcohol</td>
<td>5.5</td>
<td>9.0</td>
<td>18.2</td>
<td>0</td>
</tr>
<tr>
<td>Conduct disorder</td>
<td>8.5</td>
<td>7.5</td>
<td>17.7</td>
<td>0</td>
</tr>
<tr>
<td>Suicide</td>
<td>NA</td>
<td>7.5</td>
<td>NA</td>
<td>0</td>
</tr>
<tr>
<td>Depression</td>
<td>12.5</td>
<td>56.0</td>
<td>20.0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>0</td>
</tr>
<tr>
<td>Juvenile justice sector</td>
<td>(n = 189)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug/alcohol</td>
<td>26.5</td>
<td>38.6</td>
<td>86.0</td>
<td>31.5</td>
</tr>
<tr>
<td>Conduct disorder</td>
<td>29.6</td>
<td>73.5</td>
<td>94.6</td>
<td>56.8</td>
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<tr>
<td>Suicide</td>
<td>NA</td>
<td>12.2</td>
<td>NA</td>
<td>9.6</td>
</tr>
<tr>
<td>Depression</td>
<td>12.2</td>
<td>59.8</td>
<td>91.3</td>
<td>29.5</td>
</tr>
<tr>
<td>Other</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>13.0</td>
</tr>
<tr>
<td>Education sector</td>
<td>(n = 207)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug/alcohol</td>
<td>4.8</td>
<td>17.4</td>
<td>70.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Conduct disorder</td>
<td>8.2</td>
<td>51.2</td>
<td>64.7</td>
<td>13.8</td>
</tr>
<tr>
<td>Suicide</td>
<td>NA</td>
<td>8.2</td>
<td>NA</td>
<td>0.7</td>
</tr>
<tr>
<td>Depression</td>
<td>7.7</td>
<td>46.9</td>
<td>81.3</td>
<td>3.4</td>
</tr>
<tr>
<td>Other</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>32.6</td>
</tr>
</tbody>
</table>

The percentages of youths meeting criteria for a diagnosis of depression ranged from 7.7% (the educational sector) to 16.8% (the child welfare sector). For conduct disorder, the range was 8.2% (the educational sector) to 29.6% (the juvenile justice sector). Finally, for substance dependence/abuse, the range was 4.8% (the educational sector) to 26.5% (the juvenile justice sector).

Chi-square analyses compared differences in mental health diagnoses of youths from each sector (Table 1). In general, interviewees from the four sectors differed significantly in their rates of mental health diagnoses (conduct disorder $\chi^2 = 45.4; df = 3; p < 0.0001$; substance abuse $\chi^2 = 55.0; df = 3; p < 0.0001$; and suicidality $\chi^2 = 13.2; df = 3; p < 0.004$), although the significance for depression was marginal ($p = 0.053$). Overall, youths from the child welfare sector suffered from more emotional distress symptoms (i.e., depression and suicidality) than their counterparts from other service sectors. In contrast, youths from the juvenile justice sector had more externalizing problem behaviors (i.e., conduct disorder and substance abuse) than other youths. Table 2 presents the results of analyses of variance comparing mean numbers of mental health symptoms by sector. These results closely parallel those for diagnoses.

Services for mental health problems. Our interviews indicated that, in general, half of the youths with mental health as problems reported receiving help for those problems by the gateway sector at which they were recruited (Table 1). However, the rates varied by sectors. In the child welfare sector, the percentages of youths who had problems and who received help for them ranged from 46.9% (three or
Table 2. Mean numbers of mental health symptoms for interviewed youths, by sector

<table>
<thead>
<tr>
<th>Mental Health Symptoms</th>
<th>Child Welfare (n = 196)</th>
<th>Health (n = 200)</th>
<th>Juvenile Justice (n = 189)</th>
<th>Education (n = 207)</th>
<th>F(df)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>12.0</td>
<td>9.5</td>
<td>9.9</td>
<td>8.5</td>
<td>11.9</td>
<td>0.0001</td>
</tr>
<tr>
<td>Conduct disorder</td>
<td>3.5</td>
<td>2.2</td>
<td>5.1</td>
<td>2.8</td>
<td>37.1</td>
<td>0.0001</td>
</tr>
<tr>
<td>Substance dependence/abuse</td>
<td>2.7</td>
<td>0.8</td>
<td>4.3</td>
<td>1.3</td>
<td>19.9</td>
<td>0.0001</td>
</tr>
</tbody>
</table>

more substance misuse symptoms) to 63.6% (depression diagnosis). In the health sector, the percentages ranged from 55.2% (three or more depression symptoms) to 20% (depression diagnosis). The health sector interviewees reported the lowest mental health service rates among all sectors, with less than one-fifth of youths with problems receiving mental health services there. Interviewees from the juvenile justice sector reported the highest percentages of mental health services, with a range from 83.6% (substance abuse/depression symptoms) to 94.6% (conduct disorder diagnosis). In the education sector, the percentages of interviewees reporting mental health services ranged from 49.1% (three or more conduct disorder symptoms) to 81.3% (depression diagnosis).

Comparison of Interviews and Anonymous Tallies

Table 1 allows the reader to compare: (a) the percentage of interviewees identified as meeting criteria for diagnoses of a mental health problem; (b) the percentage of interviewees who were having significant symptoms of such a problem; and (c) the percentage of sector clients identified through the anonymous tallies as having such problems.

In the child welfare sector, the tallies (compared to the interview data) identified fewer youths with drug or alcohol abuse problems (1% vs. 17%). In contrast, the child welfare sector counts identified more youths as having significant conduct disorder problems (46% vs. 17%), but approximated the same percentages as the interviews for suicidal youths (18% vs. 17%) and depression (19% vs. 17%). Within the juvenile justice sector, the anonymous tallies identified similar percentages of mental health problems to those found in the youth interviews. The education sector tally identified fewer clients as having problems with drugs or alcohol (0.1% vs. 5%), being suicidal (0.7% vs. 8%), and being depressed (3% vs. 8%), but identified more as having behavior problems (14% vs. 8%). For the 227 consecutive adolescent patients tallied by providers from the health care sector, no clients were identified in the billing records as having any mental health problems.

In 227 consecutive adolescent patients from the health care sector, none was identified as having any mental health problems. (Note that in this sector, primary caregivers identified youths as meeting ICD criteria rather than simply as having a problem.) In contrast to the health sector client tally, a range from 5% (substance abuse or dependence) to 12% (major depression) of interviewees met DSM-IV criteria and a range from 9% to 55% had significant problems.

Informal Focus Group Comments

Many of the comments offered by the providers during the focus groups gave significant clues as to why their particular sector did or did not identify or serve youths who had mental health problems. The juvenile justice sector, which had the highest rates of identification of problems, also had a special diagnostic and screening unit. However, the workers participating in the focus group reported that providing mental health services was outside their scope of activities. Nevertheless, they were aware of the necessity for mental health assessment and even commented that watching the clients' office interactions was particularly helpful to them.

The child welfare sector had the next highest rate for identification of problems. Those workers also commented that providing mental health services was outside their scope of responsibility. Nevertheless, they felt that they should identify such problems. They pointed out that car rides with the teenagers promoted free discussion and were thus particularly helpful in assessing the youths' mental health problems.

The educational sector had particularly low identification rates for substance abuse and suicidality. The providers reported that it was hard for them to identify mental health problems because parents and the community denied that the problems existed. They also complained about a lack of time and very heavy caseloads. They felt that the absence of support groups for adolescents with mental health prob-
lems kept them from identifying and referring for such problems.

The health sector identified no clients as having mental health problems. Health care workers were the only sector providers who, when asked about the kinds of problems their adolescent clients had, did not list one behavioral or mental health problem, responding only in terms of physical health. They also mentioned that they lacked competence in assessing and treating mental health problems and were uninformed about available resources for referral. However, when they were asked about their experience referring youths to mental health or counseling services outside of the primary health care clinic, they cited long waiting periods and a lack of communication between the clinic and the referral service on the referral outcome. Thus, they appeared to have some familiarity with referring youths for problems other than physical health care concerns. They stated that after making referrals, many youths failed to keep appointments or changed their minds about accepting treatment.

Discussion

Our findings supported prior research that demonstrates a substantial gap between youths' need for mental health services and their receipt of services (4,21,24). This gap was evident for adolescents in four gateway sectors: primary health care, education, child welfare, and juvenile justice. Our study further related this gap to the typical gateway service practices and providers' constraints, concerns, and knowledge.

The percentage varied widely by sector, with the juvenile justice, education, and child welfare sectors providing more services than the health sector.

The anonymous tallies from each gateway sector paralleled the interview data from that sector. The juvenile justice sector tally reported the highest number of youths with problems, and the highest percentage of youths from this sector reported in their interviews that they received services. The existence of a special diagnostic and assessment branch in the St. Louis juvenile justice sector would explain these high service rates, which were discrepant from other studies which found low service rates from juvenile justice (4). The child welfare sector tally identified a somewhat lower rate of youths as having problems, despite the interview data showing an excellent record for services. Other studies found low levels of services provided by child welfare sectors (4). The higher rates for our St. Louis sample may indicate that the youths who received child welfare services felt that they were getting services for their mental health problems, even though the providers themselves may not have identified those services as mental health services. Alternately, the high rates may reflect the very real financial situation in St. Louis, in which the child welfare sector is the largest purchaser of mental health services for youths in the state. The education sector had a very large discrepancy between the percentage of mental health problems identified by the youths' interview data and the providers' tally data. Nevertheless, many of youths with mental health problems felt that they were receiving help through the educational sector (through their school counselors and social workers). This is consistent with other studies finding that schools provide mental health care to high percentages of needy youths (4). The health sector had the worst service record from both interview data and providers' tally data: Problems were not being identified and needed services were not being provided.

The extraordinary gap in the primary health care sector is significant because primary health care providers believe that the identification and provision of mental health problems is within their purview (21). They see such services as an extension of primary health care services, and public primary care sectors often receive extra funding for the provision of such services (21). Yet at least in the sample we interviewed, in the public health care departments that we surveyed, and in at least one other study (4,21), such mental health services were not provided. In addition, the front-line health care service providers for youths feel that they are poorly equipped to provide such services. Note that the youths' report of higher percentages of help than that reflected in the billing records may indicate that youths perceive mental health services when none are provided, or, more likely, that more mental health services are provided than are documented or billed. Also, physicians may avoid noting mental health problems in medical charts for fear of stigmatizing adolescent patients.

Although our findings suggest significant associations between need and service provision for a range of behavioral, emotional, and mental health problems, the study has several limitations. Since all the youth in our sample are from gateway sectors in only one midwestern city, they or the gateway sector practices may not be representative. Adolescents in other U.S. cities or those not using gateway sector services may experience different rates of behavioral,
behaviors, social desirability may have influenced
we lack data concerning refusal rates. Because some
need in various adolescent populations, the gap
determines the youth’s path-
way to services more than actual need and service
availability. We must therefore educate gateway
providers in diagnostic and assessment procedures,
known incidences for mental health problems; service
skills, service availability, and referral procedures.
The lack of information about the extent of need. This would indicate that the
gateway providers’ perception of need (although	often inaccurate) may determine the youth’s path-
way to services more than actual need and service availability.

Despite the above limitations, this study focuses attention on several important issues for service delivery. Many of the adolescents report that their gateway providers (e.g., school counselors, physicians, child welfare workers, or deputy juvenile officers) neither provided services nor informed them that care might be available. Further, many of the providers’ records indicate lack of awareness of the extent of need. This would indicate that the gateway providers’ perception of need (although often inaccurate) may determine the youth’s pathway to services more than actual need and service availability. We must therefore educate gateway providers in diagnostic and assessment procedures, known incidences for mental health problems; service skills, service availability, and referral procedures. The lack of information about the extent of need in various adolescent populations, the gap between need and services, and missing explanations of that gap have all handicapped policy planners and service providers.

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