

# Mental Health Service Use in the Community and Schools: Results from the Four-Community MECA Study

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## ABSTRACT

**Objective:** To describe the use of mental health and substance abuse services by children and adolescents as reported from the four community sites included in the NIMH Methods for the Epidemiology of Child and Adolescent Mental Disorders (MECA) Study. **Method:** As part of the MECA survey, questions were developed to identify children and adolescents utilizing mental health and substance abuse services. Youths aged 9 through 17 years and a parent/caretaker were interviewed. Because the investigators had concerns about the capacities of the younger children in the study to describe their use of mental health services, more extensive questions were asked of parents than of youths. **Results:** The procedures developed by the MECA project identified patterns of service use that varied in the four communities surveyed. Agreement between reports of parents and youths regarding the use of mental health and substance abuse services showed substantial inconsistencies, similar to reports of psychiatric disorders. At three of the four sites, the majority of children meeting criteria for a psychiatric disorder and scoring 60 or less on the Children's Global Assessment Scale reported some mental health-related service in the previous year, although at two of the sites fewer than 25% of these youths were seen in the mental health specialty sector. **Conclusion:** Community surveys show great promise for monitoring the need for mental health and substance abuse services and for identifying patterns of use. *J. Am. Acad. Child Adolesc. Psychiatry*, 1996, 35(7):889-897. **Key Words:** psychiatric disorders, child and adolescent mental health services.

Policy makers, researchers, and clinicians have long been concerned about the large number of children with serious emotional disturbances who do not receive treatment for their disorders (Institute of Medicine, 1989; Joint Commission on the Mental Health of

Children, 1969; Knitzer, 1982; National Advisory Mental Health Council, 1990; National Research Council, 1993; Office of Technology Assessment, 1986; President's Commission on Mental Health, 1978; Select Panel for the Promotion of Child Health, 1981). Many children and adolescents have home or neighborhood environments that place them at high risk for a psychiatric disorder (e.g., Richters and Martinez, 1993). Recent studies have found high (e.g., Bird et al., 1989; McGee et al., 1990; Offord et al., 1987; Shaffer et al., 1996; Whitaker et al., 1990) and possibly increasing (Achenbach and Howell, 1993; Ryan et al., 1992) rates of psychiatric disorders in children and adolescents. We know little, however, about the use of mental health services by children and adolescents with psychiatric disorders or how recent changes in the organization and financing of mental health services have affected the availability or accessibility of these services.

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### Objectives of the Present Study

In recent years, much effort has been devoted to improving procedures for detecting and classifying psychiatric disorders in community samples of children and adolescents (e.g., Costello et al., 1993; Lahey et al., 1996; Shaffer et al., 1996). In addition to increasing our capacity to identify and monitor psychopathology, the goal of the National Institute of Mental Health (NIMH)-funded Methods for the Epidemiology of Child and Adolescent Mental Disorders (MECA) Study was to develop and test procedures for describing the use of mental health services in different communities and to determine whether the use of these services was related to the need for services (Lahey et al., 1996). Even more than adults (Regier et al., 1993), children and adolescents receive mental health and substance abuse services in a variety of settings and from numerous professionals. If more effective systems of services are to be developed, we need to know where children and adolescents receive mental health services and whether those in greatest need of these services are most likely to receive treatment.

In describing the use of mental health and substance abuse services in the four communities studied, we first present the procedures developed by the MECA project for the measurement of service-related variables. We then describe the agreement between reports of services made by parents and their children. Finally, we describe patterns of service use at the four sites.

## METHOD

### Procedure

As described by Lahey et al. (1996), parents and youths aged 9 through 17 years were surveyed concerning demographic characteristics of the child and his or her household, the existence of psychiatric symptoms, level of functioning, and risk factors for psychiatric disorders. Both youths and parents were asked to identify the mental health and substance abuse services used by the youths both in the previous year and ever in their lives. The parent interview obtained more detailed information than the youth interview because the collaborators had concerns about the ability of youths to provide accurate reports concerning the details of mental health-related service contacts.

*Parents' Reports of Services.* The services component of the interview administered to parents obtained information about the youths' contacts with health, school-based, social services, and other service providers because of emotional or behavior problems or because of drug or alcohol problems. In an interview that used items modeled on the questions used in the National Comorbidity Survey (Kessler et al. 1994), parents were provided a list of service

settings (hospital emergency room, drug or alcohol outpatient clinic, psychiatric outpatient clinic, social service agency or department, social program in jail or prison, drop-in center or program for people with emotional or behavior problems or alcohol or drug problems, mental health professional's private office, medical clinic, health maintenance organization, or family clinic) and asked to indicate whether the youth had ever been brought to any of these settings because of an emotional, behavior, drug, or alcohol problem. The parent also was provided with a list of potential service providers (pediatrician, general practitioner, family physician, psychiatrist, psychologist, social worker, minister, rabbi, priest, other religious leader, counselor, nurse, occupational therapist, another health professional, spiritualist, herbalist, natural therapist, or faith healer) and again asked to provide information about the youth's contacts related to an emotional, behavior, drug, or alcohol problem.

For youths with any reported contact, information was collected as to how old the youth was the first time a service was used, the most recent use, whether insurance paid for any of the services, and the frequency of contacts for nonschool services. Information was collected about prescription medications used during the 12 months prior to the interview. For a child who had ever stayed overnight in a hospital or other treatment program because of emotional or behavior problems, or because of the use of alcohol or drugs, information was collected about the type of treatment facility, whether the treatment was for emotional or behavior problems or drugs or alcohol, the number of admissions during the previous year, and the number of nights spent in these facilities. Parents were asked to report on whether the youth had received extra help at school for emotional or behavior problems, alcohol use problems, or drug use problems and on the nature of the services received, the age of the youth when help was first received, and whether help had been provided within the year prior to the interview. The MECA project also obtained data, not discussed in this report, on barriers to care and attitudes toward services.

In the analyses presented in this article, summary measures were created to identify the use of mental health and substance abuse services in the year preceding the interview. Using the reports of specific services and providers used by the youth, outpatient service utilization was categorized into six types of services: (1) mental health specialty sector including contacts with a psychiatrist, psychologist, social worker, or counselor in a private office or psychiatric outpatient facility, or unspecified location for each of these except for the social worker; (2) medical services from a nonpsychiatrist physician or a nurse; (3) school-based services; (4) clergy; (5) social services; and (6) other or classification unknown, including services provided by spiritualists, herbalists, natural therapists, or faith healers. Inpatient and residential services were categorized separately and not discussed in this report, which focuses on outpatient or community-based services.

*Youths' Reports of Services.* All youths were asked whether they had ever received extra help in school for emotional or behavior problems, alcohol use problems, or drug use problems; the nature of the services received; their age when help was first received; and whether help was provided within the year prior to the interview. These questions about school-based services were the same questions asked of parents. Youths aged 12 and older also were asked whether they had ever seen a professional outside of school for an emotional or behavioral problem or for the use of drugs or alcohol. Youths were not asked detailed questions about the type of professional or site of service and youths aged 9 through 11 were not asked about their contacts with professionals outside of school. Thus, the youth data could not be categorized into the six types of

services described in the previous section. For some analyses, a variable was created that combines reports from parents and youths.

**Diagnosis and Functioning.** Both parents and youths were interviewed with the NIMH Diagnostic Interview Schedule for Children (DISC) Version 2.3, a highly structured diagnostic instrument developed for use by lay interviewers (Shaffer et al., 1996). In this study, we used a summary measure of psychiatric disorders that included all children meeting criteria for any of the disorders included in the DISC-2.3 with the exception of the screen for psychosis and children who only met criteria for a diagnosis of phobia. In determining the existence of a disorder, we used the diagnostic algorithms that included data from both the parent and child and that required reports of impairment based on questions that were included in the DISC (Shaffer et al., 1996).

An important issue for clinicians and policy makers is whether psychiatric services are being used by the youths most in need of these services. Because the MECA researchers had only limited experience with the impairment questions that are internal to the DISC interview, we also present analyses that incorporated the results of a more widely used measure of functioning, the Children's Global Assessment Scale (CGAS) (Shaffer et al., 1983). The CGAS was completed by both the interviewer of the youth and the interviewer of the parent, and it provided a summary of the worst level of functioning of the youth during the 6 months prior to the interview. In analyses presented, the CGAS score is dichotomized into children scoring 61 and higher and those scoring 60 or less. A score of 60 indicated that the youth had problems in some situations that were noticeable to anyone, although the youth could seem fine in other situations. Lower scores indicated more significant impairment. Because reports from both the parent and youth were used in ascertaining the existence of a psychiatric disorder, the lower of the parent and youth CGAS scores are used in the analyses presented.

### Subjects

The sample has been described by Lahey et al. (1996); we will provide only a summary.

**Sites.** Data were collected from four geographic areas: (1) DeKalb, Rockdale, and Henry Counties, Georgia; (2) three towns adjacent to New Haven, Connecticut; (3) Westchester County, New York; and (4) San Juan, Puerto Rico.

**Populations.** Children aged 9 through 17 years living in the community were eligible for inclusion in the study. Almost all adult respondents were mothers.

**Samples.** A random sample of community residences was selected at each of the four sites. Data were collected on 1,285 child-adult pairs, although three of the children studied provided limited data because they had developmental delays.

**Sample Demographics by Site.** The demographic characteristics of the sites were reported by Lahey et al. (1996). The sites did not differ significantly in gender or age of the children studied, but they did vary in other characteristics of the sample. The New York sample had the greatest proportion of non-Hispanic whites, the Georgia sample had the highest proportion of African-Americans, and the Puerto Rico sample had the highest proportion of Hispanics. Sites also varied in terms of household income and education of adult respondents, with the New York sample having the highest incomes and the Puerto Rico sample the lowest.

### Data Analysis

Statistical analyses were conducted with the Statistical Analysis System (SAS Institute, 1989), using unweighted data.

**TABLE 1**  
Reports by Parents and Youths (Aged 9 through 17) of School-Based Mental Health or Substance Abuse Services in Past Year  
(Four MECA Sites Combined)

	Ages		Ages		All	
	9-12		13-17		Ages	
	(n = 593)	%	(n = 692)	%	(n = 1,285)	n
Either parent or youth	15.3	91	13.2	91	14.2	182
Parent only	5.9	35	3.5	24	4.6	59
Youth only	6.9	41	5.4	37	6.1	78
Both (P+Y)	2.5	15	4.3	30	3.5	45

Note: MECA = Methods for the Epidemiology of Child and Adolescent Mental Disorders.

### RESULTS

Because the primary goals of the MECA study were methodological in nature, we begin with a comparison of reports of service use by parents and youths. It is important to point out that these data include visits for mental health-related problems as defined by the parent or youth. Detailed information about the treatment provided during each contact is not available.

Parents and youths frequently differed in their reports about the use of mental health services (Tables 1 and 2). Regarding school-based services, 14.2% of the combined four-site sample were identified by parent or youth as having had an in-school mental health or substance abuse-related contact during the year prior to the interview. Although agreement was greater than chance, youths aged 9 through 12 years showed low agreement with parents ( $\kappa = .21$ ), with youths aged 13 through 17 having a moderate level of agreement ( $\kappa = .45$ ) and an overall youth-parent agreement of

**TABLE 2**  
Reports by Parents and Youths (Aged 12 through 17) of Non-School-Based Mental Health and Substance Abuse Services in Past Year (Four MECA Sites Combined)

	Ages		Ages		All	
	12-17		13-17		Ages	
	(n = 149)	%	(n = 692)	%	(n = 841)	n
Either parent or youth	12.1	18	13.1	90	12.9	108
Parent only	6.0	9	6.2	43	6.2	52
Youth only	3.4	5	1.4	10	1.8	15
Both (P+Y)	2.7	4	5.3	37	4.9	41

Note: MECA = Methods for the Epidemiology of Child and Adolescent Mental Disorders.

$\kappa = .34$ . As expected, agreement concerning not using services was much greater than agreement concerning use. For youths aged 9 through 12 years, when the parent said no school-based services had been received, 92% of the youths agreed. However, when the parent said school-based services had been received, only 30% of youths agreed. For youths aged 13 through 17 years, when the parent indicated that no school-based services had been received, 94% of youths agreed. When parents said school-based services had been received, 56% of youths agreed. When we examined agreement only for youths meeting criteria for a psychiatric disorder, we found only a moderate level of agreement ( $\kappa = .38$ ), with only 49% of the parent reports being confirmed by youths.

Children aged 9 through 11 years were not asked about mental health and substance abuse services provided outside of the school, so assessments of agreement are limited to youths aged 12 through 17. As Table 2 shows, parents or youths identified 12.9% of the youths aged 12 through 17 as having at least one mental health-related service contact outside of school during the year prior to the interview. The patterns of agreement concerning use were similar to those found for school-based services. For youths aged 9 through 12 years, when the parent said no nonschool mental health services had been received, 96% of the youths agreed. However, when the parent said nonschool services had been received, only 31% of youths agreed. For youths aged 13 through 17 years, when the parent indicated that no nonschool services had been received, 98% of youths agreed. When parents said nonschool services had been received, 46% of youths agreed. When only youths meeting criteria for a psychiatric disorder were included in the analyses, agreement between parents and youths was .60 ( $\kappa$ ) compared with .29 ( $\kappa$ ) for youths not meeting criteria for a psychiatric disorder.

The MECA project did not evaluate the test-retest reliability of the questions related to service use, but it was possible to examine agreement between parents and youths concerning reports of psychiatric disorders. As shown in Table 3, agreement between parents and youths concerning the existence of a psychiatric disorder was relatively low ( $\kappa = .16$ ), with the results not varying much with the age of the child (ages 9 through 12  $\kappa = .08$  versus ages 13 through 17  $\kappa = .23$ ). Only 17% of the children aged 9 through 12 years meeting

**TABLE 3**  
Reports by Parents and Youths (Aged 9 through 17) of any  
DISC Diagnosis (with Impairment) in Past Six Months  
(Four MECA Sites Combined)

	Ages 9-12 (n = 692)		Ages 13-17 (n = 841)		All Ages (n = 1,282)	
	%	n	%	n	%	n
Either parent or youth	32.1	190	32.6	225	32.4	415
Parent only	15.7	93	10.1	70	12.7	163
Youth only	10.8	64	15.1	104	13.1	168
Both (P+Y)	5.6	33	7.4	51	6.6	84

Note: DISC = Diagnostic Interview Schedule for Children; MECA = Methods for the Epidemiology of Child and Adolescent Mental Disorders.

diagnostic criteria for at least one DISC diagnosis were identified by both parent and youth as having a psychiatric disorder, and only 23% of the youths aged 13 through 17 with one or more DISC disorders were identified by both parent and youth as having a psychiatric disorder. For children aged 9 through 12 who were using some school-based mental health services, only 16% were identified by both parent and youth. Of children aged 13 through 17 who had a reported use of a school-based service, 33% were identified by both parent and youth, and of children aged 13 through 17 who reported using a non-school-based service, 41% were identified by both parent and youth.

Little information is available from earlier studies about whether or how use of mental health services varies by community. Table 4 indicates that the four sites included in the MECA project differed in the reports of parents concerning the use of any mental health or substance abuse services, and the specific types of services used at each site, although the three mainland sites produced similar reports of overall service use. Those in New York were most likely to have had some mental health-related services (18.1%), while youths in Puerto Rico had the lowest report of service use (7.4%). Sites differed significantly in use of mental health specialists and mental health contacts with general medical providers. Youths at the Connecticut site were three times as likely as those at the New York site to have a mental health-related contact in the general medical sector and 3.6 times as likely as youths in Puerto Rico.

As Table 4 indicates, school-based services and mental health-related contacts with the clergy also showed

**TABLE 4**  
Percentage of Youths Receiving Specific Mental Health-Related Services in Past Year (Parent Report)

	Atlanta (n = 299)		New Haven (n = 314)		New York (n = 360)		Puerto Rico (n = 312)		Total (n = 1,285)		$\chi^2$		
	%	n	%	n	%	n	%	n	%	n	By Site	df	p
Any MH service	16.7	50	17.2	54	18.1	65	7.4	23	14.9	192	18.817	3	.000
MH specialist	7.4	22	8.0	25	11.7	42	4.8	15	8.1	104	10.933	3	.012
Medical	2.3	7	5.7	18	1.9	7	1.6	5	2.9	37	12.394	3	.006
School	8.7	26	11.2	35	9.4	34	2.9	9	8.1	104	16.344	3	.001
Clergy	1.0	3	2.6	8	0.3	1	1.0	3	1.2	15	7.840	3	.049
Social service	1.3	4	1.6	5	2.2	8	1.0	3	1.6	20	1.858	3	.602
Other	1.0	3	0.3	1	1.4	5	0.0	0	0.7	9	5.707	3	.127

significant site variations in the likelihood of use. At all sites, mental health-related contacts were most frequently provided in schools or by mental health specialists. In three of the four communities, the exception being New Haven, mental health specialists were more than twice as likely as nonpsychiatric physicians to have had a mental health-related contact.

Although we did not ask younger children to differentiate among providers of mental health services, it is useful to examine the overall reports of mental health-related contacts based on the combined reports of the parents and youths. In Table 5, reports from parents and youths are combined to provide an overall estimate of the use of mental health services in the four MECA communities. Patterns of service use are very similar to those in Table 4, which are based only on the reports of the parents. In addition to investigating the overall use of services, Table 5 differentiates between services provided in a school setting and

those outside of school, and services provided to youths who met criteria for one of the psychiatric disorders assessed by the DISC and those who did not.

As with the parent reports, we found significant differences in the likelihood of service use in the four MECA communities when we combined reports from the parents and the youths, with the overall rates of use being higher as a result of the inclusion of service contacts reported by youths but not by parents. Overall service use varies little in the three mainland sites, from 22.8% in New York to 23.8% in Atlanta. When we differentiated between the youths with a psychiatric disorder as measured by the DISC (excluding the psychosis screen and phobias) and those not meeting criteria for a disorder, we found that service use differs in the four communities only for those with a psychiatric disorder. At the three mainland sites, between 38.4% and 43.5% of all the children meeting criteria for a psychiatric disorder in the previous 6 months also had

**TABLE 5**  
Percentage of Youths Receiving Mental Health-Related Services in Past Year (Parent or Youth Report):  
DISC Diagnosis Excluding Psychosis Screen and Phobias

	Atlanta (n = 299)		New Haven (n = 314)		New York (n = 360)		Puerto Rico (n = 312)		Total (n = 1,285)		$\chi^2$		
	%	n	%	n	%	n	%	n	%	n	By Site	df	p
Any use	23.8	71	23.3	75	22.8	82	13.5	42	20.9	268	13.742	3	.000
Dx	38.4	43	43.5	50	41.0	41	19.5	17	36.5	414	14.264	3	.003
No Dx	15.0	28	11.6	23	15.8	41	11.1	25	13.4	871	3.247	3	.355
MH nonschool	10.4	31	13.4	42	15.8	57	8.3	24	12.1	155	10.970	3	.012
Dx	18.8	21	24.4	28	31.0	31	11.5	10	21.7	414	11.456	3	.009
No Dx	5.4	10	7.0	14	10.0	26	6.7	15	7.5	69	3.894	3	.273
MH school	16.4	49	16.6	52	15.3	55	8.3	24	14.2	182	11.791	3	.008
Dx	26.8	30	33.9	39	30.0	30	16.1	14	27.3	113	8.424	3	.038
No Dx	10.2	19	6.5	13	9.6	25	5.3	12	7.9	69	4.900	3	.179

Note: DISC = Diagnostic Interview Schedule for Children.

some mental health-related contact in the year prior to the interview.

An important question for clinicians, policy makers, and advocates is whether children with more severe or disabling psychiatric disorders are more likely than other children to receive treatment. Combining the data from the four MECA sites, Table 6 indicates that youths with psychiatric disorders and poor functioning as measured by the CGAS were 6.8 times more likely to have seen a mental health specialist than were youths without a psychiatric disorder and with a higher level of functioning. When we examined the combined reports from parents at all four sites concerning contacts with mental health specialists, we found that having a psychiatric disorder ( $\chi^2 = 10.48$ ,  $df = 1$ ,  $p < .001$ ) and having significant impairment in functioning, measured by a CGAS score of 60 or less ( $\chi^2 = 17.80$ ,  $df = 1$ ,  $p < .001$ ), each had a significant effect on reported use of mental health specialists.

As Table 6 indicates, when we categorized children by diagnostic status and level of functioning, we found significant differences in the rates of service use only for the children with a DISC diagnosis and a higher level of functioning (CGAS = 61 or more). The use of mental health specialists by youths with psychiatric disorders and significant dysfunction were similar in the four communities studied, although the four communities differed in the percentage of children with a diagnosis who received mental health services and the percentage of children with a diagnosis and a CGAS score of 61 or greater.

## DISCUSSION

States and local communities are restructuring their systems for delivering services to children and adolescents without the benefit of data concerning the prevalence of specific psychiatric disorders, the level of dysfunction accompanying these disorders, or knowledge of the use of existing services. Many of the changes in the organization and financing of mental health services are being driven by concerns with the overall cost of health care. These broad efforts to reduce the cost of Medicaid programs or the cost to corporations of health benefits pay only limited attention to issues related to the provision of services to youths with serious emotional or behavioral problems. To ensure that the needs of children with serious emotional disturbances are met, it will be important to monitor the changes in health care policy and the changes in the patterns and outcomes of mental health services that accompany these changes in policy.

The MECA study demonstrates the feasibility of conducting community-based research to examine the use of services by youths meeting criteria for one or more psychiatric disorders and the potential for generating data that can be used for structuring and monitoring systems of mental health services for children. Even with the relatively small samples obtained at each MECA site, we have been able to detect differences in patterns of service use, with important implications for understanding the detection and treatment of mental disorders. Important findings of this

**TABLE 6**  
Percentage of Youths Receiving Mental Health Specialty Services in Past Year Based on DISC Diagnosis or CGAS

	Atlanta		New Haven		New York		Puerto Rico		Total		$\chi^2$	df	$p$
	%	n	%	n	%	n	%	n	%	n			
Any DISC Dx	13.4	112	16.5	115	25.0	100	9.2	87	16.2	414	9.515	3	.023
DISC Dx & CGAS < 61	21.3	47	26.4	53	29.0	38	25.0	8	25.3	146	0.704	3	.872
DISC Dx & CGAS 61+	7.8	64	8.3	60	22.6	62	7.7	87	11.4	264	10.137	3	.017
No DISC Dx	3.7	187	30.0	199	6.5	260	3.1	225	4.2	871	4.929	3	.177
No DISC Dx & CGAS < 61	7.7	13	33.3	6	25.0	8	0.0	7	14.7	34	4.052	3	.256
No DISC Dx & CGAS 61+	3.5	172	1.6	190	6.0	249	3.2	217	3.7	828	6.256	3	.100

Note: DISC = Diagnostic Interview Schedule for Children; CGAS = Children's Global Assessment Scale.

study included the importance of schools in the provision of mental health services and the finding that symptomatology and dysfunction have independent effects on the use of mental health services.

We had expected to find that reports of mental health services were related to the existence of a mental disorder. The finding that impairment also had an independent effect on use of mental health services warrants further investigation. It may be that dysfunction in children and adolescents precipitates the seeking of help regardless of the perceived cause of these problems, and some of this help-seeking is related to emotional distress not related to one of the psychiatric disorders assessed by the DISC. Future studies will need to investigate whether only certain types of impairment are related to use of mental health services and the extent to which the failure to provide mental health services to certain youths, e.g., older youths with conduct disorders, could be influencing these findings.

The MECA project constitutes an important attempt to link assessments of psychopathology with reports of service use. Although the lack of agreement between reports of parents and youths concerning the use of mental health services is similar to that found with reports of psychiatric disorders, this is an area of investigation where additional methodological work is required. In this study, we did not ask younger children the same questions about the use of mental health services as we asked older children. This means that we did not receive reports of service use from these children, although we did receive reports of symptoms from them. Additional research and deliberation will be required to determine the best way to obtain information concerning psychopathology in younger children and their use of mental health services.

For the purposes of this study, service use was defined as a contact with a mental health professional or other service provider related to a mental health or behavioral problem or a problem with alcohol or drugs. Some of these contacts might not have involved treatment or mental health services. Many of the providers and service settings included in the list of potential service sites perform activities in addition to the treatment of mental disorders. For example, pediatricians might refer children rather than provide treatment, and many school-based contacts might reflect testing rather than treatment, or even punishment for "bad" behaviors. In developing estimates of met and unmet

needs, future research should examine the reasons for specific contacts and monitor in greater detail the activities that take place during the "service contact."

This study found that one quarter of the youths had some reported mental health service contact, with 36.5% of those meeting criteria for a psychiatric disorder having a report of a mental health service. In no community did as many as a third of the youths with a psychiatric disorder and significant impairment receive services from a mental health specialist. Future research will need to pay greater attention to monitoring the standards of care provided in different communities and determining whether some patterns of practice are more highly related to positive outcomes for youths than others. Many of the youths with a psychiatric disorder who did not receive services experienced less impairment and/or may have recovered without the use of formal services. Additional attention must be paid to developing an overall estimate of the number of children who are in need of treatment during any specified period of time. At a minimum, it will be important to take severity into account when trying to determine the extent to which there is a need for specific types of mental health service and the overall magnitude of the problem for different communities.

These data also suggest that greater attention needs to be paid to the many professionals, especially social workers, psychologists, and teachers, who play critical roles in the identification and treatment of children with serious emotional disturbances. Schools present an important opportunity for the early detection of psychiatric disorders and the mobilization of resources for the support of youths with serious emotional and behavioral problems. The frequency with which mental health-related contacts are reported in schools suggests that psychiatrists and mental health professionals need to pay greater attention to collaborations with school-based professionals, the training needs of these staff, and the supervision of mental health services provided within schools. Are children reported as having mental health-related contacts actually receiving mental health services or are they simply receiving information about potential referrals? We need to examine the roles played by educational, social service, and juvenile justice agencies in the detection and treatment of youths with serious emotional disturbances and the extent to which the policies and programs in these agencies facilitate

the identification and treatment of children with psychiatric disorders.

A limitation of the MECA study was the differences in time frames used to assess symptoms and service use. Information about psychopathology focused on the 6 months prior to the interview. Seasonal variations related to school assessments necessitated a different time frame, a 1-year interval, for reports of service use. This inconsistency in time frames in the current study may have resulted in some youths being classified as using services while not meeting diagnostic criteria, when both the disorder and service use could have co-occurred during the period 7 to 12 months prior to the interview. Future research needs to pay greater attention to more closely relating the assessments of psychopathology and dysfunction with reports of service use.

The procedures developed for the MECA surveys constitute an important strategy for collecting the type of data that will be necessary if future health and mental health care systems are going to meet the diverse needs of children and adolescents with serious emotional disturbances. Projects such as the MECA project and the ongoing NIMH cooperative agreement studying the use, need, outcomes, and cost of mental health services in child and adolescent populations (UNOCCAP) will be very important as mental health professionals, policy makers, and consumers attempt to monitor changes in the services provided to children that would accompany the health care reform plans currently under consideration. The identification of a large number of children whose mental health contacts occur in schools, social service agencies, and juvenile justice agencies suggests that many of the costs incurred in the provision of mental health services are not included in data obtained only from the formal mental health service system. Efforts monitoring the effects of future health care reforms also will need to monitor potential shifts in the settings where children with serious emotional problems are served to ensure that these children have access to appropriate services.

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*The MECA Program is an epidemiological methodology study performed by four independent research teams in collaboration with staff of the Division of Clinical Research, which was reorganized in 1992 with components now in the Division of Epidemiology and Services Research and the Division of Clinical and Treatment Research, of the NIMH, Rockville, MD. The NIMH Principal Collaborators are Darrel A. Regier, M.D., M.P.H., Ben Z. Locke, M.S.P.H., Peter*

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