

Mental Health Need and Access to Mental Health Services by Youths Involved With Child Welfare: A National Survey

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ABSTRACT

Objective: This study assessed the relationship between the need for and use of mental health services among a nationally representative sample of children who were investigated by child welfare agencies after reported maltreatment. **Method:** Data were collected at study entry into the National Survey of Child and Adolescent Well-Being and were weighted to provide population estimates. **Results:** Nearly half (47.9%) of the youths aged 2 to 14 years ($N = 3,803$) with completed child welfare investigations had clinically significant emotional or behavioral problems. Youths with mental health need (defined by a clinical range score on the Child Behavior Checklist) were much more likely to receive mental health services than lower scoring youth; still, only one fourth of such youths received any specialty mental health care during the previous 12 months. Clinical need was related to receipt of mental health care across all age groups (odds ratio = 2.7–3.5). In addition, for young children (2–5 years), sexual abuse (versus neglect) increased access to mental health services. For latency-age youths, African-American race and living at home significantly reduced the likelihood of care. Adolescents living at home were also less likely to receive services, whereas having a parent with severe mental illness increased (odds ratio = 2.4) the likelihood of service use. **Conclusions:** Routine screening for mental health need and increasing access to mental health professionals for further evaluation and treatment should be a priority for children early in their contact with the child welfare system. *J. Am. Acad. Child Adolesc. Psychiatry*, 2004;43(8):960–970. **Key Words:** mental health services, child welfare, foster care, National Survey of Child and Adolescent Well-Being.

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The lives of youths in families who are the subjects of reports of maltreatment investigated by child welfare are characterized by problems such as abuse, neglect, poverty, domestic violence, and parental substance abuse—problems that are recognized risk factors for the development of emotional and behavioral problems (Attala et al., 1995; Brooks-Gunn and Duncan, 1997; Cicchetti and Lynch, 1993; Conger et al., 1997; Davis, 1988; Ireland and Widom, 1994; Sternberg et al., 1993). Among the multiple apparent consequences, childhood abuse and household dysfunction also are closely linked to the leading causes of death in adulthood, including ischemic heart disease, cancer, chronic lung disease, skeletal fractures, and liver disease (Felitti et al., 1998). Previous studies suggest that as many as 80% of youths involved with child welfare agencies have emotional or behavioral disorders, developmental delays, or other indications of needing mental health intervention (see Farmer et al., 2001; Landsverk et al., 2002; Taussig, 2002). In contrast, diagnosed mental disorders occur among about one fifth of youths in the general population (Costello et al., 1996; U.S. DHHS, 1999).

Research on the need for and use of mental health services by children served by child welfare agencies has focused primarily on youths placed in nonrelative foster care; less is known about the great majority of youths whom child welfare encounters who remain in their homes or live with relatives. One study (Blumberg et al., 1996) reported that the bias against mental health service use was greatest for youths who remained with their families. Preliminary evidence, however, suggests that youths who have contact with child welfare agencies but remain in their homes experience lifetime rates of serious emotional disturbance similar to youths who have been in foster care (Farmer et al., 2001; Kolko et al., 1999). Other evidence also indicates that, like their counterparts in nonrelative foster care, youths placed with relatives experience emotional and behavioral problems at a higher rate (30%–50%) than youths in the general population (Landsverk et al., 2002; McIntyre and Keesler, 1986; Moffatt et al., 1985; Pilowsky, 1995).

Given the substantial need for mental health treatment suggested by studies of youths served by the child welfare system, it is likely that these young people will use publicly funded mental health services at a high rate. Access to Medicaid-reimbursed services may

be facilitated by entry into foster care. A study in California, for example, found that only one in six children who received such services while in foster care had previously used mental health services (Blumberg et al., 1996). Others have found that youths in foster care use Medicaid-reimbursed mental health services at a rate 8 to 15 times greater than other eligible youths (dosReis et al., 2001; Halfon et al., 1995; Harman et al., 2000). Lifetime (i.e., childhood through adolescence) use of mental health services, publicly funded or not, is higher among youths who have had contact with child welfare than among impoverished youths with similar levels of mental health services need (Farmer et al., 2001). Rates of child mental health service use for youths in the child welfare system span a wide range of estimates, from a low of 19% (Kolko et al., 2003) to much higher rates: 38% (Greenwalt et al., 1998), 65% (Oates et al., 1994), and 94% (Horowitz et al., 1997).

Based on studies of child welfare samples using a standardized measure of clinical need, particularly the Child Behavior Checklist (CBCL), youths with the most severe problems appear to be the most likely to receive treatment (Garland et al., 1996). In addition to clinical severity, use of mental health services also appears to be influenced by child welfare placement type, race/ethnicity, and type of maltreatment. Youths in nonrelative foster care may be more likely to receive mental health services (Leslie et al., 2000) than youths placed with relatives. The likelihood of receipt of any mental health services is lower for African-American and Hispanic youths in some studies (Garland and Besinger, 1997; Garland et al., 2003; Kolko et al., 1999) and higher in one (Zima et al., 2000). However, once African-American youths in foster care get into the mental health service system, they receive about the same number of visits as white youths in foster care (Leslie et al., 2000). Youths placed in foster care due to neglect or caregiver absence may be less likely than other maltreated youths to receive mental health services (Garland et al., 1996; Leslie et al., 2000). Conversely, sexually abused youths are more likely to receive services, irrespective of their level of mental health need (Garland et al., 1996; U.S. DHHS, 2001). In contrast, a recent large study of children with reported sexual abuse ($N = 759$) referred to comprehensive community mental health services reported significantly higher odds for most clinical problems

than youths without sexual abuse histories (Walrath et al., 2003). Sexually abused youths may also be more likely than physically abused youths to receive direct treatment (i.e., therapy for the children), whereas services for physically abused youths are more likely to target parents (Kolko et al., 1999).

The aim of the current study was to identify factors related to the need for and use of mental health services among youths early in an episode with the child welfare system. Data are from the National Survey of Child and Adolescent Well-Being (NSCAW), a nationally representative sample of youths who were subjects of reports of maltreatment investigated by child welfare agencies (NSCAW Research Group, 2002). Because of the national scope and the inclusion of a large representative sample (including the majority of youths who remained in their homes), this study provides a broader perspective on the clinical need and service use patterns of children entering the child welfare system than has previously been available and avoids most of the methodological issues in such previous research (see Rosenfeld et al., 1997). More specifically, this article addresses (1) the clinical need and related characteristics, (2) the correlates of mental health service utilization, and (3) the rates and types of mental health service use.

METHOD

NSCAW consists of two cohorts of children randomly selected (between October 1999 and December 2000) to take part in this survey, along with their associated caregivers and child welfare workers. The main cohort examined in this report consists of 5,504 youths sampled from investigations and/or assessments completed during the sampling period. Initial interviews were conducted within about 6 months of completed investigations; thus, the 1-year time frame for reporting mental health service use includes some months before and some after completion of the agency investigation. The sample used for the current analysis was constrained to children aged 2 through 14 years ($N = 3,803$) to correspond to age-related measures of mental health need.

Survey Design

The NSCAW sample design involves a stratified two-stage sample with the primary sampling units being county child welfare agencies. The secondary sampling units were selected from lists of closed investigations or assessments from the sampled agencies. The sample was subdivided into nine strata—one each for eight key states and a ninth stratum for 28 other states. The nine strata combined to produce national estimates. Sampling within primary sampling units was stratified by age (infants versus all others), sexual abuse (versus all other types of maltreatment), and receipt of child welfare services (NSCAW Research Group, 2002).

Analysis Weights. Analysis weights were constructed in stages corresponding to the stages of the sample design. Selection of a youth was the product of two probabilities: selection of the primary sampling unit and selection of a youth, given the youth's county of residence. Weights were further adjusted to account for small deviations from the original plan, which occurred during sampling, and for nonresponse. Additional information about the NSCAW sample design and weight derivation is published elsewhere (Dowd et al., 2001; NSCAW Research Group, 2002).

Measures

Need for Mental Health Services. In the absence of a research measure of psychiatric diagnosis, the Child Behavior Checklist (CBCL) and its companion instruments, the Youth Self-Report and the Teacher's Report Form, were used to estimate emotional and behavioral problems for youths and need for mental health treatment (Achenbach, 1991). For youths aged 2 to 5 years, CBCL scores are based on the report of the youth's caregiver, for youths aged 6 to 10 years, caregiver or teacher, and for youths aged 11 years and older, the combination of caregiver, teacher, and the Youth Self-Report. The reliability and validity of these measures are well established (Achenbach, 1991) and have been used previously in research on child welfare populations (e.g., Armsden et al., 2000; Kolko et al., 2003; Simms, 1989). Youths were considered to be in need of mental health services if they scored in the clinical range (64 or above) on the internalizing, externalizing, or total problem scale of the CBCL. Because reports may vary by informant (Yeh and Weisz, 2001), meeting clinical range criteria by any of the above informants was used to increase sensitivity to need. In contrast, the more conservative clinical range cut point was used rather than the borderline range, making it likely that some youths with clinically relevant problems who scored below this cut point were not identified. The CBCL provides a reasonable proxy for clinical need for any diagnosis with a sensitivity of 0.60 and specificity of 0.73 against the Diagnostic Interview for Children, although the correspondence between the CBCL and specific research diagnoses is not strong (Jensen et al., 1993).

Mental Health Service Use. Data on the use of mental health services in the 12 months preceding the survey interview are based on an adapted version of the Child and Adolescent Services Assessment (Ascher et al., 1996; Burns et al., 1994; Farmer et al., 1994). This instrument gathers information from caregivers and youths about an array of child-focused services for emotional or behavioral problems including outpatient and residential care. Outpatient services included (1) clinic-based specialty mental health services (e.g., community mental health centers); private practice professionals including psychiatrists, psychologists, social workers, and psychiatric nurses and drug or alcohol clinics; (2) in-home mental health services (e.g., family preservation); and (3) therapeutic nursery/day treatment. Residential services included (1) hospitalization in a psychiatric hospital or psychiatric unit of a general hospital, (2) hospitalization in a medical inpatient unit for emotional or behavioral problems, and (3) inpatient drug or alcohol detoxification. Group home and residential treatment center services were not included as a placement type because group homes in the child welfare world are not necessarily designated as treatment settings and because data on both placement types were collected as a combined variable; thus, separate estimates could not be calculated.

Types of Alleged Maltreatment. Child welfare workers identified the types of maltreatment alleged in the most recent report using a modified Maltreatment Classification Scale (Manly et al., 1994).

For these analyses, categories were collapsed into four commonly used groups: physical, sexual, and emotional abuse and neglect.

Types of Placement. Youths were categorized as being in one of four possible living situations at the time of the investigation: (1) with their permanent primary caregiver, typically a parent; (2) non-relative foster care; (3) kinship foster care; or (4) group home/residential treatment center. Although youths might have been in more than one type of placement between the beginning of the investigation and the time that they took part in the survey, the residence at the time of the survey was used for these analyses.

Child Welfare Worker Risk Assessment. Child welfare workers identified family risk factors based on the information/knowledge available to them at the time of the case investigation but not based on a standardized measure. Risk factors included parent drug or alcohol abuse, parent severe mental illness, parent intellectual/cognitive impairment, parent physical impairment, impaired parenting skills (e.g., inappropriate or excessive discipline), monetary problems, and domestic violence.

Data Analysis

The Pearson χ^2 statistic was used for bivariate analyses of categorical data. To account for the complex survey design, χ^2 statistics were turned into an F statistic with noninteger degrees of freedom using a second-order Rao and Scott correction (StataCorp, 1999). Continuous data were tested with t tests after adjusting for survey design. To control for multiple comparisons, α was established at $p < .01$. Service use was modeled using logistic regression analyses of variables associated with service use. Candidate variables for modeling included all variables associated with service use at $p < .10$ as determined by bivariate analyses. Demographic variables were included in all models. Because of multiple informants, slight variation in measures of clinical need, and differences in the nature of available services, separate models were estimated by age group.

Missing Data

Risk Assessment. Data on parental risk factors were missing for 10% to 15% of the items. Rates of missing data, however, did not differ significantly based on CBCL score, gender, race/ethnicity, age, or mental health service use but were significantly greater among youths in out-of-home placements ($F_{1,92} = 28.5, p < .01$). Results were unaffected by inclusion of subjects with missing risk assessment data, whether coded positive or negative.

Type of Alleged Maltreatment. Data on types of alleged maltreatment were missing for 6.1% of youths. Rates of missing alleged maltreatment data did not differ significantly by CBCL score, placement, age, race/ethnicity, or use of mental health services but did differ between males and females; data were missing for 6.9% of females compared with 2.9% of males.

RESULTS

Sample Demographics

Thirty percent of the sample included in these analyses fell into the preschool group (2–5 years), 42% in

the school-age group (6–10 years), and 28% in the adolescent group (11–14 years). Approximately half were white (47.6%), almost one third were African American (28%), and the remainder were Hispanic (17.5%) or other racial/ethnic groups (7%). Males and females were equally represented. The majority of youths (89.7%) were living at home with their permanent primary caregiver; the remainder were split among nonrelative foster care and kin care, with a very small percentage (1.3%) in a group home (Table 1).

The most prevalent reason for youths coming to the attention of child welfare was alleged neglect (63.6%). A substantial proportion of youths were also subjects of reports of physical abuse (36.2%); alleged sexual abuse (13.3%) and emotional abuse (12.0%) occurred at much lower rates. Some variation in the type of alleged maltreatment was observed across age groups (not shown in tables), i.e., lower rates of physical abuse among 2- to 5-year-olds (30%) than the other two age groups, and a higher rate of emotional abuse among school-age (15%) and adolescent youths (12%) than preschoolers. Previous reports of maltreatment were characteristic of just more than half of the sample.

Rates of family risk factors ranged from 10.0% to 32.5%, with impaired parenting being the most common. Nearly two thirds (61%) of youths were subject to at least one of these risk factors.

Mental Health Need

Almost half (47.9%) of all youths scored in the clinical range on the CBCL. In the bivariate analysis, these youths were distinguished by (1) age (e.g., higher need among adolescents [65.7%] and lower [32.3%] among preschoolers), (2) placement in nonrelative foster care (63.1%) or a group home (88.6%), (3) lower prevalence of need among youths reported for neglect (44.5%), and (4) higher for child welfare worker reports of impaired parenting skills (57.3%).

Correlates of Mental Health Service Use

A key factor distinguishing youths who did or did not receive mental health services was the level of clinical need (not shown). Mean CBCL scores were significantly higher for service users, i.e., total problem scale (mean 66.8, SE = 0.68 versus mean 57.5, SE = 0.56), internalizing scale (mean 63.5, SE = 79 versus mean 55.5, SE = 45), and externalizing scale (mean 66.4,

TABLE 1

Sample Characteristics, Clinical Range Designation, and Mental Health Service Use of Youths Aged 2–14 Years Who Were Subjects of Investigated Reports of Maltreatment

Child and Family Characteristics	Total Sample (<i>N</i> = 3,803; Weighted % or Mean [SE])	Clinical Range CBCL		Mental Health Service Use	
		Yes (<i>n</i> = 1,902; Weighted % or Mean [SE])	No (<i>n</i> = 1,901; Weighted % or Mean [SE])	Yes (<i>n</i> = 859; Weighted % or Mean [SE])	No (<i>n</i> = 2,939; Weighted % or Mean [SE])
Total	100.0	47.9	52.1	15.8	84.2
Demographic characteristics					
Age group (yr)					
2–5	29.6	32.3	67.7**	6.6	93.4**
6–10	41.9	46.8	53.2	15.5	84.5
11–14	28.6	65.7	34.3**	25.9	74.2**
Race/ethnicity					
African American	28.0	45.2	54.8	11.9	88.1 ^a
White	47.6	50.1	49.9	18.6	81.4 ^a
Hispanic	17.5	47.4	52.6	15.0	85.0
Other	7.0	45.6	54.4	14.7	85.3
Gender					
Female	50.3	48.4	51.6	15.7	84.4
Male	49.7	47.3	52.7	15.9	84.1
Current placement					
Home	89.7	47.0	53.0 ^a	13.9	86.0**
Nonrelative foster care	4.0	63.1	36.9**	28.4	71.6*
Kinship foster care	4.5	39.3	60.7	26.1	73.8*
Group home/residential treatment center	1.3	88.6	11.5**	59.9	40.1*
Other	0.6	49.4	50.7	44.3	55.6
Maltreatment type (<i>N</i> = 3,517)					
Physical abuse	36.2	52.2	47.8 ^a	19.4	80.6 ^a
Sexual abuse	55.1	44.9	18.8	81.2	
Emotional abuse	12.0	44.4	55.6	24.0	76.0 ^a
Neglect	63.6	44.5	55.5*	13.3	86.7*
Mean maltreatment types (SE)	1.2 (0.2)	1.2 (.02)	1.2 (.02)	1.2 (.02)	1.3 (.05)
Previous report of maltreatment	53.0	55.2	50.5	16.5	83.5
Parental risk factors					
Substance abuse (<i>N</i> = 3,243)	10.7	51.7	48.3	16.1	83.9
Severe mental illness (<i>N</i> = 3,316)	14.6	55.9	44.1 ^a	25.7	74.3**
Cognitive impairment (<i>N</i> = 3,373)	6.4	61.5	38.5 ^a	20.6	79.4
Physical impairment (<i>N</i> = 3,406)	5.8	59.0	41.0	21.9	78.1 ^a
Impaired parenting skills (<i>N</i> = 3,322)	32.5	57.3	42.8**	19.9	80.1**
Monetary problems (<i>N</i> = 3,394)	23.1	48.0	52.0	18.7	81.3 ^a
Domestic violence (<i>N</i> = 3,338)	12.5	40.1	59.9	18.9	81.1
Any risk factor	60.7	50.9	49.1	17.7	82.3 ^a
Mean risk factors (SE)	1.0 (.05)	1.1 (.07)	1.0 (.06)	1.4 (.11)	1.0 (.05)**

Note: CBCL = Child Behavior Checklist.

Distributions may fail to add to 100% due to weighting; ^atrend (.01 < *p* < .10); **p* ≥ .01; ***p* ≤ .001.

SE = 73 versus mean 57.6, SE = 55), indicating high clinical need for this group. Nonetheless, the means for nonusing youths were still indicative of relatively problematic youths across the scales. Otherwise, with the exceptions that youths who received mental health care

were significantly more likely to have a parent identified with severe mental illness and to have been exposed to more parental risk factors, the factors differentiating youths who received mental health services largely reflect the factors that distinguished youths with clinical

need versus youths not in the clinical range, i.e., older age, out-of-home placement, type of maltreatment (other than neglect), and exposure to impaired parenting skills.

Factors associated with service use in bivariate analyses were modeled in separate logistic models for each of the three age groups (Table 2). Controlling for other factors (e.g., demographics, placement, maltreatment type, and parental risk factors), youths scoring in the clinical range on the CBCL were 2.5 to 3.6 times more likely to receive mental health services. Sexually abused preschool children were approximately four times more likely (odds ratio [OR] 3.7) to receive mental health services than children of similar age who had experienced neglect. African-American children of school age were less likely to receive mental health services than white youths in this age group. School-age children and adolescents who remained in their homes (versus youths placed out of home) were significantly less likely to have received services, even when clinical need was controlled for (ages 6–10: OR 0.4; ages 11–14: OR 0.4). For adolescents, child welfare worker recognition

of a parent with severe mental illness also increased the likelihood that youths had received mental health services (OR 2.4).

Rates and Types of Mental Health Service Use

In the sample of all youths who were subjects of child welfare investigations, nearly one half exhibited clinical need. Of the full sample, only 15.8% of received any mental health specialty services in the 12 months preceding the NSCAW survey (Fig. 1). Among youths with strong evidence of clinical need, only one fourth (11.7%) had received any care. In contrast, a very small proportion (4.1%) of youths who were not in the clinical range received any mental health services; they may have been close to the cutoff or exhibited a few severe problem behaviors. The remaining 84% received no mental health services.

As observed in Figure 2, psychiatric hospitalization was the least common service used (3.1%); outpatient services constituted the modal type of care (15.1%), and most hospitalized youths used outpatient care as well. Most of the outpatient care occurred in clinics or

TABLE 2

Multivariable Logistic Regression Models of Mental Health Service Use in the Past Year by Youths Aged 2–14 Years Who Were Subjects of Investigated Reports of Maltreatment (N = 3,211)

Selected Variables	2–5 Years Old (N = 970)		6–10 Years Old (N = 1,274)		11–14 Years Old (N = 971)	
	OR	95% CI	OR	95% CI	OR	95% CI
Demographic characteristics						
Child age (continuous)	1.3	0.9–1.7	1.0	0.9–1.2	0.9	0.8–1.2
African American (vs. white)	0.5	0.2–1.2	0.4*	0.2–0.8	0.7	0.3–1.4
Hispanic (vs. white)	0.8	0.3–2.3	0.6	0.2–1.8	1.4	0.7–2.9
Other (vs. white)	3.0	0.8–10.9	0.3	0.1–0.8	1.0	0.2–4.1
Male (vs. female)	1.9	0.9–4.3	0.8	0.5–1.4	1.2	0.7–2.1
Clinical range CBCL						
(≥64 vs. <64)	3.5*	1.3–9.5	2.9**	1.6–5.2	2.7*	1.5–5.1
Placement						
Home (vs. out of home)	0.6	0.3–1.5	0.4**	0.2–0.6	0.4*	0.2–0.7
Maltreatment type						
Physical abuse (vs. neglect)	0.8	0.3–2.0	1.6	0.9–2.6	1.7	0.8–3.5
Sexual abuse (vs. neglect)	3.7*	1.6–8.6	0.8	0.4–1.8	1.4	0.7–3.1
Emotional abuse (vs. neglect)	3.2	1.1–9.4	1.7	0.8–3.5	1.2	0.5–3.0
Parental Risk Factors						
Parent severe mental illness	2.0	0.5–8.6	1.6	0.8–3.0	2.4*	1.3–4.3
Impaired parenting skills	0.6	0.3–1.5	0.8	0.4–1.5	1.3	0.6–2.6
Parent physical impairment	2.8	0.9–8.5	0.7	0.3–1.9	0.8	0.4–1.9
Monetary problems	1.2	0.5–2.8	1.4	0.7–2.9	1.3	0.7–2.2

Note: OR = odds ratio; CI = confidence interval.

*p ≤ .01; **p ≤ .001.

		CBCL Score in Clinical Range	
		Yes (47.9%)	No (52.1%)
Mental Health Service Use	Yes (15.8%)	11.7%	4.1%
	No (84.2%)	36.2%	48.0%

Fig. 1 Use of mental health services in the past year by clinical range Child Behavior Checklist score.

office-based settings; still, approximately one fourth of youths who used outpatient care received those services at home. Across all service types, rates of service use were significantly higher among youths with greater clinical need. For example, in-home counseling was provided to youths in the clinical range at a rate eight times higher than to youths in the nonclinical range. Similarly, the rate of hospitalization was five times higher in the clinical need group (5.1% versus 1.0%), which by national standards (i.e., between two and three tenths of a percent [Ringel and Sturm, 2001]) is very high for both groups.

DISCUSSION

The NSCAW has provided the first national estimates of mental health need and service use in the child welfare population. These NSCAW findings about clinical need and the gap between need and mental health service use can be extrapolated to national reporting data on maltreatment. In 2000, child welfare agencies across the country investigated allegations of maltreatment involving an estimated 1.7 million children (U.S. DHHS, 2002). Applying the population estimates obtained in this survey, approximately 814,300 of these children had a substantial need for

mental health services, but only about 192,175 were receiving these critical services. This leaves a minimum of 622,125 children with unmet mental health needs.

In this NSCAW analysis, our estimates indicated that easily one half of the youths who come to the attention of the child welfare system have manifest emotional and/or behavioral problems. This estimate might have been even higher if it also had included all children who had a clinical score on a CBCL narrow band scale. In contrast to the wide range of estimates (25%–80%) previously reported for smaller samples and variation in the criterion for need (see Landsverk et al., 2002), this estimate may also provide a reliable benchmark for the field. When need is examined by specific child or parent characteristics, variation is observed ranging from 32.3% of very young children to 88.6% of youths in residential care—potentially also offering some explanation for the variation in rates in previous studies.

By and large, the major findings presented above are consistent with the existing literature on mental health need and mental health service use by maltreated youths (cited in the introductory text). That this national study would generally confirm previous research is reassuring. This does, however, pose a question of what can be learned from the data presented. A major

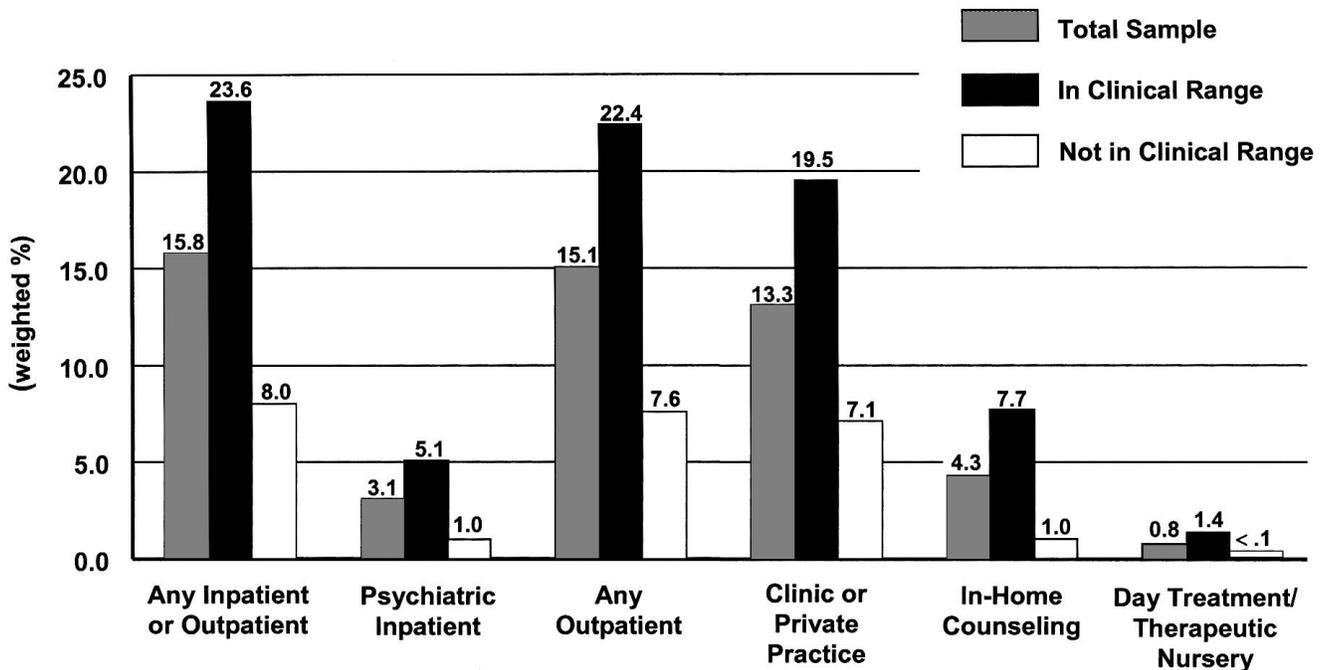


Fig. 2 Type of mental health services used in the previous year by youths aged 2-14 years who were subjects of reports of maltreatment.

contribution of these data is documentation of the magnitude of the problem, i.e., the failure of human service sectors in the United States to obtain the services needed by these very high risk youths. These data also highlight the largest sources of the gaps between need and service use. First among these gaps is the low level of service use for the 90% of youths who reside at home, especially when this was not the first report of maltreatment for more than half the population. Will their next appearance in the child welfare system result in a placement? Second, a special concern is raised for neglected youths who represent more than three fifths of the population but a meager 13% of those seen in the mental health system. Third, the finding that very young children are so unlikely to receive care (i.e., one third in need and 7% received services) identifies another target group for increased attention.

Such findings beg for clear identification of the barriers to receiving mental health care, a complex and multidetermined problem but most likely a function of inadequate resources, including a complex maze even to obtain funding for services (see Leslie et al., 2003), and that most child welfare resources are expended on out-of-home placements (Barth et al., 1994). Alternatively, overworked child welfare employees have little

or no time to assess need and make referrals, especially in the investigative phase of involvement with child welfare when the priority is child protection. Whether these workers even perceive their role as identifying mental health problems or, if so, whether this goes beyond suggesting voluntary services when maltreatment is not substantiated is not known. Also, the failure to provide child welfare staff with sufficient mental health training to develop adequate case identification skills is a likely contributing factor (Hurlburt et al., unpublished, 2004). Addressing the preceding array of issues may contribute to increased use of mental health services for youths who may not have to move deeper into the child welfare system for placement.

Looking toward the mental health system, questions about its receptivity and ability to treat these youths represents another potential barrier. Several recent studies of maltreated youths have demonstrated that little benefit is derived from usual community treatment (Kolko et al., 2003). The extent to which child mental health professionals are prepared to provide evidence-based interventions for maltreatment is virtually unknown, although efforts by the National Child Traumatic Stress Network (www.nctsn.org), supported by the Substance Abuse and Mental Health

Services Administration, may begin to close the gap in clinicians' knowledge and skills and begin to have an impact on the kind of care provided. A shortage of well-trained mental health professionals, especially child and adolescent psychiatrists, compound the problem of access to diagnostic assessment, medication evaluation, and multidisciplinary team coordination.

A further systemic barrier to the receipt of appropriate and effective services by these youths is not exclusively an issue of child-focused treatment. The data suggest multiple types of clinical needs that require a range of approaches, not child treatment alone. Parental substance abuse and mental illness suggest intervention in the adult mental health system. Effective parenting skills may be increased with parent-focused interventions provided through the child welfare system (Brunk et al., 1987; Chaffin et al., 2004). For youths with severe disruptive behavior disorders, parent-focused interventions in the child mental health system may be more beneficial than child therapy (see Burns et al., 1999). These examples point to a need for multisystem interventions and coordination of services by child welfare—a further demand on time and expertise—as well as cooperation between the child and adult mental health service systems.

Limitations

Study limitations are tied to measurement issues. Data used in this study were obtained from multiple informants with variable knowledge about a child's history, including whether the child had received mental health services. For approximately 11%, the informant was not the child's parent but a foster parent or, in a small percentage, staff in a group home. For the small percentage of youths who were out of home, underreporting may have occurred because the respondent may not have had contact with or access to information about the child for a full year. Second, the reliability and validity of child welfare worker reports of family risk factors used in these analyses have not been established, and the correspondence between measures of parent self-report (e.g., addiction, parenting style) and child welfare worker assessment have not been examined. Third, the inclusion of a measure of functional status might have been useful to further confirm clinical need. This was not done here because of major variation in concepts in the measurement approaches

used for different age groups. Fourth, the extent to which child welfare, versus other human service sectors, acts as the gateway (or referral source) into mental health services was not examined here but will be explored in future waves of NSCAW. Fifth, the use of parents to report about their child's behavior could contribute to underreporting. For several reasons, this is not likely to be true in the extant study because (1) the child welfare investigation was closed and the decision made about the child's outcome determined before the study was conducted, (2) confidentiality of data was ensured, and (3) no difference between abusive versus nonabusive mothers' reports of child behavioral problems was found in a recent study (Baumann and Kolko, 2002).

Clinical Implications

This study found a substantial rate of need for mental health treatment among youths who were the subjects of investigations of maltreatment. Despite an estimate that one half of the population had clinically significant emotional or behavioral problems, only one fourth of this group (or one sixth of the study population older than age 2) received any mental health care during the year before the study interview. The gap between need for and receipt of services is significant. Although this gap parallels a similar proportion of unmet need (60%–80%) for the general population of U.S. children (Ringel and Sturm, 2001), the magnitude is much greater due to an estimated prevalence that is 2.5 times greater in the child welfare population.

The multiple insults of maltreatment, family risk factors, frequent placement changes for many youths, and severe emotional and behavioral problems underscore a critical need for clinical attention to this special population. Although the finding that clinical need drives mental health service use (i.e., youths who receive care are those who truly need it), the great majority of youths with documented need receive no care and thus constitute a truly missed opportunity. The data presented underscore the necessity to implement fully the existing policies about screening, evaluation, and referral. Assessment of mental health need and access to mental health professionals for evaluation and treatment should be a priority for youths early in their exposure to the child welfare system; universal screening is clearly indicated (see American Acad-

emy of Child and Adolescent Psychiatry and Child Welfare League of America, 2002; American Academy of Pediatrics, 2002; National Academy of Sciences, 1993). Beyond increasing access to services, the provision of high-quality mental health treatment, and preferably evidence-based care, is warranted to prevent the poor outcomes documented historically for these youths.

Guidelines prepared for the U.S. Department of Justice on the treatment of physically and sexually abused (but not neglected) youths actually delineate evidence-based psychosocial interventions (Saunders et al., 2003). Although evidence of treating child neglect is not as well developed in controlled trials, it is emerging, and there is general agreement on principles and strategies (Chaffin et al., 2004; DePanfilis, 1999). Disseminating interventions with a strong evidence base represents a key leadership agenda for the child mental health community for both initial training of clinicians and continuing medical education for experienced clinicians.

At an organizational level, strong linkages between child welfare and mental health have been encouraged historically (Knitzer and Yelton, 1990) to facilitate identification, evaluation, and treatment. Barriers to collaborative relationships between child welfare and mental health systems require policy and organizational solutions and understanding about how to bring these two types of organizations and cultures together. Active involvement and leadership by child clinicians in the public sector are a special interest, especially because 20% of youths seeking care from public mental health settings present with abuse or neglect (U.S. DHHS, 1997). System-level linkages require quality review to ensure appropriate referrals, application of evidence-based clinical care, and retraining of mental health specialists (e.g., Cohen and Mannarino, 1998; Deblinger et al., 1996; Kolko, 1996; Kolko and Swenson, 2002; Putnam, 2003; Saunders et al., 2003). Integrated models of care (e.g., locating mental health professionals in child welfare agencies or multiservice child agencies) could influence access to treatment.

In conclusion, the need for serious attention to the mental health needs of these youths is apparent and the potential to intervene effectively is within reach. This can become a reality when a true partnership is established between the child mental health and child welfare service systems.

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