

Child Adolesc Psychiatric Clin N Am 13 (2004) 905–921 CHILD AND
ADOLESCENT
PSYCHIATRIC CLINICS
OF NORTH AMERICA

# Engaging families in child mental health services

Mary M. McKay, PhD<sup>a,\*</sup>, William M. Bannon, Jr, MSW<sup>b</sup>

<sup>a</sup>Departments of Psychiatry and Community Medicine, Mount Sinai School of Medicine, 1425 Madison Avenue, New York, NY 10029, USA <sup>b</sup>Columbia University School of Social Work, 622 West 113th Street, New York, NY 10025, USA

The last decade has brought important advances in the area of children's mental health, including a concerted focus on building a scientific base for understanding the mental health difficulties that our most vulnerable members of society experience and examining the impact of services that potentially reduce child mental health needs [1,2]. Serious concern remains, however, as to whether the current child mental health service delivery system can identify and reach youth in need of care. The US Surgeon General identified meeting the mental health needs of youth by ensuring the receipt of appropriate and relevant mental health care as a national priority [2,3].

These calls to attend to children's mental health needs are not new. In the early 1980s, Knitzer [4,5] severely criticized the child mental health service delivery system as failing to respond to youths in serious need of mental health care. Two decades later, rates of child mental health difficulties remain at alarming levels, with an estimated 17% to 26% of youths in need of mental health care across the United States [6-9]. Within low-income, urban communities, rates of child mental health care need have been found to be even higher, with as many as 40% of youths evidencing signs of mental health difficulties [10].

Numerous recent reports and research studies highlight the fact that most children with mental health difficulties do not receive any type of mental health care [2,3,8,11,12]. For example, a report by the National Institute of Mental Health [13] concluded that approximately 75% of children with mental health needs do not have any contact with the child mental health service system. This disparity between need and use of services was found to be highest for minority youth [13,14]. Unfortunately, these rates are identical to those reported in the

E-mail address: mary.mckay@mssm.edu (M.M. McKay).

This work is supported by grants from the National Institute of Mental Health (K02 MH01796 & T32 M#14623).

<sup>\*</sup> Corresponding author.

mid-1980s by the Office of Technology Assessment [15], which indicates that the level of need for services remains unchanged despite advances in developing evidence-based assessments, treatments, and services for these children. There is a significant need to understand and enhance the ability of the child mental health care system to reach out effectively to youth and their families and engage them in acceptable and effective child mental health care.

Addressing the mental health needs of minority youth who live in urban areas has emerged as a most critical issue given the substantial evidence that these youth are most deeply affected by the stressors that exist within inner-city communities, notably poverty, community violence, inadequate child serving resources, undersupported schools, substance abuse, and multiple health epidemics [16–20]. This article pays specific attention to issues related to engaging urban youth of color and their families in services and provides an overview of the larger body of research on engagement of youth and their families in mental health care.

## Defining child mental health service engagement

Multiple conceptualizations of the process of engagement of youth and families in mental health care have been offered and tested. For example, in a series of articles, engagement has been defined as a process that begins with a child being identified as experiencing mental health difficulties and ending with a child receiving mental health care [21–23]. More specifically, engagement in care is described as beginning with the recognition of a child mental health problem by parents, teachers, or other adults within a child's context. Next, there is a process of addressing the unmet need by connecting a youth and the family with a mental health resource, generally via a referral for care. The final phase of engagement consists of a child being brought to a child mental health center or being seen by a school-based mental health care provider.

Within the literature, engagement in child mental health services also has been divided into two specific steps: initial attendance and ongoing engagement [24]. Each step is considered related to the other, but each one also emerges as a distinct construct being independently related to characteristics of the child, the family, and the service system. Rates of service engagement also differ at each of the two steps and warrant specific consideration. For example, studies that focused on attendance at initial appointments for care within an urban child mental health care center found that rates of failure to attend an initial intake appointment can range from 62% [25] to 48% [26] of youth accepted for an evaluation. In relation to ongoing urban service engagement, estimates of average length of care can be as low as four sessions [27] or rates of as few as 9% of youth and their families remaining in care after a 3-month period.

Researchers have suggested that a more precise definition of service engagement may contribute to more reliable research findings and generalizability. Kadzin et al [28–30] noted that grouping children and families who discontinue services into one category (ie, dropouts) may contribute to inconsistent and biased

findings. The authors noted distinct phases of ongoing engagement and observed that children who exit treatment do so at diverse points, such as while waiting for treatment, after one or two treatment sessions, or later in treatment. It was hypothesized in a study conducted by this team involving youth with disruptive behavioral difficulties at the Yale Child Study Center that the characteristics of children and families who drop out of services vary in relation to the point in time at which they exited services [29]. Subsequent findings supported this hypothesis.

More specifically, the study sample was divided into three groups: early dropouts (attended  $\leq 6$  weeks of treatment), late dropouts (attended 7–14 weeks of treatment), and individuals who completed therapy (approximately 7–8 months). Children and families who dropped out early in the treatment process averaged 3.8 sessions, whereas later dropouts averaged 10.8 sessions of treatment. Analyses indicated that child, parent, and family characteristics differed significantly between the overall group of families who terminated treatment prematurely and completed treatment. Most of the domains and measures that predicted early termination from treatment in analyses did not predict late termination from treatment, however. In comparison to completers, families that dropped out of treatment early were significantly more likely to belong to a minority group, have greater stress, and be headed by a single parent. Children in families that dropped out early were characterized by more severe child impairment in relation to conduct disorder and delinquency, academic functioning, and social behavior problems. When comparing late terminators versus completers, late terminators differed by nonbiologic head of household, child antisocial history, and poor adaptive functioning at school.

A direct comparison between early and late terminators revealed that the two groups differed significantly by minority status, family income, poor living accommodations, adverse family child-rearing practices, child contact with antisocial peers, and poor adaptive functioning at school. The authors noted that the literature is often at odds, reporting inconsistent findings of which families drop out of treatment prematurely. This study identified that a reason for these conflicting findings may be that combining all dropouts into a single group is potentially misleading and can obscure our understanding of the process of families prematurely exiting services. A more precise definition and conceptualization of different categories of dropouts may be needed by the child attrition literature. These findings also potentially can guide specific engagement interventions by helping to identify and target risk factors associated with families that drop out at different points of the treatment process.

### Characteristics of youth and families that influence service engagement

Past research that examined engagement in child mental health services focused largely on child and family social, demographic, and clinical mental health characteristics and their association with engagement. These data are often retrieved from administrative sources and related to service engagement patterns. Commonly examined child characteristics include demographic and clinical status variables. In terms of child characteristics, findings regularly reveal that male children are more likely to be referred and use mental health services in comparison to female children [31,32], and they tend to use more services when involved in treatment [33,34]. As children get older, the disparity between rates of service use by gender tends to decrease [31,35]. Findings that relate a child's age and rates of engagement are mixed, however, with some studies indicating an inverse relationship [31,35] and others noting a positive association [34,36].

In terms of child mental health need and engagement, prior research has identified a clear association between the presence or diagnosis of a child mental health disorder [37–40] or impaired functioning [41] and a greater likelihood of service engagement. The relationship between the severity of impairment and service use is somewhat less identifiable, however [42,43]. Findings indicate a positive relationship between need and engagement [44,45], no relationship [37], and counterintuitive findings such that the more serious the level of child mental health care need, the less likely the child is to receive treatment [28,46–48].

In relation to the impact of family characteristics on child mental health service engagement, poverty status has been linked with an underuse of child mental health services [49]. Prior studies also have found that minority families are less likely to be engaged in services in comparison to white families [30,50–54]. Less studied examples of family characteristics that have been associated with reduced service engagement include higher levels of parent and family stress, single parent status [55–58], higher levels of discipline effectiveness [26,59,60], parents receiving their preferred form of child services [61], and family cohesion and organization [62,63].

Although significant findings are summarized earlier, the relationships between these typically studied variables and service use patterns are often unclear. Reviews of these studies frequently reported conflicting findings and cited failures to replicate findings [56,58,64]. It is difficult to compare findings because most studies only focus on one or two variables at a time [56]. It seems evident that no single characteristic was, by itself, necessary or sufficient to explain child mental health care service engagement [28,29,65]. It is not surprising that it has been difficult to use these findings to inform specifically targeted engagement interventions [66–68].

The most recent research on engagement of children and their families in care attempted to examine this important phenomenon by emphasizing the role that adult caregivers play in helping a child to obtain care [69] and the influence of family interactional patterns on engagement [70]. Research that examines how these unique family influences relate to service engagement has presented a new way to understand the reasons why families do or do not enter services and a way to design interventions to increase the continuity of service use.

#### Research findings guiding service engagement interventions

A growing set of studies that inform engagement interventions has required researchers to go beyond identifying child and family characteristics and relating

these factors to service use. These research studies survey family members directly to reveal the inner workings of the family unit to identify influences on the complex decision to seek care for a child. For example, through child and caregiver reports, studies have identified several concrete obstacles (eg, insufficient time, lack of transportation), contextual obstacles (eg, community violence), and agency obstacles (eg, time spent on a waiting list) experienced by the family [29,47,50,71–74] that interfere with use of services. Recent research has extended these investigations to include consideration of not only logistical barriers to service use but also perceptual barriers.

An innovative series of studies has been conducted that examines the impact of adult caregivers' perceived barriers. Recent findings support the influence of perceptual barriers as being significantly more salient to understanding engagement in services than logistical barriers [30,75,76]. For example, Kazdin et al [30,77–81] published a series of articles that specifically examined the effects of perceived barriers to child mental health treatment. A barrier to treatment participation scale also was developed by this group. Although findings linked logistical barriers to treatment dropout, evidence also emerged that parental perceptions of barriers to treatment (eg, alliance with the therapist, perceived need for treatment) predicted engagement significantly beyond the variation explained by logistical barriers [30].

Later research findings replicated these results with studies that significantly linked family perceptions of aspects of the therapeutic relationship (eg, the degree to which they are involved in service planning) and service use [82–84]. For example, Garcia and Weisz [82] examined factors that distinguished treatment completers from treatment dropouts. The factor that accounted for the largest variance and distinguished dropouts from completers was therapeutic relationship problems. MacNaughton and Rodrigue [75] examined predictors of parents' adherence to recommendations made by psychologists after the evaluation of clinic-referred children. Parental perceived barriers were the most salient predictor of adherence to recommendations. The implication is that continuity of care may be compromised seriously if the perception of barriers by families is high. This body of research findings focused engagement intervention researchers on the need to impact perceptions of barriers, attitudes regarding help seeking, perceptions of relevance, and potential helpfulness of care.

Despite these advances, authors note limited usefulness of data concerning barriers as a means of enhancing child mental health care treatment engagement [79]. More specifically, logistic and parent-perceived barriers are often assessed after treatment has begun and may not provide any opportunity to identify families at risk of dropout during the pretreatment phase. Consequently, investigations of pretreatment indicators of which families are at risk of treatment dropout have been conducted. More specifically, Nock and Kazdin [79] found that parents with high expectations for child therapy perceived fewer barriers to treatment. Parents who did not expect therapy to be effective and who had negative beliefs about the therapeutic process reported significantly more barriers to treatment participation. This new series of engagement research studies suggests

the possibility of being able to identify and support families at risk of treatment dropout even before treatment begins.

Past research also emphasized the need to address the cultural background of families when attempting to identify the influence of parent attitudes on service use [84,85]. McCabe [84] found that among a sample of Mexican-American children in outpatient psychotherapy, premature termination was predicted by parental perceptions that they should be able to overcome their child's mental health problems on their own and emotional and behavioral problems should be handled by increasing discipline. Adult caregiver expectations and beliefs concerning child mental health care are significantly related to a greater risk of premature termination of services. McCabe suggested that more culturally sensitive interventions are needed to improve retention and prevent dropout. In sum, it has been suggested that engagement of families in child mental health services rests on parental attitudes about professional services and providers, their receptivity to involvement in services, and their previous experiences with the mental health care system [59]. Attitudes and expectations may influence not only parents' decision to seek mental health care for their child but also their interest in ongoing involvement with the child mental health care system. These factors could offer targets for specific engagement interventions [86].

#### Overview of existing interventions to increase engagement

Strong evidence exists that intensive engagement interventions implemented during initial contacts with youth and their families can boost service use substantially. For example, supplying simple reminders to adult caregivers of upcoming sessions has proved to be an effective method of increasing attendance at initial appointments. Shivack and Sullivan [87] reported a 32% increase in attendance when clients were reminded of their appointment through a telephone prompt. Kourany et al [88] found significant differences in attendance at initial appointments between adult caregivers who received a reminder letter, phone call, or both compared with caretakers who received neither reminder. Similarly, MacLean et al [89] found rates of no shows between families that received a reminder letter (6.8%) to be significantly lower when compared with families that did not (20.6%). Results of these studies consistently indicated that reminding families of upcoming sessions is a basic but useful tool to increase attendance at initial appointments. Limitations of using these methods identified in past research include applying these techniques in inner-city settings, in which many lowincome families may not be reached by phone or may change residences frequently and fail to have a reliable mailing address [87].

Several studies have shown that telephone intake procedures that go beyond information gathering and focus on the complex array of potential barriers to service involvement can increase substantially the attendance at initial appointments and ongoing service involvement. Some of the most important work conducted in the area of developing and testing engagement interventions has

been conducted by Szapocznik et al [90]. This investigative team has achieved significant success engaging adolescent substance abusers and their families through use of an intensive, family-focused engagement intervention delivered via the telephone and then throughout the treatment process. More specifically, an intervention—strategic structural systems engagement, which is based on family therapy concepts and guided by family systems theory—was developed to overcome resistance to involvement in care and address patterns of interaction that were hypothesized to interfere with engagement into treatment [70].

Details of the engagement intervention tested by this team are provided in three journal articles [70,90,91]. Briefly, the initial contact with the adult caregiver of the youth is viewed as the beginning of service provision. The provider attempts to establish a working alliance with the caregiver and develop strategies that will help all family members attend an intake appointment. The strategies include strengthening parents' confidence in their ability to bring the adolescent to an initial mental health appointment and enhancing their perceptions of potential impact on their child. The provider often reaches out to other family members who are defined as critical to successful involvement in services.

In one study, 108 Latino families of youth suspected of or observed using drugs were randomly assigned to a strategic structural systems engagement experimental engagement intervention condition or an "engagement as usual" arm of the study [90]. Participants in the experimental condition were engaged at a rate of 93%, compared with an engagement rate of 42% for persons assigned to the control condition. There were also indications that the engagement method had impact beyond attendance at an initial intake appointment. In the comparison condition, 41% of families that were engaged eventually dropped out of treatment prematurely, whereas only 17% of families intensively engaged later dropped out of care. In a second study, conducted by the same team of investigators, these impressive results were replicated. With an even larger sample of "hard to reach" families, the strategic structural systems engagement strategy was associated with an engagement rate of 81%, compared with a 60% involvement rate for youth and families in the control condition [90]. Significant findings that replicate the strength of strategic structural systems engagement in involving families in treatment continue to be published [91].

This body of work by Szapocznik et al was highly influential in the design of another series of engagement interventions, which takes place either during the initial telephone intake call or at the point of first face-to-face contact between provider and families, within inner-city mental health settings. A series of tests has been conducted to examine the use and effectiveness of these engagement strategies in outpatient clinical centers for urban youth. First, in a study meant to test systematically, a telephone intervention strategy focused on increasing attendance at intake appointments at urban child mental health clinics was conducted [92]. This engagement intervention aimed to help the primary adult caregiver of a child invest in the help-seeking process and systematically problem solve barriers to help seeking. More specifically, the telephone initial telephone exchange was meant to (1) clarify the need for child mental health care for the

caregiver and the provider, (2) maximize the caregiver's investment and efficacy in relation to help seeking, (3) identify attitudes about and previous experiences with mental health care that might dissuade the adult from bringing the child for services, and (4) develop strategies to overcome concrete obstacles, such as lack of time, transportation, child care, and issues.

The initial show rates of a sample of 27 urban families that received the telephone intervention were compared with a match sample within a quasi-experimental study. Results revealed that the engagement strategy increased initial attendance by 29% in comparison to the more traditional telephone intake procedures ( $x^2 = 5.08$ ; P < .05).

To address some of the methodologic limitations of the previous study related to sample size and design, the investigator tested the telephone intervention strategy by randomly assigning 108 new requests for inner-city child mental health services to one of two study conditions. In the first condition, 55 telephone intakes were assigned to an intensive engagement and problem-solving intervention. The second condition consisted of a routine telephone intake assessment that consisted of obtaining typically obtained information related to presenting problem of child and appropriate fit for agency. Of the 55 families that received the telephone intervention, 72.7% (n = 40) came to the first appointment or called at least a day before the interview to reschedule. Of the families that were assigned to the more traditional screening, only 45.3% came to the appointment or called independently ( $x^2 = 8.42$ ; P < .01).

McKay et al [93] also conducted a study to determine if additional training related to engaging families in the first interview could improve return rate for a second appointment and ongoing rate of engagement. This first interview engagement strategy consisted of working on the following tasks during the first face-to-face contact between provider and youth and family: (1) clarifying the roles of the worker, agency, intake process, and possible service options, (2) setting the foundation for a collaborative working relationship, (3) identifying concrete, practical issues that could be addressed immediately, and (4) developing a plan to overcome barriers to ongoing involvement with the agency.

In this study, 107 new cases at an urban child mental health center were randomly assigned to trained first interviewers or a comparison group of therapists who did not receive specific engagement training. Of the 33 children assigned to first interviewers, 29 (88%) came for a first appointment and 28 (97%) returned for a second appointment. In comparison, of the 74 clients assigned to the routine first interview condition, 47 (64%) came for an initial appointment and only 83% (n=39) returned for a second appointment. The average length of treatment during the 18-week study period for experimental participants was 7.1 sessions, as opposed to an average of 5.4 sessions for the comparison group. First interviewers lost only five cases between assignment and the third interview, compared with therapists without specific engagement training, who lost 35 families between assignment and the third session.

The next study conducted by this team tested the combined effects of a telephone and a first interview engagement intervention on initial attendance and

ongoing retention in services in comparison to the impact of the telephone intervention alone and a no-treatment comparison group (n=100) [94]. The combined condition and the telephone-alone condition were associated with significant increases in attendance at intake appointments in comparison to the control group (P < .01). There was not a significant effect for the telephone engagement intervention alone in relation to ongoing use of services, however. On average, families assigned to the combined condition attended 7.3 sessions during the 18-week study period. Families that were seen by comparison therapists averaged between 5 and 5.9 sessions attended during this same time period (t=9.07; P<.01). Families that received the combined engagement intervention attended 74% of the sessions scheduled, which represents a 25% increase over the telephone intervention alone and a 16% increase above the clinic comparison families [94].

Alternative approaches that address parental concerns and barriers during the course of treatment also have evidenced greater treatment retention [95,96]. For example, in the comprehensive referral pursuit and maintenance approach, the referral source, the client, and the therapist meet to collaborate in identifying needed resources (eg, transportation, housing) that may impact engaging families in services [96]. Results of studies of this intervention revealed that at the tenth week of treatment, 46% of families in the traditional services had dropped out, compared to only 26% in the comprehensive referral pursuit and maintenance approach group. Printz and Miller [95] used a method known as the enhanced family treatment, which examined and attempted to address parental concerns or barriers not directly related to the parent-child interaction, but in a larger context of their lives. One hundred forty-seven families were randomly assigned to either a standard family treatment that focused exclusively on parental management or an enhanced family treatment that also promoted frequent discussions of adult issues (eg, attitudes toward therapy, financial concerns, marital relations, and work concerns). Enhanced family treatment produced a significantly lower dropout rate in comparison to standard family treatment overall (29% versus 46.7%) but particularly for high adversity families (29.6% versus 58.8%).

More recent interventions also have been conducted that focus not only on addressing specific barriers that parents present but also on reducing the sheer number of barriers to treatment reported by parents as a means of increasing service engagement. Kadzin and Whitley [81] tested a parent problem-solving intervention that built on their prior research findings that perceptions of barriers by parents negatively impacted service engagement [29,77]. In this intervention, 127 children and families referred to treatment for aggressive and antisocial behavior were randomly assigned to receive or not receive an additional component (parent problem solving) that addressed parental stress over the course of treatment. The parent problem-solving intervention successfully reduced the barriers that parents reported experiencing during treatment.

An essential component of successful models of engagement interventions is the identification of treatment barriers across multiple levels [25]. This ecologic approach to understanding service engagement is either explicitly or implicitly stated in all of the effective interventions. Interventions of this type are associated not only with initial involvement in child mental health care but also treatment retention and completion.

This ecologic approach is supported by the program of research on multisystemic therapy. Henggeler et al [97] identified that families of delinquent or substance-abusing youth who received multisystemic therapy had a higher rate of treatment completion compared to families that received usual services. Multisystemic therapy includes a comprehensive assessment of barriers to engagement and subsequent problem solving that focuses on the ecology of children and families. These problem-solving approaches are used throughout the course of treatment [98]. Although it seems evident that a broad consideration of factors that influence engagement is most effective in enhancing attendance at initial appointments and treatment retention, it is not entirely clear which components of these ecologically based approaches are the most salient factors that affect service engagement.

# Adding case managers and paraprofessionals to the child mental health service delivery system to enhance engagement

Although the engagement interventions described previously seem promising in their ability to impact service involvement for youth and their families, alternative strategies to increase service use also merit attention. For example, there is a growing tradition of collaborating closely with family members, particularly as a means of overcoming barriers to help seeking. An important example of the critical role that family members can play is provided by Koroloff et al [99] in their tests of family associates as links to services for youth and families in need. The family associate engagement strategy was designed to provide outreach to low-income families whose children were identified as needing mental health care. The family associate was trained to encourage and enable families to enroll their children in mental health services and assist families in continuing with services that were recommended for the child. Family associates were paraprofessionals who served as "system guides" and provided families with information, emotional support, and help with specific barriers, such as lack of transportation or child care. In a study of 239 families with a child (4–18 years of age) referred for mental health care, the presence of a family associate was significantly associated with families initiating and continuing contact with the child mental health service delivery system [100,101].

In addition to considering a family associate model of engagement, Burns et al [102] conducted a test of the impact of the addition of a case manager on engagement of youth with serious emotional disturbance and their families in care. Findings from a randomized control trial of 167 participants revealed that involvement in the experimental case manager condition was associated with significantly longer participation in services, use of a wider variety of services, fewer inpatient hospitalization days, and use of more community-based services.

# **Summary and implications**

The continued presence of a substantial portion of youth experiencing significant mental health issues calls for new models of child mental health services and research that addresses these needs and specifically focuses on the issue of engagement of youth and their families in care. The findings summarized in this article point to potentially effective methods for decreasing no-shows at initial appointments and increasing engagement in child mental health care across diverse samples of youth and their families. Even with effective service engagement interventions, rates of dropout and no-shows remain significant concerns. More data are needed to identify families that are missed by the child serving system.

It is important to note that this article largely examines engaging families in child mental health services based on factors that impact a family's use of services. When one considers factors that influence engaging families in child mental health services, however, one also must consider issues related to service access. For example, families may not be engaged in child mental health services simply because services may not be available. The sheer volume of children and families estimated by large epidemiologic studies to be in need of child mental health services far outstrips the number of available mental health care practitioners [103]. The disparity between estimated need and available practitioners alone speaks of problems in accessing services.

The problem of availability may be intensified depending on where a child and family live. Research has shown that most mental health care professionals tend to be concentrated in urban areas and are less likely to be found in the most rural sections of the country [104]. Children and families in rural areas in need of mental health care may not be able to locate appropriate services. Perhaps the most significant issue in accessing services concerns the lack of family health insurance to pay for child mental health care [14]. These problems may be intensified for minority families. For example, approximately one fourth of African-American families are uninsured [105], which is 1.5 times more than white families. The issue of service access is often a significant influence on engaging children and families in mental health services. A comprehensive survey of the factors that influence engagement in child mental health services would need to consider this important topic.

Another important issue to consider in reviewing research on engagement is the underlying assumption that children and families that drop out of services would have benefited from services if they had not terminated early. Several studies have indicated a significant relationship between the number of treatment sessions attended by children and families and better mental health outcomes [29,106]. These investigations are far from comprehensive, however. It is an unfortunate reality that over the past several decades many children have received inappropriate mental health care that, at best, may have been ineffective and, at worst, damaging [1]. Efforts to extend engagement in these instances would not been desirable. Data must be gathered from

families directly to identify more clearly their service preference and assessments of outcomes in addition to their reasons for lack of engagement in treatment.

Another confounding factor in examining engagement in child mental health services is that many referrals are not made by the children and families themselves but are mandated by schools courts or other agencies [2]. Many children and families do not keep initial appointments or drop out because they never desired or recognized a need for child mental health services in the first place. It seems evident that the future of service engagement research involves an increasing amount of direct inquiry of child, family, and provider perspectives when attempting to account for service use.

Of note, collaborative research efforts between consumers and researchers hold considerable promise for addressing these issues, particularly in urban settings. Many impoverished urban communities evidence high rates of mental health care need and low treatment participation. Often in these settings there is a mistrust of outsiders, who may be the very people providing mental health services or conducting research. In such instances, researchers may not be privy to consumers' views of services because of their choice not to share their perspective with outsiders. Collaborative research efforts between researchers and consumers may have the advantage of creating alliances and increasing relevance of services, however. These alliances may facilitate an understanding of the practical realities families face and how problems related to engaging families in child mental health services may be solved.

It is clear that mechanisms exist to increase the involvement of urban youth and their families in needed mental health services. To accomplish this task, however, child mental health agencies and providers might consider the following: (1) Examine intake procedures and develop interventions to target specific barriers to service use. (2) Provide training and supervision to providers to increase a focus on engagement in the first face-to-face meetings with youth and families. (3) Consider service delivery options with input from consumers regarding types of services offered. The most important theme that seems to run through all the engagement research efforts reviewed in this article is that involvement of youth and their families is a primary goal that must receive as much attention as any other part of the service delivery process. It might be argued that without youth and family participation, effective services will never be provided to youth and families in need.

#### References

- [1] Rog DJ. The status of children's mental health services. In: Bickman L, Rog DJ, editors. Children's mental health services: research, policy, and evaluation. Thousand Oaks (CA): Sage Publications; 1995. p. 3–18.
- [2] US Public Health Service. Mental health: a report of the surgeon general. Rockville: US Department of Health and Human Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health; 1999.

- [3] US Public Health Service. Youth violence: a report of the surgeon general. Washington, DC: Department of Health and Human Services; 2001.
- [4] Knitzer J. Children's rights in the family and society: Dilemmas and realities. Am J Orthopsychiatry 1982;53:481–95.
- [5] Knitzer J. Unclaimed children: the failure of public responsibility to children and adolescents in need of mental health services. Washington, DC: Children's Defense Fund; 1982.
- [6] Brandenburg NA, Friedman RM, Silver SE. The epidemiology of childhood psychiatric disorders: prevalence findings from recent studies. J Am Acad Child Adolesc Psychiatry 1987;29: 76–83.
- [7] McCabe K, Yeh M, Hough RL, Landsverk J, Huriburt MS, Culver SW, et al. Racial/ethnic representation across five public sectors of care for youth. Journal of Emotional & Behavioral Disorders 1999;7:72–82.
- [8] US Public Health Service. Report of the surgeon general's conference on children's mental health: a national action agenda. Washington, DC: Department of Health and Human Services; 2000.
- [9] Tuma JM. Mental health services for children: the state of the art. Am Psychol 1989;44:188–99.
- [10] Tolan PH, Henry D. Patterns of psychopathology among urban poor children: comorbidity and aggression effects. J Consult Clin Psychol 1996;64:1094–9.
- [11] Ringel JS, Sturm R. National estimates of mental health utilization and expenditures for children in 1998. J Behav Health Serv Res 2001;28:319-33.
- [12] Stiffman AR, Earls F, Robins LN, Jung KG. Problems and help seeking in high-risk adolescent patients of health clinics. J Adolesc Health Care 1998;9:305–9.
- [13] National Institute of Mental Health. Blueprint for change: research on child and adolescent mental health. Rockville: US Department of Health and Human Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health; 2001.
- [14] Kataoka SH, Zhang L, Wells KB. Unmet need for mental health care among US children: variation by ethnicity and insurance status. Am J Psychiatry 2002;159:1548-55.
- [15] Office of Technology Assessment. Children's mental health: problems and services (PB87–207486). Washington, DC: US Government Printing Office; 1986.
- [16] Attar BK, Guerra NG, Tolan PH. Neighborhood disadvantage, stressful life events, and adjustment in urban elementary-school children. J Clin Child Psychol 1994;23:391–400.
- [17] Hess LE, Atkins MS. Victims and aggressors at school: teacher, self, and peer perceptions of psychosocial functioning. Applied Developmental Science 1998;2:75–89.
- [18] Gorman-Smith D, Tolan PH, Henry D. The relation of community and family to risk among urban-poor adolescents. In: Cohen P, Slomkowski C, et al, editors. Historical and geographical influences on psychopathology. Mahwah (NJ): L. Erlbaum Associates Publishers; 1999. p. 349-67.
- [19] Padgett DK, Patrick C, Burns BJ, Schlesinger HJ, Cohen J. The effect of insurance benefit changes on use of child and adolescent out patient mental health services. Med Care 1993;31: 96-110.
- [20] Weist MD, Acosta OM, Youngstrom EA. Predictors of violence exposure among inner-city youth. J Clin Child Psychol 2001;30:187–98.
- [21] Laitinen-Krispijn S, Van der Ende J, Wierdsma AI, Verhulst FC. Predicting adolescent mental health service use in a prospective record-linkage study. J Am Acad Child Adolesc Psychiatry 1999;38:1073–80.
- [22] Zwaanswijk M, Van der Ende J, Verhaak PF, Bensing JM, Verhulst FC. Factors associated with adolescent mental health service need and utilization. J Am Acad Child Adolesc Psychiatry 2003;42:692-700.
- [23] Zwaanswijk M, Verhaak PF, Bensing JM, van der Ende J, Verhulst FC. Help seeking for emotional and behavioral problems in children and adolescents: a review of recent literature. Eur Child Adolesc Psychiatry 2003;12:153-61.
- [24] McKay MM, Stoewe J, McCadam K, Gonzales J. Increasing access to child mental health services for urban children and their caregivers. Health Soc Work 1998;23:9–15.

- [25] McKay MM, McCadam K, Gonzales J. Addressing the barriers to mental health services for inner-city children and their caretakers. Community Ment Health J 1996;32:353-61.
- [26] Harrison M, McKay MM, Bannon WM. Inner-city child mental health service use: the real question is why youth and families do not use services. Community Ment Health Journal 2004;40:119–31.
- [27] McKay MM, Harrison M, Gonzales J, Kim L, Quintana E. Multiple family groups for urban children with conduct difficulties and their families. Psychiatr Serv 2002;53:1467–9.
- [28] Kazdin AE, Mazurick JL. Treatment outcome among children with externalizing disorder who terminate prematurely versus those who complete psychotherapy. J Am Acad Child Adolesc Psychiatry 1994;33:549-57.
- [29] Kazdin AE, Mazurick JL. Dropping out of child psychotherapy: distinguishing early and late dropouts over the course of treatment. J Consult Clin Psychol 1994;62:1069–74.
- [30] Kazdin AE, Holland L, Crowley M. Family experience of barriers to treatment and premature termination from child therapy. J Consult Clin Psychol 1997;65:453–63.
- [31] Griffin JA, Cicchetti D, Leaf PJ. Characteristics of youths identified from a psychiatric case register as first-time users of services. Hosp Community Psychiatry 1993;44:62–5.
- [32] Padgett DK, Patrick C, Burns BJ, Schlesinger HJ, Cohen J. The effect of insurance benefit changes on use of child and adolescent out patient mental health services. Med Care 1993;31: 96-110.
- [33] Realmutto GM, Bernstien GA, Maglothin MA, Pandey RS. Patterns of utilization of outpatient mental health services by children and adolescents. Hosp Community Psychiatry 1992;43: 1218–23
- [34] Roghmann KJ, Hartoutun M, Babigian HM, Goldberg ID, Zastowny TR. The increasing number of children using psychiatric services: analysis of a cumulative psychiatric case register. Pediatrics 1982;70:790–801.
- [35] Wise BK, Cuffe SP, Fischer T. Dual diagnosis and successful participation of adolescents in substance abuse treatment. J Subst Abuse Treat 2001;21:161–5.
- [36] Wu P, Hoven CW, Bird H, Moore RE, Cohen P, Alegria M, et al. Depressive and disruptive disorders and mental health service utilization in children and adolescents. J Am Acad Child Adolesc Psychiatry 1999;38:1081–90.
- [37] Burns BJ, Costello EJ, Angold A, Tweed D, Stangi D, Farmer E, et al. Children's mental health service use across service sectors. Health Aff 1995;14:147–59.
- [38] Leaf PJ, Alegria M, Cohen P, et al. Mental health service use in the community and schools: results from the four-community MECA study. J Am Acad Child Adolesc Psychiatry 1996;35: 889-97.
- [39] Offord DR, Boyle MH, Szatmari P, RaeGrant NI, Links PS, Cadman DT, et al. Ontario child health study: II. Six-month prevalence of disorder and rates of service utilization. Arch Gen Psychiatry 1987;44:832–6.
- [40] Zahner GEP, Pawelkiewicz W, De-Francesco JJ, Adnopoz J. Children's mental health service needs and utilization patterns in an urban community: an epidemiological assessment. J Am Acad Child Adolesc Psychiatry 1992;31:951–60.
- [41] Bird HR, Andrews H, Schwab-Stone M, Goodman S, Dulcan M, Richters J, et al. Global measures of impairment for epidemiologic and clinical use with children and adolescents. Int J Methods Psychiatr Res 1996;6:295–307.
- [42] Friedman RM, Street S. Admissions and discharge criteria in children's mental health services. J Clin Child Psychol 1985;14:229–35.
- [43] Hundert J, Cassie JR, Johnston N. Characteristics of emotionally disturbed children referred to day-treatment, special-class, outpatient, and assessment services. J Clin Child Psychol 1988;17: 121–30.
- [44] Burns BJ. Mental health service use by adolescents in the 1970s and 1980s. J Am Acad Child Adolesc Psychiatry 1991;30:144–50.
- [45] Dore MM, Wilkinson AN, Sonis WA. Exploring the relationship between a continuum of care and intrusiveness of children's mental health services. Hosp Community Psychiatry 1992;43: 44–8.

- [46] Ramsey E, Walker HM. Family management correlates of antisocial behavior among middle school boys. Behavioral Disorders 1988;13:187–201.
- [47] Wahler RG, Dumas JE. Attentional problems in dysfunctional mother child interactions: an interbehavioral model. Psychol Bull 1989;105:116-30.
- [48] Webster-Stratton C. Long-term follow-up of families with young conduct problem children: from preschool to grade school. J Clin Child Psychol 1990;19:144–9.
- [49] Hoberman HM. Ethnic minority status and adolescent mental health services utilization. J Ment Health Adm 1992;19:246–67.
- [50] Bui CT, Takeuchi DT. Ethnic minority adolescents and the use of community mental health care services. Am J Community Psychol 1992;20:403–17.
- [51] Angold A, Erkanli A, Farmer EMZ, et al. Psychiatric disorder, impairment, and service use in rural African American and white youth. Arch Gen Psychiatry 2002;59:893–901.
- [52] Sue S, Fujino DC, Hu L, Takeuchi DT. Community mental health services for ethnic minority groups: a test of the cultural responsiveness hypothesis. J Consult Clin Psychol 1991;59: 533-40.
- [53] Takeuchi DT, Bui KT, Kim L. The referral of minority adolescents to community mental health centers. J Health Soc Behav 1993;34:153-64.
- [54] Viale-Val G, Rosenthal RH, Curtiss G, Marohn RC. Dropout from adolescent psychotherapy: a preliminary study. J Am Acad Child Psychiatry 1984;23:562–8.
- [55] Angold A, Messer SC, Stangl D, Farmer EZ, Costello EJ, Burns BJ. Perceived parental burden and service use for child and adolescent psychiatric disorders. Am J Public Health 1988;88: 75–80
- [56] Armbruster P, Kazdin AE. Attrition in child psychotherapy. Advances in Clinical Child Psychology 1994;16:81–108.
- [57] Brannan AM, Heflinger CA, Foster EM. The role of caregiver strain and other family variables in determining children's use of mental health services. Journal of Emotional & Behavioral Disorders 2003;11:78–92.
- [58] Gould MS, Shaffer D, Kaplan D. The characteristics of dropouts from a child psychiatry clinic. J Am Acad Child Psychiatry 1985;24:316–28.
- [59] McKay MM, Pennington J, Lynn CJ, McCadam K. Understanding urban child mental health service use: two studies of child, family, and environmental correlates. J Behav Health Serv Res 2001;28:1–10.
- [60] Verhulst FC, van der Ende J. Factors associated with child mental health service use in the community. J Am Acad Child Adolesc Psychiatry 1997;36:901–9.
- [61] Bannon WM, McKay MM. Do barriers to service or parental preference match for service relate to urban child mental health service use. Fam Soc, in press.
- [62] Gavidia-Payne S, Stoneman Z. Family predictors of maternal and paternal involvement in programs for young children with disabilities. Child Dev 1997;68:701–17.
- [63] Perrino T, Coatsworth JD, Briones E, Pantin H, Szapocznik J. Initial engagement in parentcentered preventive interventions: a family systems perspective. J Prim Prev 2001;22:21–44.
- [64] Wierzbicki M, Pekarik G. A meta-analysis of psychotherapy dropout. Prof Psychol Res Pr 1993; 24:190-5.
- [65] Kazdin AE, Mazurick JL, Bass D. Risk for attrition in treatment of antisocial children and families. J Clin Child Psychol 1993;22:2-16.
- [66] Costello EJ, Benjamin RD. Epidemiology and child diagnosis. In: Last CG, Hersen M, editors. Handbook of child psychiatric diagnosis. New York: Wiley; 1989. p. 496–516.
- [67] Mash EJ, Barkley RA. Treatment of childhood disorders. 2nd edition. New York: Guilford Press; 1998.
- [68] Tolan P, Ryan K, Jaffe C. Adolescent's mental health service use and provider, process, and recipient characteristics. J Clin Child Psychol 1988;17:229–36.
- [69] Dakof GA, Tejeda M, Liddle HA. Predictors of engagement in adolescent drug abuse treatment. J Am Acad Child Adolesc Psychiatry 2001;40:274–81.
- [70] Santisteban DA, Szapocznik J, Perez-Vidal A, Kurtines WM, Murray EJ, LaPerriere A. Effi-

- cacy of intervention for engaging youth and families into treatment and some variables that may contribute to differential effectiveness. J Fam Psychol 1996;10:35-44.
- [71] Armstrong HE, Ishiki D, Heiman J, Mundt J, Woack W. Service utilization by black and white clientele in an urban community mental health center: revised assessment of an old problem. Community Ment Health J 1984;20:256–80.
- [72] Cohen P, Hesselbart CS. Demographic factors in the use of children's mental health services. Am J Public Health 1993;83:49-52.
- [73] Miller GE, Prinz RJ. Enhancement of social learning family intervention for childhood conduct disorder. Psychol Bull 1991;108:291–307.
- [74] Russell M, Lang M, Brett B. Reducing dropout rates through improved intake procedures. Soc Casework 1987;68:421-5.
- [75] MacNaughton KL, Rodrigue JR. Predicting adherence to recommendations by parents of clinicreferred children. J Consult Clin Psychol 2001;69:262–70.
- [76] Rodrigue JR, Houck CD. Parental health and adolescent behavioral adjustment. Childs Health Care 2001;30:79–91.
- [77] Kazdin AE, Wassell G. Barriers to treatment participation and therapeutic change among children referred for conduct disorder. J Clin Child Psychol 1999;28:160-72.
- [78] Kazdin AE, Wassell G. Predictors of barriers to treatment and therapeutic change in outpatient therapy for antisocial children and their families. Ment Health Serv Res 2000;2:27–40.
- [79] Nock MK, Kazdin AE. Parent expectancies for child therapy: assessment and relation to participation in treatment. Journal of Child & Family Studies 2001;10:155–80.
- [80] Hollon SD, Munoz RF, Barlow DH, et al. Psychosocial intervention development for the prevention and treatment of depression: promoting innovation and increasing access. Biol Psychiatry 2002;52:610–30.
- [81] Kazdin AE, Whitley MK. Treatment of parental stress to enhance therapeutic change among children referred for aggressive and antisocial behavior. J Consult Clin Psychol 2003;71: 504-15
- [82] Garcia JA, Weisz JR. When youth mental health care stops: therapeutic relationship problems and other reasons for ending youth outpatient treatment. J Consult Clin Psychol 2002;70: 439-43.
- [83] Koren PE, Paulson RI, Kinney RF, Yatchmenoff DK, Gordon LJ, DeChillo N. Service coordination in children's mental health: an empirical study from the caregiver's perspective. Journal of Emotional & Behavioral Disorders 1997;5:162–72.
- [84] McCabe KM. Factors that predict premature termination among Mexican-American children in outpatient psychotherapy. Journal of Child & Family Studies 2002;11:347–59.
- [85] Snowden LR. Barriers to effective mental health services for African Americans. Ment Health Serv Res 2001;3:181–7.
- [86] Spoth R, Redmond C. Research on family engagement in preventive interventions: toward improved use of scientific findings in primary prevention practice. J Prim Prev 2000;21:267–84.
- [87] Shivack IM, Sullivan CW. Use of telephone prompts at an inner-city outpatient clinic. Hosp Community Psychiatry 1989;40:851-3.
- [88] Kourany RF, Garber J, Tornusciolo G. Improving first appointment attendance rates in child psychiatry outpatient clinics. J Am Acad Child Adolesc Psychiatry 1990;29:657–60.
- [89] MacLean LM, Greenough T, Jorgenson V, Couldwell M. Getting through the front door: improving initial appointment attendance at a mental-health clinic. Can J Commun Ment Health 1989;8:123-33.
- [90] Szapocznik J, Perez-Vidal A, Brickman AL, Foote FH, et al. Engaging adolescent drug abusers and their families in treatment: a strategic structural systems approach. J Consult Clin Psychol 1988;56:552-7.
- [91] Coatsworth JD, Santisteban DA, McBride CK, Szapocznik J. Brief strategic family therapy versus community control: engagement, retention, and an exploration of the moderating role of adolescent symptom severity. Fam Process 2001;40:313–32.
- [92] McKay MM, McCadam K, Gonzales J. Addressing the barriers to mental health services for inner city children and their caretakers. Community Ment Health J 1996;32:353-61.

- [93] McKay M, Nudelman R, McCadam K. Involving inner-city families in mental health services: first interview engagement skills. Res Soc Work Pract 1996;6:462–72.
- [94] McKay M, Stoewe J, McCadam K, Gonzales J. Increasing access to child mental health services for urban children and their care givers. Health Soc Work 1998;23:9-15.
- [95] Prinz RJ, Miller GE. Family-based treatment for childhood antisocial behavior: experimental influences on dropout and engagement. J Consult Clin Psychol 1994;62:645–50.
- [96] Szykula SA. Reducing dropouts from youth-relevant treatment services: the comprehensive referral pursuit and maintenance approach. Child Youth Serv Rev 1984;6:37–46.
- [97] Henggeler SW, Pickrel SG, Brondino MJ, Crouch JL. Eliminating (almost) treatment dropout of substance abusing or dependent delinquents through home-based multisystemic therapy. Am J Psychiatry 1996;153:427–8.
- [98] Henggeler SW, Schoenwald SK, Borduin CM, Rowland MD, Cunningham PB. Multisystemic treatment of antisocial behavior in children and adolescents. New York: Guilford Press; 1998.
- [99] Koroloff NM, Elliott DJ, Koren PE, Friesen BJ. Connecting low-income families to mental health services: the role of the family associate. Journal of Emotional & Behavioral Disorders 1994;2:240-6.
- [100] Elliott DJ, Koroloff NM, Koren PE, Friesen BJ. Improving access to children's mental health services: the family associate approach. In: Epstein MH, Kutash K, Duchnowski AJ, editors. Outcomes for children and youth with emotional and behavioral disorders and their families: programs and evaluation best practices. Austin (TX): PRO-ED; 1998. p. 581–609.
- [101] Koroloff NM, Elliott DJ, Koren PE, Friesen BJ. Linking low-income families to children's mental health services: an outcome study. Journal of Emotional & Behavioral Disorders 1996; 4:2–11.
- [102] Burns BJ, Farmer EM, Angold A, Costello EJ, Behar L. A randomized trial of case management for youths with serious emotional disturbance. J Clin Child Psychol 1996;25:476–86.
- [103] Wolraich ML. Services in the primary care context. In: Bickman L, Rog DJ, editors. Children's mental health services: research, policy, and evaluation. Thousand Oaks (CA): Sage Publications; 1995. p. 89-100.
- [104] Holzer CE, Goldsmith HF, Ciarlo JA. Effects of rural-urban county type on the availability of health and mental health care providers. In: Manderscheid RW, Henderson MJ, editors. Mental health, United States. Rockville: Center for Mental Health Services; 1998. p. 204–13.
- [105] Brown ER, Ojeda VD, Wyn R, Levan R. Racial and ethnic disparities in access to health insurance and health care. Los Angeles: UCLA Center for Health Policy Research and The Henry J. Kaiser Family Foundation; 2000.
- [106] Angold A, Costello JE, Burns BJ, Erkanli A, Farmer EM. Effectiveness of nonresidential specialty mental health services for children and adolescents in the real world. J Am Acad Child Adolesc Psychiatry 2000;39:154–60.