

## **Martha Morrison Dore**

### **Mental Health Care for Children and Youth**

Lexy is the single parent of Patti, 14, Julie, 11, and Tommy, 8. Tommy has pervasive developmental disorder and requires 24-hour-a-day special care. Each morning, Lexy gets up at 5 A. M. to begin preparing for her day. She throws a load of wash into the washing machine and feeds the cats before she showers and dresses, hoping against hope that Tommy will not wake up until she finishes putting on her makeup. The moment Tommy awakens, the turmoil begins. He calls out for her and if she does not appear immediately, he begins a high-pitched wail that quickly awakens Patti and Julie, sleeping in the next room. Next he begins banging his forehead on the wall, unless Lexy can quickly put his helmet on him to discourage this behavior. Then Lexy tries to persuade Tommy to use the bathroom and get dressed. Often, this results in a physical altercation, with Tommy running out of the room and Lexy chasing him around the house to get him dressed. As he grows larger and stronger, the effort increasingly leaves Lexy exhausted and disheveled by the time the van arrives at 8:00 A. M. to pick Tommy up for his day treatment program. On several occasions during the morning effort to get him ready for school, Tommy has run out of the house and into the street, with Lexy grabbing him and physically dragging him back into the house. She can only imagine what the neighbors are saying about her failures as a single parent.

Nancy and Bob Elliot dread the ringing of the telephone between the hours of nine and ten in the morning, the time the school calls to tell them that their 13-year-old daughter Annalee

has left school again. Often, Nancy has barely removed her coat from driving Annalee to school and delivering her to the door of her homeroom when the call comes. Nancy gets back in the car and heads downtown to “the strip,” an arcade that is the local hangout for high school dropouts, unemployed older men, and teenagers who have decided to cut school that day. She usually stops to pick up Bob at his office, as alone she cannot manage Annalee and, anyway, she tells herself, Annalee listens better to her father’s booming directives. If they are lucky, Nancy and Bob will quickly spot Annalee’s spikey dyed purple hair in the crowded arcade. Their daughter is usually hanging over the back of some leather jacketed, heavily tattooed older teenager, seated at one of the many video games, all of which seem to involve killing and destruction.

After a scene, which often includes a gathering crowd of threatening-looking teens who curse and shout comments at Nancy and Bob, drawing the attention of the arcade security guard, who asks all three of them to leave, the Elliots manage to get Annalee into the car and drive home,. All the way home, Nancy and Bob listen to a diatribe from their enraged daughter, telling them how much she hates them and threatening yet another suicide attempt (there have been three, all of which have resulted in brief psychiatric hospitalizations), or to run away from home and live on the streets like some of her friends on the strip. By the time they arrive home, Nancy is usually in tears, and Bob is in a silent fury. Annalee slams out of the car and locks herself in her bedroom, refusing to come out, even for dinner. On several occasions, the Elliots thought they detected the sweet smell of marijuana smoke drifting from under the locked door of Annalee’s room.

Esther and Kevin Ross were thrilled when their caseworker with the public child welfare agency told them they had been approved as adoptive parents for 3-year-old Sammy, their foster son. They knew that Sammy had been born with crack in his system, and that he had spent the

first 18 months of his life living with his homeless, crack-addicted mother who moved from man to man and place to place, occasionally landing in a homeless shelter where the staff would observe her harsh and careless treatment of her little boy. Finally, after several reports to protective services, as a result of which nothing was done, Sammy's mother left him in the care of a fellow homeless shelter resident to run to the store for milk. She never returned. Sammy was placed into foster care with the Rosses, a middle-aged couple whose own children were grown. The Rosses quickly fell in love with Sammy, who seemed to need them desperately, crying hysterically when either one of them left his sight even for a few minutes. Because the child welfare agency could not locate Sammy's mother and had no identity for his father, the agency moved quickly to terminate parental rights and free Sammy for adoption by the eager Rosses.

After a very rocky first year of tantrums, night terrors, and eating and soiling problems, Sammy seemed to settle in to his adoptive home. Thus the Rosses were surprised and confused when Sammy started preschool and they began to get complaints from the teachers and other parents that Sammy was hitting and biting other children, especially the boys. He was caught repeatedly trying to put his hands down little girls' pants. The Rosses' two older children, both married with young children of their own, dropped by their parents' home less and less often. Their younger daughter finally confessed that she had caught Sammy lying on top of her 2-year-old daughter, making sexual movements, and that she and her sister were afraid that Sammy would physically harm their children. The Rosses contacted the child welfare agency that had placed Sammy with them for some direction and guidance, only to be told that once the child was adopted, because he had not been identified as a special needs child, the agency's responsibility had ended.

In each of the situations described above, parents are struggling to care for children with serious mental, emotional and behavioral (MEB) disorders. Scenarios like these are repeated hundreds of times daily all over the United States. Current epidemiological studies estimate that 18% to 22% of children and adolescents suffer from one or more diagnosable MEB disorders at any given time in this country, depending on the population studied and how data are collected (O'Connell, Boat, & Warner 2009). Recent studies of MEB in very young children have found similar rates of MEB disorders, with one review of available studies of preschool children age 2 through 5 determining an overall rate of disorder at close to 20% (Egger & Angold 2006). It is estimated that 9% to 13% of these children and youth are severely impaired in their daily functioning, depending on the type of diagnosis, number of symptoms, and co-morbidity (Costello, Egger & Angold 2005; Kessler, Chiu, Demler & Walters 2005). These percentages translate into over four million young people in the United States who are currently in need of mental health services.

As the stories of Tommy, Annalee, and Sammy illustrate, MEB disorders can manifest themselves at any age, even in very young children. Externalizing disorders such as conduct disorders, Attention Deficit Hyperactivity Disorder (ADHD), and oppositional disorders are more commonly found in boys, while the internalizing disorders such as mood and anxiety disorders are more frequently identified in girls (Rutter, Caspi, & Moffit, 2003). MEB disorders can interfere with a child's developmental progress and his or her ability to interact with others, progress in school, and participate in community life and the workplace. And, not only do MEB disorders negatively affect the child, they affect other individuals in the child's environment as well, including parents, siblings, teachers, peers, and even neighbors. They also have a negative impact on community resources. Costello and her colleagues (2007) found that a substantial

portion of the cost of treating MEB disorders was incurred by the child welfare, education, and juvenile justice systems in one community they studied. One estimate has put the cost to society of MEB disorders in children and adolescents at \$237 billion annually (National Research Council 2009).

Since the early 1980s, the mental health community in the United States has sought ways to respond more effectively to the mental, emotional, and behavioral problems of children. There have been a series of federal studies of this issue, including the influential *Report of the Surgeon General's conference on children's mental health: A national action agenda*, released in 2000. This report called for improving the recognition and assessment of mental health needs in children as well as the widespread adoption of science-based prevention and treatment services. This was followed a few years later by a report to Congress, *Promotion and prevention in mental health: Strengthening parenting and enhancing child resilience* (SAMHSA 2007), which incorporated a public health perspective to call for population-based promotion of mental health and prevention of mental illness. Shortly thereafter, the Committee on the Prevention of Mental Disorders and Substance Abuse Among Children, Youth and Young Adults: Research Advances and Promising Interventions, a joint project of the National Research Council and the Institute of Medicine, issued a report on its own study of the prevention of mental, emotional, and behavioral disorders in young people (O'Connell et al. 2009).

Each of these efforts has documented the extensive service needs and the lack of access to mental health services for a large portion of affected children and their families. Research indicates that only about one in five children who needs mental health services actually receives them. Among those living in poverty, in rural communities, and those who are members of minority groups, these figures are much lower (Flisher, Kramer, Grosser, Alegria, Bird, et al.

1997; Halfon, Inkelas, & Wood 1995; Owens, Hoagwood, Korwitz, Leaf, Poduska, et al 2002). For the majority of children and adolescents, schools are the entry point to the mental health system, with the mental health and general healthcare systems a close second (Farmer, Burns, Phillips, Angold, & Costello 2003). Children's emotional and, especially, behavioral disorders are most often first identified in an educational setting, where teachers quickly become aware when a child's difficulties negatively impact the classroom as a whole, as did Sammy's. Over the past decade, the construct of executive function (EF) has emerged as key to self-regulation of behavior and development of social and cognitive competence in the preschool years as precursor to the capacity for learning in school (Best & Miller 2010; Center on the Developing Child 2011; Rueda, Posner, & Rothbart 2005). EF includes: (1) *working memory* or the capacity to retain information and instructions for a sufficient period of time to inform performance of necessary tasks; (2) *inhibitory control* or the ability to master thoughts and impulses and resist distractions to focus on the tasks at hand; and, (3) *mental flexibility* or the ability to respond in differing ways to different demands or to revise ways of doing things in response to new information. The study of EF is informed by recent discoveries in neuroscience about brain development in the earliest years of life and contributes to our understanding of the challenges that some children face in their readiness to manage the demands of a structured learning environment like kindergarten or first grade.

Children like Sammy who experience trauma and adversity in their earliest years are more likely to have difficulties in EF that place them at profound disadvantage when they enter school or even preschool. Recent research on the effects of emotional deprivation and trauma in infancy has found that such exposure results in neurobiological changes that increase the risk of mental and emotional disorders in children and adults (Nemeroff 2004). Studies of children

adopted from institutions in eastern Europe where they experienced extreme emotional neglect have found a pattern of significant MEB problems, including quasi-autism, disinhibited attachment, and inattention/overactivity (Colvert, Rutter, Kreppner, Beckett, Castle, Groothues, et al 2008). There is growing evidence that adverse experiences in infancy and early childhood lead to long lasting physical and chemical changes in the brain that impact development of cognitive skills like learning and memory, leading once again to problems in EF.

Pediatricians and other healthcare providers are common sources of identification of serious problems in functioning in infants and toddlers. In Tommy's case, his mother, who had two older children, noticed when he was just a baby that Tommy did not respond to her as her girls had done as infants. His tiny body stiffened when she held him and, when she tried to make eye contact with Tommy as she nursed him, he looked away as though avoiding her gaze. Tommy also rarely slept more than 30 minutes at a time, even at night, and seemed to startle and become frantic at the slightest noise. When she expressed her concerns to her pediatrician, he referred her to a local Early Intervention program designed to provide a multidisciplinary developmental assessment and evaluation for infants and toddlers thought to be suffering from physical, cognitive, communication, and/or social/emotional delays.

For older children and adolescents, entry into the juvenile justice system is another point at which serious emotional or behavioral health problems may be identified (Farmer, Burns, Phillips, Angold, & Costello 2003). Adolescents like Annalee, whose problems are manifested in acting out behaviors such as skipping school, staying out past curfew, hanging out in unsavory areas of town, using illegal or controlled substances, and running away from home may find themselves reported to the juvenile authorities and detained as ungovernable or as a "person in need of supervision" in the local juvenile detention center. Many state juvenile justice systems

now routinely screen all detained youth for mental health problems as well as indications of danger to themselves or others (Grisso & Underwood 2003; Nordness, Gummert, Banks, Schindler, Moss, et al. 2002). A growing body of research is demonstrating that a high percentage of delinquent youth has one or more diagnosable mental disorders. One study of nearly 2,000 youths in an Illinois detention facility corroborated earlier estimates that approximately 60% of youthful offenders meet DSM IV-R diagnostic criteria for at least one psychiatric disorder (Teplin, Abram, McClelland, Dulcan, & Mericle 2002). In the Illinois study, 56.5% of female juvenile detainees and 45.9% of male detainees met criteria for two or more disorders. The most common co-occurring disorders were substance use, oppositional disorders, and conduct disorders.

Children like Sammy, who come to the attention of child welfare authorities because of parental maltreatment, are at particularly high risk of MEB problems. Recent studies suggest that up to 80% of children entering foster care have significant MEB disorders (Leslie, Hurlburt, Landsverk, Barth, & Slymen 2004; Maughan & Cicchetti 2002; Teisl & Cicchetti 2008). This contrasts with 18% to 20% of children in the general population (O'Connell et al 2009). A study by the Urban Institute found that, compared with other children, foster children had higher levels of emotional and behavior problems, more often had physical, learning or mental health conditions that limited their psychosocial functioning, and were less engaged in school and more likely to have been expelled (Kortenkamp & Earle 2002). These findings are not unexpected given current understanding of the detrimental effects of trauma on early brain development and the finding that children in the first five years of life have the highest incidence of severe maltreatment. In one national study, just over 75% of children who died from child abuse or neglect were younger than four years old, and the highest death rate was between birth and one



year of age (US Department of Health and Human Services 2009). Even compared with children from similar socioeconomic and demographic backgrounds, children who enter foster care are at greatly increased risk for psychopathology (Burns, Phillips, Wagner, Barth, Kolko, et al 2004; Jee, Halterman, Szilagyi, Conn, Alpert-Gillis, & Szilagyi 2011; Stahmer, Leslie, Hurlburt, Barth, Webb, & Landsverk 2005).

Despite research documenting the pervasive mental health needs of children and adolescents in the child welfare system, there is evidence that these needs are seldom adequately met (Hurlburt, Leslie, Landsverk, Barth, Burns, et al 2004; Pecora, Jensen, Romanelli, Jackson, & Ortiz 2009). One national study of children in foster care found that just 15.8% of those in care for at least 12 months received any mental health services. Of children who scored within the clinical range on a well-established measure of child behavior problems (47.9% of children in the sample), 36.2% received no mental health services at all (Burns, et al. 2004). In the Round 2 of the Child and Family Service Reviews, States performed better on variables focusing on meeting the mental health needs of children and youth. Across the States, 77 percent of all applicable cases were rated a strength for assessing and meeting children's mental health needs. The mental health items assess the agency's ability to identify needs and facilitate appropriate services to meet those needs rather than determining the mental health of the child. While improvement was noted from Round 1 to Round 2 of the CFSRs, a common challenge remained with respect to this aspects of well-being in that the mental/behavioral health services available were insufficient to meet identified needs in 32 States. While it is likely that state child welfare agencies have worked to upgrade their provision of mental health services since the first round of Child and Family Service Reviews, findings such as those from the National Study of Child and Adolescent Well-Being (NSCAW) suggest significant problems in the ability of state child

welfare authorities to address the extensive mental health needs of maltreated children like Sammy who enter out-of-home care (Hurlburt et al 2004; Stahmer et al. 2005).

Once serious MEB problems are identified in children and adolescents, the question becomes one of cause and response: what combination of factors in the child and in the child's environment is contributing to maladaptive functioning and what can be done about it? In this chapter, I begin by exploring current understanding of the etiology of mental health problems in children and adolescents. I then discuss the processes available for identifying and classifying disorders in childhood, as well as the types of disorders most often observed in young people and their prevalence across various domains. Current treatments are identified, particularly those that are evidence-based or have strong empirical support for their effectiveness. Finally, I look at the system-of-care concept that informs provision of children's mental health services in the United States, where those services are provided, and the public policies, including funding structures, that support or present obstacles to provision of mental health care to children and youth today.

### **Etiology of Emotional and Behavioral Disorders in Children and Adolescents**

Although historically the debate over the causes of serious MEB in children centered on the relative contributions of nature or heredity vs. nurture or the environment, currently the focus is on the processes by which nature and nurture interact to result in psychopathology (Calkins, Blandon, Williford, & Keane 2007; Cicchetti & Blender 2006; Gunnar 2007; Isles & Wilkinson 2008; Masten 2011; National Scientific Council on the Developing Child 2010; Rutter, Moffitt, & Caspi 2006; Teisl & Cicchetti 2008). Advances in the field of neuroscience and studies of the developing brain have increasingly revealed how the prenatal environment and experiences in infancy and earliest childhood can influence how a child's genetic inheritance is expressed

(National Scientific Council on the Developing Child 2010). The brain and cardiovascular, immune, and other systems in the body communicate with one another through neural and endocrine processes. These processes respond to stress on the organism which is interpreted by the brain. Stress and stress hormones produce both adaptive and maladaptive effects on the brain which, in turn, alter physiological and behavioral responses in the human organism. In this way, early life events influence development of patterns of emotion and behavior manifested throughout the life course (McEwen 2007).

The concept of a normal developmental process that contains wide individual variations is a central tenet of current understanding of child psychopathology. That is, the normal behaviors of children at all ages vary considerably; however, at each developmental stage, there are certain behaviors that are outside the boundaries of what is considered normal functioning (Cicchetti 2006; Cummings, Davies, & Campbell 2000). Thus, for an 8-year-old like Tommy, repetitive rocking, head banging, screaming when mother does not appear promptly, and running outdoors to avoid getting dressed for school, are all behaviors that are clearly outside normal expectations for a child of that age. For Sammy and Annalee, their deviations from developmental norms are somewhat less clear. For a child of 3 to bite and scratch his schoolmates is verging on abnormal, although one might give a child like Sammy, who had little appropriate socialization in his earliest years, some latitude to see if he responds to the clear boundaries set by his classroom teachers. Similarly, Annalee, who is 13 and in the throes of early adolescence, is exhibiting, in extreme form, some of the earlier developmental tasks of separation and individuation that are revisited at puberty. Her behavior could be better understood if viewed in context: Is this new behavior for this child? Or, does she have a history of oppositional and defiant behavior across previous developmental stages?

In this current interpretation of childhood MEB disorders, there is an assumption that a child's psychosocial development represents a series of adaptations, or, occasionally maladaptations, to new experiences or changing situations, determined by biological capacity, previous life experiences, and current environmental demands (Bierman, Nix, Greenberg, Blair, & Domitrovich 2008). Some children who function within the bounds of normalcy at one developmental stage may be cognitively, emotionally, or behaviorally ill-equipped or ill-prepared to manage the demands of the next stage (Best & Miller 2010). Sammy, for example, may have functioned normally as a toddler at home with his adoptive parents, where the environment was familiar and highly structured, and novel stimuli were limited. However, when he started preschool with new demands for controlling his inhibitions and other elements of executive functioning, coupled with heightened stimulation from the noise and excitement of other children, new surroundings, and a new routine, Sammy was unable to function within normative expectations. He reverted to an earlier, more primitive level of functioning, handling stress by biting and hitting other children. Adaptive and maladaptive behaviors in children overlap. They are inextricably linked, and to recognize the latter, it is important to understand the former. As Achenbach (1990, p. 4) noted, "many problems for which help is sought are quantitative variations on characteristics that may normally be evident at other developmental periods, less intense degree, in fewer situations, or in ways that do not impair developmental progress."

Research on brain development, particularly in children who in early life have suffered physical and sexual abuse and/or physical and emotional neglect, helps us understand the psychosocial functioning of a child like Sammy (Nemeroff 2004). Maltreatment in infancy has effects on the developing brain that lead to biological modifications, resulting in changes in

cognition and behavior and increasing vulnerability to stress, predisposing such children to development of psychiatric illnesses throughout life (Lieberman, Chu, Van Horn, & Harris 2011; Scheeringa, Zeanah, Myers, & Putnam, 2005). Trauma in infancy disrupts homeostasis in areas of the brain that respond to the stress of perceived threats. Clinical studies of severely maltreated children have identified symptoms of various mental and physical responses to trauma, including hyperarousal and dissociation (Chu & Lieberman 2010; Finkelhor, Ormrod, & Turner 2007). From a neurodevelopmental perspective, continuous arousal of these responses in infancy, when the brain is very malleable, floods the brain with certain chemicals, shaping its physical structure in particular ways and leading to sensitization, exaggerated responses to certain stimuli, and, eventually, maladaptive personality traits (Bogat, DeJonghe, Levendosky, Davidson, & von Eye 2006; National Scientific Council on the Developing Child 2010; Teicher, Andersen, Polcari, Anderson, & Navalta 2002). Observed sequelae of early childhood trauma thought to result from distortions in brain function include altered cardio-vascular system regulation, affective lability, behavioral impulsivity, increased anxiety, increased startle response, and sleep abnormalities (Bogat, et al. 2006; Margolin & Vickerman 2007). Based on magnetic resonance imaging of the brains of abused and neglected children, researchers find that trauma in infancy stunts development of areas of the brain that govern advanced cognitive functions, such as cause-and-effect reasoning and problem-solving, essential components of the *working memory* dimension of executive functioning. As a result of both increased sensitivity to perceived threat and deficits in the capacity to understand or interpret events as other than threats to their physical and/or emotional safety, children like Sammy may respond in primitive ways to stressful situations and to developmental demands. Because the brain is still developing rapidly up until about age 3, the effects of trauma on brain development can be ameliorated somewhat during that period.

However, after age 3, these effects become a more permanent part of the child's psychosocial functioning and require specialized treatment (Cohen, Mannarino, & Deblinger 2006; Fisher, Gunnar, Dozier, Bruce, & Pears 2006; Lieberman et al 2011; Vickerman & Margolin 2007).

Another area of research that has informed current understanding of the etiology of severe MEB disorders in children like Sammy is the study of infant/caregiver attachment. According to attachment theory, the nurturing relationships that an infant experiences with its earliest caregivers set the stage for the child's ability to relate to others throughout life (Bowlby 1969). Attachment is constructed through day-to-day interactions between caregiver and child, the product of a process of mutuality driven by qualities in both the infant and the caregiver. The security children feel in these caregiving relationships allows them to venture forth to explore their environment, expanding their understanding and awareness of the world, and thereby promoting cognitive and social development. In cognitive terms, the quality of attachment enables the young child to develop an internal representational model of himself/herself in relation to others and the expected responses of others when approached for protection and reassurance (Main, Kaplan, & Cassidy 1985). Frightening and stressful experiences may undermine a child's confidence in a caregiver as protector, particularly if the caregiver is the source of those experiences.

Our current knowledge regarding early attachment is the result of years of observational studies of parent-infant interaction in natural settings across various cultures. These studies have categorized types of attachment into three primary groupings—secure, anxious, and avoidant—which describe how the infant responds to his or her caregiver in a stressful situation (Ainsworth 1969; Ainsworth, Blehar, Waters, & Wall 1978; Egeland & Farber 1984). More recent studies of infants raised by a rejecting or maltreating caregiver have identified a fourth category of

attachment, termed “disorganized/disoriented” (Main & Solomon 1990). In this form of attachment, the child has no organized pattern or coherent strategy for seeking protection in stressful situations, unlike children in the other three groups who react in predictable ways (Carlson, Cicchetti, Barnett, & Braunwald 1989). Young children who exhibit disorganized/disoriented strategies for seeking comfort when threatened or frightened are thought to have no effective means of managing stress. They are therefore likely to use more primitive methods of handling anxiety-provoking situations such as aggression and withdrawal.

Whether these patterns of attachment established in infancy are lifelong is open to question. There is evidence that even secure attachments can be disrupted by subsequent stressful life events in childhood, such as the loss of a parent, or a traumatic experience, such as sexual abuse. Several studies have found a close relationship between the type of early attachment exhibited by a young child and that same child’s psychosocial functioning later in childhood (Carlson 1998; Carlson & Sroufe 1995; Lyons-Ruth, Alpern, & Repacholi 1993). Carlson (1998) found clear associations between disorganized/disoriented attachment in infancy, the mother/child relationship in the preschool years, and disorders in behavioral functioning throughout childhood. Scholars currently believe that early attachment is not directly predictive of later functioning, but rather indicates the presence of a set of conditions that are associated with particular developmental paths for children (Sroufe, Carlson, Levy, & Egeland 1999). Developmental scientists now see attachment as “the dominant approach to understanding early socioemotional and personality development” (Thompson 2000, p. 148).

Longitudinal studies of children’s development over time began the process of identifying specific factors that place children at high risk of MEB disorders. These risk factors may be located in the child, in the family system, or in the environment within which the child

and family reside. One of the earliest longitudinal studies of the developmental life course of children was conducted on the Hawaiian island of Kauai by Emmy Werner (1986, 1993). This study, whose findings have been corroborated by other longitudinal studies, identified poverty, limited parental education, parental alcoholism, and parental mental illness as factors in the family system that present high risks to a child's psychosocial development. Additional family factors such as large family size with closely spaced births, parent involvement in criminal behavior, loss of a parent through death or divorce, and severe marital discord (now termed intimate partner abuse or IPV) have been subsequently identified by other researchers as also having negative consequences for children's future functioning (Egeland, Carlson, & Sroufe 1993; Luthar & Ziegler 1993; Rutter 1993). Child-specific risk factors identified in various longitudinal studies include premature birth, difficult temperament, male gender, low intelligence, and physical disability (Garmezy & Masten 1991; Luthar 1991). Community-level risk factors include high rates of interpersonal violence, crime, and drug trafficking; deteriorating housing stock; inadequate community institutions, such as schools, parks, and recreation facilities; and low levels of social supports for families (Coulton 1996; Ernst 2001; Levanthal, Dupere, & Brooks-Gunn 2009).

Those who study factors that place children at high risk of MEB disorders stress that these risk factors are not predictive of psychopathology, but, instead, contribute to processes that may result in poor outcomes (Calkins, Blandon, Williford, & Keane 2007; Cicchetti & Blender 2006; Masten 2011). Furthermore, the effects of risk factors are not uniform across different situations or among different people. Some researchers believe that there is a multiplicative effect, such that the co-occurrence of two or more risk factors exponentially increases the likelihood of maladaptive functioning in children (Owens & Shaw 2003; Sameroff, Gutman, &



Peck 2003). Unfortunately, risk factors do tend to co-occur. Poverty, for example, is often accompanied by other risk factors such as limited parent education, large family size, single parenthood, residence in neighborhoods with high rates of crime and violence, and few family or community supports. The child poverty rate has climbed steadily as the economy has declined in the US. In 2009, the Census Bureau reported a child poverty rate of 20.7%, a significant increase over the already high rate of 18% just two years earlier. Evidence of the stressful effects of poverty and its associated risks on the mental health of children is found in a comparison of parental reports of high levels of behavioral and emotional problems in the National Survey of America's Families, conducted in 2002. Poor parents reported rates of MEB disorders of 9.1% in their 6-11 year old children and of 11.1% in their 12-17 year olds. This contrasts significantly with rates of 5.8% and 7.0% reported by parents in higher income families (Duncan, Ziol-Guest, & Kalil 2010).

Although much is now known about individual risk factors, less is understood about the processes by which risk factors operate to produce poor outcomes for children. Certain risk factors, such as severe child maltreatment, appear to have a direct precipitating impact on the development of child psychopathology because of a negative impact on brain development (National Scientific Council on the Developing Child 2010). Other factors, such as male gender or parental depression, contribute to dysfunctional outcomes only in conjunction with other, direct factors. If we were to look closely at Annalee's family over time, we might note a history of marital discord, paternal aggression, and maternal depression going back to Annalee's birth. If Annalee was a baby with a difficult temperament—fussy, colicky, and difficult to soothe—with an emotionally fragile mother who was struggling to connect emotionally with her newborn and to please a loud, demanding, and threatening husband, the stage would have been set for

problems in attachment between Annalee and her mother, which may have resulted in ongoing developmental vulnerability, currently manifested in early adolescence in struggles with autonomy and identity.

“Resilient” is the term used to characterize individuals, children included, who exhibit positive psychosocial functioning in spite of the presence of significant risk factors and/or stressful events in their lives. Early researchers who identified factors that presented heightened risks for development of child psychopathology through their longitudinal studies, also became aware of children who managed to survive, even thrive, despite adversity in their early lives (Masten 2007). They began to look for characteristics in children, families, and the environment that seemed to provide some protection against risks (Egeland 2007). Child attributes include an easy-going temperament, positive self-esteem, female gender, and internal locus of control (the belief that one can influence the external environment). Family characteristics include family cohesion and warmth, secure attachment to at least one consistent caregiver, and a positive, stable relationship between parent figures. Protective factors in the larger environment include the availability of a positive adult role model outside the home such as a teacher, coach or religious leader; engagement in school; relationships with prosocial peers; and a safe, stable neighborhood with child-focused resources such as sports and recreation programs, boys and girls clubs, out-of-school time programs, and accessible healthcare. Current approaches to primary and secondary prevention of MEB disorders in children focus on identifying and reducing factors that place children at high risk for psychopathology such as family violence, parental substance abuse or mental disorders, or child maltreatment, as well as locating and enhancing factors that offer protection and increase resilience (Calkins, Blandon, Williford, & Keane 2007; Cicchetti & Blender 2006; Luthar & Brown 2007).

## **Mental Disorders in Children and Adolescents**

### *Types of Disorders and Their Prevalence*

Epidemiological studies of nonclinical community samples have provided an increasingly clear picture of the prevalence of MEB disorders among children and youth in the United States. The most common disorders up to age 25 as defined by the *Diagnostic and Statistical Manual of Mental Disorders (DSM), 4<sup>th</sup> Edition—Revised*, include: conduct disorder; oppositional defiant disorder, attention deficit hyperactivity disorder (ADHD); anxiety disorders, including posttraumatic stress disorder; mood disorders; and, substance abuse disorders. Some MEB disorders such as the autism spectrum disorders and pervasive developmental disorders, bipolar disorder, eating disorders, schizophrenia, and obsessive compulsive disorder are less frequent; however, these disorders are often profoundly challenging to those children and youth who have them and to their families and others who care for them. According to statistics from the Committee on the Prevention of Mental Disorders and Substance Abuse Among Children, Youth and Young Adults (O’Connell, Boat, & Warner 2009), the overall prevalence of MEB disorders in young people is 17%. For depression, the prevalence rate is 5.2%, for anxiety disorders it is 8.0%, for ADHD it is 4.5%, for any disruptive behavior disorder (conduct disorder and/or oppositional defiant disorder) 6.1%, and for substance use disorder 10.3%. These prevalence rates are fairly consistent across multiple studies and across cultures. About half of the children and youth with these diagnoses are significantly impaired in their daily functioning in the commonly-measured domains of relationships with family and peers, learning in school, and community participation. Studies have also looked at the percent of children and youth who have ever received a diagnosis of an MEB disorder and found that by age 16, 37% to 39% of youth

have received such a diagnosis (Jaffee, Harrington, Cohen, & Moffitt 2005). By age 21, this percentage rises to 40% to 50%.

According to researchers, children often have more than one MEB disorder and there are common patterns of comorbidity among these disorders. For example, children and youth with disruptive behavior disorders are also commonly diagnosed with ADHD and substance abuse disorders, while those with mood disorders often have accompanying anxiety disorders (Roberts, Roberts, & Xing 2007).

Perhaps even more important than the presence of a diagnosis of an MEB disorder or constellation of disorders in children is the impact of the disorder on a child's psychosocial functioning. Although an anxiety disorder or simple phobia may be limiting to a child and frustrating to the immediate family, research suggests that it is the so-called externalizing disorders—substance abuse, disruptive behavior disorders, and ADHD—that have the most detrimental effect on a child's functioning across all life domains. As we shall see later in this chapter, with the possible exception of ADHD, these are also the MEB disorders that are least likely to be effectively treated in school settings, where most early problems are identified. Until the law was revised by Congress in 2004, youth with externalizing disorders could be denied services under the Individuals with Disabilities Education Act (IDEA) because of an exclusionary provision for children deemed “socially maladjusted.” With the 2004 reauthorization of IDEA whose name was changed to the Individuals with Disabilities Education Improvement Act (IDEIA), a child whose problem behavior was a symptom of a diagnosed MEB disorder could not be denied a free appropriate public education in the least restrictive, most normal environment available. Further, for a school to expel or remove a child from his or her current educational setting for more than 10 days in a row because of the child's conduct, a

manifestation determination hearing must be held to determine whether the behavior in question was “caused by, or had a direct and substantial relationship to, the child’s disability” (US Department of Education 2009). If so, school personnel, in collaboration with the child’s parent(s) or other caregiver, must conduct a functional behavioral assessment to identify the context of the problem behavior (antecedents and consequences) and develop a behavioral intervention plan. Exceptions to the requirement to retain a child whose behavioral difficulties are associated with a specific diagnosis include a child who carries a weapon to school, uses or sells illegal or controlled substances on school property, or has inflicted serious bodily injury on another person while on the school premises. In these instances, school personnel can require the removal of a child to an alternative educational setting that is more appropriate for the child.

Not long ago Annalee’s parents, Nancy and Bob Elliot, were notified by the principal of Annalee’s junior high school that if their daughter missed as few as 4 more school days during the year, she would fail all of her subjects and be retained in her current grade for the following year. The Elliots know that if that happens, Annalee will drop out of school altogether and they will lose her completely to the streets. At the suggestion of a neighbor who had experienced similar difficulties with her son, the Elliots responded with a letter to the principal requesting an evaluation for special education services for their daughter as required by Part B of IDEIA. In response, they received a letter from the school notifying them that a psychological and educational evaluation of their daughter had been scheduled and informing them of the Elliots’ rights as parents to participate as part of the team in the preparation of an Individualized Educational Plan (IEP) if Annalee is assessed as having special educational needs under IDEIA. In Annalee’s case, this would likely entail a DSM IV-R psychiatric diagnosis. The letter also described their rights under the Family Educational Rights and Privacy Act (FERPA) and

informed them of the appeal procedures available if they disagree with the findings of the evaluation or the services offered to Annalee in her IEP.

### *Assessment and Diagnosis of Mental Disorders in Children and Adolescents*

The purpose of assessment and diagnosis of MEB disorders in children and adolescents is twofold: (1) to understand the unique dimensions of individual biopsychosocial functioning, and (2) to identify signs and symptoms of specific diagnostic categories. Thus the focus is on both understanding the child within its unique biopsychosocial context and fitting that child into a nosological scheme that can inform interpretation and aid treatment of a particular disorder. The DSM of the American Psychiatric Association, which first added specific child-related classifications in 1980, has undergone a number of revisions over the past 30+ years to better reflect current research and clinical knowledge regarding childhood disorders. Diagnostic criteria are increasingly specific to insure reliability in diagnosis. Despite these efforts, assigning diagnostic labels to children is more challenging than with adults because the expression, manifestation, and course of disorders in children is less clear than in adults and is often age and developmental-level specific. For example, the diagnostic significance of biting in young children changes radically over a period of just months. When an 18-month-old bites the arm of another child, we are not especially alarmed about the biter's psychosocial functioning; infants and toddlers use their mouths in a variety of ways to express themselves and explore the world. However, when Sammy at age 3 bites his classmates, particularly as one of a constellation of aggressive behaviors, it is cause for concern. Or, consider Annalee's oppositional defiant behavior, which, although of concern because of its potential for placing her in high-risk situations with long-term negative consequences, is not uncommon and unexpected in an adolescent girl of 13 in the throes of puberty. If Annalee were a few years older and still

engaging in this behavior, it would have very different diagnostic implications and be of much greater concern regarding the prognosis for a stable adulthood. Developing a clearer understanding of Annalee's difficulties requires a more nuanced picture of her present and past biopsychosocial functioning and stressful life events than simply knowledge of her current symptoms.

Contextualized understanding of a child's functioning requires assessing multiple domains of the child's life. This involves gathering information from a diverse array of informants: parents or other caregivers (grandparents, foster parents, older siblings, extended family); daycare providers, classroom teachers, and other school personnel, such as social workers or guidance counselors who may have had contact with the child; pediatricians or other healthcare providers who have observed the child over time; and religious leaders, coaches, and others in the community who may have played a significant role in the child's life. As the earlier quotation from Achenbach and the identification of domain-specific functional impairments suggest (Blair 2002; Colvert, Rutter, Kreppner, Beckett, Castle, et al. 2008; Luthar & Brown 2007), maladaptive behavior in children may be limited to a single domain, such as home or school, or it may be pervasive across all areas of a child's life. Assessing the child's ability to function in each domain allows for a more complete and complex understanding of the level and type of disturbance and of treatment possibilities. Labeling a child like Tommy as having pervasive developmental disorder only describes a child with a set of limiting conditions, not an individual with strengths and potential (Volkmar, Lord, Bailey, Schultz, & Klin 2004).

Developing an understanding of an individual child's potential as well as his limitations is crucial in assessment and treatment planning. Partnering with parents and other family members in this process, as now called for in most mental health legislation, helps practitioners

focus on a child's or an adolescent's strengths; most parents, even those as worn out with caring for a challenging child as Tommy's mother, Lexy, see their child as much more than his special needs. Lexy and Tommy's sisters Patti and Julie notice Tommy's small achievements, like putting on his socks with the heels in the right place, or spreading peanut butter on bread without covering the table with it; they smile at his delight in the dolphins cavorting at the zoo or at the ants that busily scurry across the garden path. Assessment of a child with an MEB disorder is a narrative of who that child is and who she can become. This narrative should encompass more than disability; it should also include possibility—for the child and for the family.

### **Treatment of Mental, Emotional, and Behavior Disorders in Children and Adolescents**

Until the latter part of the 20<sup>th</sup> century, the range of treatments for childhood MEB disorders was relatively limited; play and talk therapies, milieu therapy, recreation therapy, and behavioral interventions based on social learning theory represented the extent of the clinical repertoire. Since the early 1980s, with extensive funding support from the National Institute of Mental Health, there has been an explosion in the development and testing of new models of treatment for children and adolescents, both psychopharmacological and psychosocial. Currently, the expectation is that treatments will be evidence-informed, if not wholly evidence-based. Evidence-based treatments are those whose effectiveness with a particular population and diagnosis or condition has been demonstrated through rigorous scientific research and whose application is well-defined and replicable (Brestan & Eyberg 1998; Burns, Hoagwood, & Mrazek 1999; Compton, Burns, & Egger 2002; Farmer, Compton, Burns, & Robertson 2002; Gleason, Egger, Emslie, Greenhill, Kowatch, Lieberman, et al. 2007; Kazdin 2003; McClellan & Werry 2003).



In response to federal mandates to demonstrate the effectiveness of various approaches to treating MEB disorders in children and youth, as well as to pressure from managed care companies to contain healthcare costs, efforts in the psychiatric community have increasingly focused on classifying childhood disorders and specifying targeted treatments, particularly psychopharmacological interventions. A 2002 article written by the head of the Child and Adolescent Treatment and Preventive Intervention Research Branch of the National Institute of Mental Health focused almost exclusively on the use of psychotropic medications for a range of childhood disorders, including depression and anxiety, ADHD, autism and schizophrenia (Vitiello 2002). Although both the National Institutes of Health and the American Academy of Child and Adolescent Psychiatry had issued psychosocial treatment recommendations (American Academy of Child and Adolescent Psychiatry 2001; National Institutes of Health 2000), the Vitiello article acknowledged that research on psychosocial interventions for children has been hampered by the inability to garner private sources of research funding compared to the extensive funding of pharmacotherapy studies by the pharmaceutical industry. A study published in the journal of the American Medical Association “found that the number of preschoolers taking stimulants more than doubled between 1991 and 1995, and the number of children taking antidepressants increased 200 [percent]” (Zito, Safer, dosReis, Gardner, Boles, & Lynch 2000). In more recent studies of preschoolers with MEB disorders, 12% to 16% have been treated with psychotropic medications (DeBar, Lynch, Powell & Gale 2003; Luby, Stalets, & Belden 2007). In 2007 a work group formed under the auspices of the American Academy of Child and Adolescent Psychiatry to study the use of pharmacotherapy in young children noted that there is not a broad evidence base for the use of most psychotropic medications in children under 6 years

of age (Gleason, Egger, Emslie, Greenhill, Kowatch, et al. 2007) and encouraged avoidance of medications when effective psychosocial interventions are available.

Much of the application of psychopharmacological treatments in children is based on the use of these medications in adults. The underlying assumption is one of continuity in psychiatric disorders throughout the life span; however, there is limited research supporting this belief. Symptoms of MEB disorders in children are generally more global and less categorical than in adults. Because of their limited cognitive development and abbreviated range of behavioral responses, a specific symptom in a child may indicate a variety of problems. For example, early morning wakefulness, which in adults is often a symptom of depression, may, depending on a child's developmental stage and individual biopsychosocial functioning, signify a still-unregulated biological clock; a nightmare; hunger; a wet diaper; or a response to a change in environment or routine, such as a move to a new dwelling. It might also signify a child's entry into a new developmental stage, such as beginning kindergarten. For some adult mental illnesses, such as bipolar disorder, which has been increasingly diagnosed in even very young children over the past decade (Moreno, Laje, Blanco, Jiang, Schmidt, & Olfson 2007), there is question as to whether these mental illnesses can actually occur in children because of the underdevelopment of certain parts of the brain until late adolescence or early adulthood (American Academy of Child and Adolescent Psychiatry 2007).

### *Psychopharmacological Interventions with Children*

There is no question that some medications are strikingly effective in treating certain childhood disorders. For example, the effectiveness of methylphenidate (Ritalin) for treatment of ADHD is well-established (American Academy of Child and Adolescent Psychiatry 2002; Gleason, et al 2007; Wilens, McBurnett, Stein, Lerner, Spencer, & Wolraich 2005). Randomized

clinical trials, the gold standard for establishing evidence-based treatments, have repeatedly demonstrated that methylphenidate is effective in managing core ADHD symptoms of inattentiveness, distractibility, and agitation, as well as increasing compliance and reducing aggression in children 3 years of age and older (Gleason, et al. 2007; McClellan & Werry 2003). There is also good clinical evidence supporting the use of selective serotonin reuptake inhibitors (SSRIs) for treatment of depression and clomipramine for obsessive-compulsive disorder in children (Bridge, Iyengar, Salary, Barbe, Birmaher, et al. 2007). According to one review of evidence-based psychopharmacological treatments, some studies support the use of SSRIs with other anxiety disorders in children as well (McClellan & Werry 2003). However, in 2004, the US Food and Drug Administration issued a warning that SSRIs (Prozac, Zoloff, Paxil, Luvox, and others) may cause an increase in suicidal thoughts and behaviors in children and adolescents. While subsequent studies have not found such an association (Simon, Savarino, Operskalski, & Wan, 2006), it is generally advised that youth who are prescribed an SSRI should be monitored carefully for any increase in depressive symptoms.

Other psychopharmacological treatments of childhood disorders are generally based on limited studies or have been extrapolated from adult use. Such issues as small sample sizes, problems with diagnostic inclusion criteria, high placebo response rates, and short treatment duration have limited the number of well-designed and executed studies that can establish the effectiveness of psychopharmacological treatments in children. Furthermore, there are few studies establishing the long-term physiological effects of such treatments over time. Some drugs, particularly some of the neuroleptics, are known to have serious side effects in adults; how these will affect the developing organism in a child is unknown (Gleason et al. 2007). Thus, in addition to using evidence-based psychopharmacological treatments instead of unproven ones,

children's mental health experts advocate using psychosocial interventions with proven effectiveness.

### *Evidence-Based Psychosocial Interventions for Children and Adolescents*

Historically, individual psychotherapy was the treatment of choice for older children, whereas play therapy was used to treat emotional and behavior problems in younger children. Traditional forms of psychotherapy include supportive, psychodynamic, cognitive-behavioral, and interpersonal therapies, as well as those based on family systems theory. Since the early 1990s, however, there has been a significant push to use only those treatments with well-established scientific evidence supporting their effectiveness. This effort has gained momentum in the last decade such that most federal and state agencies as well as private insurers that fund children's mental health services require evidence-based treatments to be used whenever possible. Several handbooks for practitioners outlining evidence-based therapies for children and adolescents have been published (LeCroy 2008; Gullotta, Blau & Ramos 2007; Steele, Elkin & Roberts 2008; Weisz & Kazdin 2010; Weisz 2004), including for specific child populations such as infants and young children (Mowder, Robinson, & Yasik 2009) and for specific practice locations such as schools (Macklem 2011; Mayer, VanAcker, Lochman, & Gresham 2011).

One widely-used form of psychotherapy with children for which there is strong evidentiary support is cognitive-behavioral treatment. This treatment has proven effective for a variety of emotional and behavior disorders exhibited by children and adolescents, including anxiety and depression, PTSD, adjustment and conduct disorders, eating disorders, and ADHD (Chorpita & Daleiden 2009; Chorpita, Daleiden, Ebesutani, Young, Becker, et al 2011; Weisz & Gray 2008; Wethington, Hahn, Fuqua-Whitley, Sipe, Crosby, et al 2008). Cognitive distortions are believed to play a major role in many children's MEB disorders because their immature

cognitive development heightens the possibility of misinterpreting or misperceiving situations or events. The focus of treatment is on (1) identifying and changing cognitive distortions that contribute to the child's difficulties; (2) learning new behaviors or skills for coping with situations that provoke anxiety or reactive behavior in the child; (3) testing newly acquired skills in novel situations; and, (4) processing their outcomes with the therapist. Such cognitive strategies as self-talk and guided imagery are taught to the child to help mediate anxiety. Cognitive-behavioral therapies are usually time-limited, often lasting for 16 sessions or less. Supplementary meetings are held with parents or other caregivers to teach them the basic principles of the approach, so they can reinforce its continued use after formal treatment ends.

Another form of evidence-based treatment for children and youth with oppositional and aggressive behaviors is parent management training (Dretzke, Frew, Davenport, Barlow, Stewart-Brown, et al 2005; Kazdin 2008). Parent management training is based on research that shows that parents or caregivers unintentionally reward a child's negative behavior by over-responding to the child when such behavior occurs and, at the same time, ignoring the child when his or her behavior is positive. The child's negative behavior is reinforced by the parents' attention even when the attention is also negative, such as yelling, name-calling, threats, or physical aggression. This type of interaction between parent and child is termed the "coercive family process" and is thought to contribute to development of oppositional and conduct disorders in children (Patterson 1982).

The focus of parent management training is on teaching parents to alter this coercive interaction pattern by not responding to their child's provocative behaviors, by attending to and rewarding positive or desired behavior, and by ignoring or delivering mild forms of punishment to extinguish negative behavior. Parents are helped to set clear rules and expectations for their

child to follow and taught how to negotiate and compromise with their child to achieve desired outcomes. Treatment sessions are held primarily with parents to allow them to review and practice their newly learned skills, role play situations in which they apply the principles they are learning, and review the behavior change program they are implementing at home. Treatment is relatively short-term, the length depending on the extent of the child's difficulty and the parents' ability to grasp and apply the program's principles—usually from 4 to 8 weeks for parents of young children, and somewhat longer, 12+ weeks, for parents of adolescents with serious conduct problems (Kazdin 2008).

Parent management training has been extensively studied and is well supported by empirical research (Dretzke, et al 2005; Mabe, Turner & Josephson 2001). The model has been applied in diverse settings (home, school, community, residential institutions) with a range of age groups and across cultures. Improvements observed in child behavior have been maintained for as long as 10 to 14 years. Adaptations of this model using videotapes with groups of parents of young children with conduct problems have received strong empirical support as well.

Disruptive behavior like Sammy's, which can range from relatively minor actions (e.g., talking back) to more severe forms of aggression (e.g., hitting, biting) is the most common reason for referral of preschool children for mental health services (Mowder, et al 2009). One evidence-based treatment designed to assist children like Sammy and their parents is parent-child interaction therapy (PCIT) (Eyberg & Bussing 2010; Zisser & Eyberg 2010). This intervention focuses on strengthening the attachment between parent and child, essential for a child like Sammy with an early history of disordered/disorganized attachment resulting from maltreatment, as well as separation and loss of his birth parent. PCIT posits that "a secure, nurturing relationship is a necessary foundation for establishing effective limit setting and consistency in

discipline that will achieve lasting change in the behaviors of parent and child” (Brinkmeyer & Eyberg 2003, p. 205). There are two phases to PCIT. The first focuses on developing the parent-child relationship, and the goal of the second phase is to improve parents’ ability to set limits and apply consistent discipline. The effectiveness of PCIT in reducing children’s disruptive behavior and increasing parenting competency has been demonstrated in a number of controlled studies comparing outcomes for families receiving PCIT to those for families on a treatment wait-list (Berkovitz, O’Brien, Carter, & Eyberg 2009). Intervention with young behaviorally disordered children like Sammy is essential, because studies have repeatedly shown that children with severe MEB disorders in the preschool years are at greater risk for antisocial behaviors and criminal involvement as adolescents and young adults (Burke, Loeber, & Birmaher 2002; Egger & Angold 2006; Webster-Stratton, Reid, & Hammond 2004).

Given the current understanding of children’s MEB disorders as having multiple causes, it follows that several of the treatments that are considered evidence-based focus on the multiple systems that interact to support or ameliorate a child’s problematic functioning. For youth with conduct disorder and associated comorbid disorders, such as substance abuse, there are several family- and community-based approaches that have been shown to be effective in multiple outcome studies. These include multisystemic family therapy (MST) which works simultaneously with the family, youth, peers and school to identify and address obstacles and establish supports for the youth and family in their quest for change (Henggeler, Schoenwald, Borduin, Rowland & Cunningham 2009). The developers of MST have worked to insure treatment fidelity by tailoring the intervention’s application to antisocial behavior and MEB disorders and by licensing the intervention and mandating training from MST Services ([www.mstservices.com/programdesign.pdf](http://www.mstservices.com/programdesign.pdf)). The MST model has been empirically tested in a

number of studies, including several using randomized controlled trials (Schaffer, & Borduin 2005; Stambaugh, Mustillo, Burns, Stephens, Baxter, et al 2007; Timmons-Mitchell, Bender, Kishna, & Mitchell 2006). Although Littell (2005) has raised questions regarding the model's effectiveness (see Henggeler, Schoenwald, & Borduin 2006, for a response to this critique). In their review of evidence-based practice in child and adolescent mental health services, Hoagwood and her colleagues (2001) cited MST as having among the strongest empirical support of any children's treatment. These authors note that research on MST suggests that supervision and training of clinical staff and institutional support for the model are key to successful outcomes.

Other family-focused treatment models with strong empirical support include multidimensional family therapy (MDFT), developed to treat adolescent substance abuse and associated conduct problems. MDFT has been empirically tested in multiple studies with ethnically diverse populations and a range of problem severities (Liddle, Dakof, Turner, Henderson, & Greenbaum 2008; Liddle, Roe, Dakof, Henderson, & Greenbaum 2009). It is listed on the federal National Registry of Evidence-Based Programs and Practices as a treatment model that has a strong evidentiary base ([www.nrepp.samhsa.gov](http://www.nrepp.samhsa.gov)). Similarly, the family-based treatment model developed in Pennsylvania under that state's Child and Adolescent Service System Program (CASSP) initiative was found to be effective in a study of nearly 2,000 participating families in preventing crisis hospitalization of children with severe MEB disorders and stabilizing them in their families and communities (Lindblad-Goldberg, Jones, & Dore 2004). This intervention is based on ecosystemic and structural family therapy principles. Research on this model highlights the multidetermined nature of MEB disorders in children, finding that one-third of families in the study were known to multiple state service systems,



including child welfare, substance abuse, adult mental health, and criminal justice (Lindblad-Goldberg, Dore, & Stern 1998).

Another family-based treatment listed on the National Registry of Evidence-Based Programs and Practices is brief strategic family therapy (BSFT), developed at the Center for Family Studies at the University of Miami specifically for conduct-disorders and substance-abusing Hispanic youth and their families (Robbins, Horigian, Szapocznik, & Ucha 2010). According to its authors, BSFT was developed from a Hispanic perspective, recognizing and addressing cultural factors, particularly those stemming from different rates of acculturation between parents and children, which contribute to development and maintenance of serious conduct problems in youth (Coatsworth, Santisteban, McBride, & Szapocznik 2001). BSFT, whose outcomes have been tested in randomized clinical trials (Santisteban, Perez-Vidal, Coatsworth, Kurtines, Schwartz, et al 2003), is highly structured, problem-focused, and directive. It is intended to provide parents with practical experiences in effecting changes in their child's functioning (Robbins et al 2010).

Each of these family-based treatments views the child or adolescent with severe MEB disorders as embedded in a context described by family, school, community and peers, all of which must be engaged to support improved psychosocial functioning in the child. Even family-based treatments that originally drew primarily on family systems theory to inform their intervention strategies, have expanded their purview well beyond the family to target the youth's social ecology, including peers, school personnel, community organizations and agents, other involved service systems, and the family's formal and informal support networks.

In Annalee's case, a family-based approach might begin working with Annalee and her parents together to assess the situation and develop a clearer understanding of the history of their

current difficulties as well as the commitment of each family member to changing the situation. Concurrent individual treatment with Annalee might aim to help her establish personal goals for herself and identify strategies and actions to achieve those goals. Treatment with Annalee's parents together would draw on principles of parent management training to help Nancy and Bob Elliot learn new ways of responding to and managing their daughter's oppositional and defiant behavior. The clinician might also help the Elliots seek out a couples group for parents of early adolescent girls with MEB challenges. Local chapters of the National Federation of Families for Children's Mental Health ([www.ffcmh.org](http://www.ffcmh.org)) often sponsor groups for parents of children with MEB disorders and, if not, have information about accessing such groups locally. State affiliates of the National Federation go by various names such as Parent Support Network or [state name] Federation of Families; a list of state and local organizations and their contact information can be found on the National Federation website. Parents repeatedly report that being put in contact with other parents who have the same or similar struggles with children with MEB disorders is the single most helpful intervention they experience. These local parent organizations often have helpful information about resources for families and children with MEB disorders such as schools, summer camps and after-school programs. They also play an advocacy role with local, state, and federal funders of services for children with these disorders.

Intervention with Annalee's school would focus on securing an educational assessment to determine if there are any undiagnosed special learning challenges or needs and to access the services and supports she would need to succeed in high school. Community resources would also be engaged to help Annalee find satisfying and sustaining supports outside the family as she seeks to establish her autonomy in more prosocial ways. Young teens like Annalee can often be engaged in volunteer activities that help to build a sense of self-esteem and feelings of self-

efficacy by giving to others. Helping Annalee engage with prosocial peers would also be a focus of a family-based approach. Connecting with activities that interest a young adolescent girl, such as an art class, a modeling class, or a theater group, where other teenagers with similar interests can be found, is an essential component of a multidimensional treatment approach.

### **Mental Health Services for Children and Youth**

Prior to the late 20<sup>th</sup> century, mental health services for children consisted primarily of two types of care: (1) long-term care in inpatient settings, such as residential treatment centers and state psychiatric hospitals; and (2) outpatient treatment in a mental health center, psychiatrist's office, or child guidance clinic. Partial hospital or day-treatment programs, usually affiliated with an inpatient psychiatric facility or residential treatment center, were available in some urban communities, as were treatment foster homes or group homes for MEB disordered youth. The latter were often run by religious or secular child-serving organizations with minimal efforts at treatment. Mental health care of children during this time was dominated by psychodynamic theories of the origins of childhood mental disorders that frequently saw the family, particularly the mother, as the primary causal agent in the child's distress. Separating the child from the family was a preferred course of treatment. In some facilities, such as Bruno Bettelheim's residential treatment center, the Sonia Shankman Orthogenic School, located on the University of Chicago campus, parents were not allowed any contact at all with their children for as long as a year because of Bettelheim's belief about their lethality to the child's recovery process. Indeed, Bettelheim was one of the chief proponents of the then-popular, now discredited, theory of the "refrigerator mother" whose withholding of maternal affection resulted in childhood autism (Bettleheim 1967).

Many social factors converged to bring about a sea change in children's mental health services during the last decades of the 20<sup>th</sup> century. The family therapy movement, which began in the late 1950s and gathered steam during the 1960s and 1970s, strongly rejected psychodynamic interpretations of children's MEB disorders. Family therapy, informed by general systems theory newly popular in the hard sciences, focused on the functioning of the family system as a whole and on the role played by the child's symptoms in maintaining dysfunctional family interaction. In the view of family therapists of the time, it was a mistake to treat the child apart from the family, as systems theory suggested that removal of one family member's symptoms would simply result in another family member becoming symptomatic and assuming the role of the identified patient in order to maintain the system's customary functioning. Although this approach helped remove parents as the focus of blame and engaged them as partners in the therapeutic process, the most prominent early family therapists, many of whom were male psychiatrists, continued the traditional medical role of expert authority. It was another, parallel movement that gave parents a real voice in their children's treatment process.

During the mid-20<sup>th</sup> century, a series of lawsuits brought by advocates and parents whose children were residing in state-run facilities for persons with developmental disabilities and mental illnesses challenged the level of care provided in such institutions. Graphic court testimony about the abuse and neglect perpetrated on hapless and helpless residents led to a series of legal decisions requiring states to provide adequate care for all those with handicapping conditions in the least restrictive, most normal settings possible. In response, large state institutions downsized practically overnight or closed their doors completely, releasing residents, including many children with serious MEB disorders, back into their families and communities. Parents who had become skilled advocates in working for institutional reform now turned their

attention to insuring that community institutions, such as schools and mental health centers, provided the services their children required.

In 1982, Jane Knitzer and her colleagues at the Children's Defense Fund documented the consequences of failing to provide adequate community mental health services for children. In response to Knitzer's findings and to pressure from parent advocacy groups, the federal government initiated the Child and Adolescent Service System Project (CASSP), designed to assist the states in developing a continuum of mental health services for children (Pumariega, Winters, & Huffine 2003). The CASSP initiative incorporated a set of principles intended to inform creation of a "system-of-care" for children's mental health services. These principles, first articulated by Stroul and Friedman in 1986, have become the central organizing force shaping development of children's mental health services in the United States today. System-of-care principles include: (1) attention to the individual needs, preferences, and cultural characteristics of the child and family; (2) use of a strengths-based, rather than deficits-informed approach to assessment and treatment; (3) involvement of families in their children's care and in program and system development; (4) cross-agency coordination and collaboration in service system management and service delivery; and (5) use of the least restrictive service setting that is clinically appropriate. Although today these principles may seem quite routine, at the time they were first initiated, the call for family involvement in treatment planning and for culturally aware and competent service delivery was perceived as a radical departure from expected practice.

Along with the CASSP initiative, a second piece of federal legislation significantly reshaped the community-based care of children with MEB disorders. In 1987, Congress passed the Education for All Handicapped Children Act (P.L. 94-142) which mandated that children with special education needs, including those with serious MEB disorders, be served in

community schools, mainstreamed in regular classes with support when possible and in self-contained classrooms when necessary. P. L. 94-142, as it was known, required that all children with special educational needs have an individualized education plan (IEP) that specified how the school would meet the child's particular learning needs. According to the law, parents were to be partners in developing this plan and were required to sign off, approving its provisions. Schools were mandated to provide whatever services the child required to succeed academically, including psychological services, transportation, social work services, therapeutic recreation, and even a full time classroom aide.

The Individuals with Disabilities Education Act (IDEA), the legislation that supplanted P. L. 94-142, first enacted by Congress in 1990 and revised in 1997, allowed schools to classify a child with an MEB disorder either as emotionally disturbed (ED) or as "other health impairment" (OHI). To qualify as ED under IDEA, a child had to exhibit one or more of the following: (1) an inability to learn that is not explained by intellectual, health, or sensory factors; (2) an inability to build or maintain satisfactory interpersonal relationships with peers or teachers; (3) inappropriate types of behavior or feelings under normal circumstances; and (4) a tendency to develop physical symptoms or fears associated with personal or school problems (Roberts, Jacobs, Puddy, Nyre, & Vernberg 2003). These qualifying conditions were determined by school personnel based on observation and experience with the child in the academic setting. When there is a DSM Axis I diagnosis by an outside mental health professional, the child may qualify for special education services under the OHI designation if the symptoms interfere with the child's educational process, not simply on the basis of the diagnosis.

Despite federal mandates directing schools to provide the services required for all children to function academically, by the end of the 1990s, the Surgeon General's report on

mental health estimated that only about 2% of children with MEB disorders were receiving appropriate educational services (U. S. Department of Health and Human Services 1999). Differential demand for and availability of services, disagreements over responsibility for funding and providing such services, and conflicting legal interpretations regarding mandated services and educational needs colored implementation of educational services for children with MEB disorders at the end of the 20<sup>th</sup> century. One of the difficulties proved to be the lack of well-defined boundaries between educationally-related services mandated under IDEA and services that are rehabilitative in nature. When is psychological treatment necessary to enable a child to form the interpersonal relationships with peers and teachers that facilitate learning, and when is it intended to restore a child's overall psychosocial functioning? In the first instance, the child's school district would be responsible for providing and paying for such treatment under IDEA; in the second instance, it would not. These kinds of distinctions were the subject of numerous court cases, as parents and school districts fought to determine legal responsibility for funding the services required to support a child's educational performance. In hindsight, given what we have learned in the ensuing years about the relationship between executive functioning, a concept that includes working memory, attention and inhibitory control, and the ability to learn in school, these earlier efforts to parse elements of a child's MEB disorder that relate specifically to classroom functioning clearly missed the essential connection between cognition and emotion (Bierman et al 2008; Blair 2002; Blair & Diamond 2008; National Scientific Council on the Developing Child 2008).

In 1992, building on the CASSP foundation, the federal government initiated the Comprehensive Community Mental Health Services for Children and Their Families program to expand the availability of community-based mental health services for children by developing

local systems-of-care across the US. The local systems-of-care sites funded by this initiative were quite varied and included whole states, such as Vermont and Rhode Island; entire counties, such as Stark County, Ohio, and Ventura and San Mateo counties in California; inner-city neighborhoods, such as East Baltimore and Mott Haven in the Bronx; and one American Indian tribe, the Navajo Nation, which spans several states. By the end of the decade, more than 40,000 children and their families had received services in sites funded by this initiative (Holden, Friedman, & Santiago 2001). A 5-year evaluation of the first 22 sites funded under the Comprehensive Community Mental Health Services program found that, in comparison with sites providing children's mental health services using a traditional service delivery model, services within the system-of-care sites were more child- and family-centered, community-based, and culturally-competent (Hernandez, Gomez, Lipien, Greenbaum, Armstrong, & Gonzalez 2001). According to the evaluators, their findings indicated that the system-of-care philosophy was influencing mental health practice at the clinical level, not simply at the larger systems level. As a result of these and other evaluation findings, the Surgeon General's Report on Mental Health, issued in 1999 (U. S. Department of Health and Human Services), incorporated the system-of-care philosophy in its recommendations for service system reform and delivery of mental health services to children and their families.

Intensive case management (ICM) and wraparound services are two forms of community-based services that have developed significantly as a result of the system-of-care philosophy designed to support and sustain children with MEB disorders in their families and communities. ICM was modeled on adult mental health services for individuals who are chronically mentally ill and who require ongoing support and assistance to remain stable in the community. Children's ICM works with families to coordinate provision of the array of



community services needed to maintain the child in the least restrictive setting possible (Evans, Armstrong, & Kuppinger 1996). Depending on the ICM model employed, the case manager plays a wide variety of roles—assessor of service need, service broker, purchaser of services, and provider of clinical care. Studies have shown that children receiving ICM services spend fewer days in psychiatric inpatient settings and more days in community settings with longer periods between hospitalizations (Evans, Huz, McNulty, & Banks 1996; Hoagwood, et al 2001).

“Wraparound services” is a term used to describe a model of community-based care that “wraps” individualized services around a specific child and family designed to maintain the child in the home and community. According to its proponents, wraparound is “... an *individualized, family-driven and youth-guided team planning process* that is underpinned by a strong *value base* that dictates the manner in which services for youth with complex needs should be delivered...” (Bruns, Walker, Zable, Matarese, Estep, et al 2010, p. 315). Although the model has been in existence since the 1970’s, beginning in 2004, efforts were made to articulate the wraparound model so that it could be substantiated as an evidence-based practice (Mears, Yaffee, & Harris 2009; Suter & Bruns 2009). These efforts coalesced into the National Wraparound Initiative which works to support the fidelity and integrity of the model ([www.nwi.pdx.edu](http://www.nwi.pdx.edu)). A number of states have mandated use of the wraparound model as a focal element in the state’s children’s mental health services system-of-care.

Wraparound services have proven effective in preventing out-of-home placement of children like Tommy. A wraparound program might provide an early-morning aide, who would come to Tommy’s home to assist his mother in getting him ready for school. The aide would also help Lexy design and implement a behavior modification plan that would help Tommy learn to get ready for school in such a way that eventually the aide’s help would no longer be needed and

the experience would not be so exhausting and demoralizing for Lexy. Similarly, when Tommy is ready to be mainstreamed into a regular public school classroom, wraparound services might provide a classroom aide who would remain at Tommy's side throughout the day to assist him in managing the academic and social demands of the classroom until he is able to do so with less intensive support. Wraparound services could also include weekend respite services, so that Lexy and her daughters could enjoy some time together, a carpenter to modify the front door of their house so Tommy cannot escape at will into the street, and even an evening get-together for Lexy and her neighbors with Tommy's wraparound care manager, so the neighbors can be helped to understand Tommy's special needs and the parenting demands on Lexy. Huffine (2002) describes wraparound services like these as "practical accommodations" (p. 809). With wraparound services in place, it is likely that Lexy and her children would experience a more stable, less stressful, and more satisfying family life.

### **Access to Mental Health Care for Children and Youth**

As noted previously, it is estimated that only about one in five children who needs mental health care actually receives it. Despite efforts by the federal government to expand access to mental health care for children through the initiatives described above, other social and economic factors have resulted in funding directed primarily at individuals with severe and persistent disorders. Preventive services and those aimed at children and adolescents whose emotional and behavioral difficulties are not yet severe enough to cause disruption to the systems with which they interact are extremely limited. Introduction of managed care, cost containment, and benefit limits in private insurance, along with expanded drug benefits, have reshaped the delivery of mental health services in the private sector. Child psychiatry is now focused almost entirely on the management of psychotropic medications, rather than delivery of psychosocial interventions.

Medicaid, a jointly-funded, federal-state program that provides health coverage to low income individuals, is the largest provider of mental health services for children in the United States, especially for children in foster care. However, modest provider reimbursement and bureaucratic inefficiencies have resulted in fewer providers accepting this form of payment. Even providers who do accept Medicaid are restricted in the amount of treatment time that is reimbursable, depending on state guidelines. Medicaid funds inpatient psychiatric hospitalization, residential treatment, and group care for children and youth with MEB disorders. To fund home- and community-based treatment programs, such as MST, states must apply for waivers to the usual reimbursement for out-of-home care. The waiver program allows states to apply to the Center for Medicare and Medicaid Services (CMS) to expand community-based services for children with MEB disorders who would otherwise require in-patient psychiatric hospitalization. This program was expanded in 2006, under the federal Deficit Reduction Act, to include waivers for community care for children whose treatment needs would otherwise require residential treatment, considered a less restrictive form of out-of-home care than psychiatric hospitalization.

Medicaid funds the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program which provides for the screening of Medicaid-eligible children for physical, dental, vision and hearing problems. EPSDT also covers medically necessary services designed to correct physical and mental conditions; however, although they can do so under the legislation, few states elect to cover screening for mental health problems in their EPSDT programs. Thus MEB disorders whose treatments are covered under this program are seldom identified. The federal government also provides supplemental insurance under the State Children's Health Insurance Program (SCHIP) for working families whose income is too high to qualify for

Medicaid coverage, but too low to afford private health insurance. States can choose to expand Medicaid to cover these children, to insure them through a separate program, or some combination of the two options. Children insured under an expanded Medicaid program are entitled to EPSDT screening and services; however, mental health coverage under the separate program provision is quite variable.

The 2008 passage of the Paul Wellstone-Pete Domenici Mental Health Parity and Addiction Equity Act required that group health plans provide the same range and scope of mental health and substance use treatment services that they provide for medical services. Insurers are no longer able to set higher co-pays or put stricter limits on mental health and substance use benefits as they did previously; however, they can apply equitable cost containment across all services. This legislation did not go into effect until January 1, 2010, and mental health professionals and providers are still determining how the law will be implemented. Advocates for children, particularly those who advocate for community-based services, are waiting to see how health insurers will treat services such as home-based treatments that are not part of the traditional psychiatric repertoire.

A significant change in public mental health policy for children in recent years is the substantial increase in funding to the public education system to address mental health and psychosocial concerns. There has also been a trend toward school-community collaboration in meeting the mental health needs of young people. Recent studies have shown that as many as three-fourths of children who receive any mental health services receive them in school settings. For most of these children, school-based services are the only mental health care they receive.

Mental health service use also varies by type of disorder and ethnicity. Studies have shown that children with disruptive disorders are much more likely to be identified as needing

services than those with anxiety or mood disorders. Similarly, studies of mental health service use by ethnicity and funding have found that Hispanic youth are least likely to receive needed services, whereas youth with publicly-funded healthcare such as those in foster care, receive more mental health care than children with private health insurance or children with no insurance at all (Kataoka, Zhang, & Wells 2002). Despite these findings of differential access to care, the most common finding across all studies is the low level of service access by children in need of mental health care.

## **Conclusion**

In this chapter, I have examined child mental health: the etiology of MEB disorders in children and youth; the types and prevalence of these problems in children and adolescents across the US today; how these problems are currently being assessed and treated; and the service system and public policy that supports this treatment. We have seen how mental health problems are manifested differently in children and adolescents by viewing the experiences of three families struggling to meet the caregiving demands of children at different developmental stages with varying forms of maladaptive behavior. Their life experiences and the unique symptoms of their disorders suggest differing dynamic processes of nature and nurture, as reflected in the stories of Tommy, Sammy, and Annalee. It is likely that Tommy's current psychosocial functioning, reflective of pervasive developmental disorder, is primarily the result of a biological process, perhaps with a genetic component. Although positive nurturing by his mother Lexy and others in his environment can help to modify the negative effects of Tommy's disorder and enhance positive aspects of his functioning, this case illustrates the limitations of nurture when nature has dealt a crippling hand.

Sammy represents a child whose maladaptive functioning reflects the inadequate nurturing and traumatic effects of his early life experiences. Although he may have been biologically vulnerable because of the toxic prenatal environment that resulted from his mother's drug use and accompanying lack of adequate nutrition, Sammy's physical and emotional neglect as a newborn as well as the physical and sexual abuse he is said to have suffered at the hands of his mother's male partners, make Sammy a child whose personality and functioning were formed more by nurture than nature.

Annalee, our third case study, represents a young adolescent whose current emotional and behavioral difficulties suggest developmental vulnerability resulting from the interaction of nature and nurture over the course of her childhood. She was a sensitive, somewhat fussy infant cared for by a mother who was struggling with her own postpartum depression and marital difficulties. As a young child, Annalee was anxious, timid, and somewhat school phobic. In elementary school she was an outsider with few friends. Thus, the stage was set for heightened reactivity to the biological changes and psychosocial demands of puberty.

We have also explored the application of various evidence-based interventions with Tommy, Sammy, and Annalee and their families. We saw that wraparound services, designed in collaboration with Lexy and others involved in Tommy's life, would provide the range of supports needed to maintain Tommy in his family, school, and community, and to maximize the possibilities for realizing his full potential.

We noted that PCIT, designed to help youngsters like Sammy—with problems in attachment and disturbances in their psychosocial functioning—experience the kind of positive nurturing relationship that will form the basis for authoritative caregiving by his loving adoptive parents. PCIT will teach the Rosses how to set clear limits with Sammy and to shape his

behavior in ways that were not necessary with their biological children, who never suffered the traumatic early abuse and neglect that Sammy did. The Rosses will learn the importance of consistent early intervention with children like Sammy, whose aggressive behavior can be predictive of lifelong disturbance in psychosocial functioning.

Finally, we identified family-based therapy as the treatment of choice for Annalee and her family, who are challenged to cope with her oppositional and defiant behavior in transition to adolescence. The chaos she is creating for the family is reawakening her mother's depression and triggering her emotional withdrawal from her daughter, as well as exacerbating her father's tendency to become rigid and authoritarian. Neither of these emotional responses will aid Annalee in resolving her developmental struggles. Family-based treatment will help this family regain its emotional balance by addressing the immediate crisis in ways that allow for growth and change in all family members.

These three narratives of Tommy, Sammy, and Annalee highlight the varied mental health needs of children and their families and reflect the importance of continued development of the system-of-care that informs provision of mental health services to children and adolescents in the US today.

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