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Addressing Early Adversity Through Mental Health Consultation in Early Childhood Settings

Special Issue Guest Editor's Note: *In this article the authors examine the role of early childhood mental health consultation as a mechanism of providing support for children exposed to early adversity. This article builds on the article "Family Relations, Stress, and Vulnerability: Biobehavioral Implications for Prevention and Practice" (this issue, 9–23), by Ha and Granger. This article provides an overview of how negative parent–children relationships affect the biological stress system and how these psychobiological changes are related to future mental health.*

ABSTRACT

The science of early childhood adversity has advanced in recent years, documenting long-term consequences of exposure to traumatic events and toxic stress for health and development. Sequelae of toxic stress exposure can be mitigated by the buffering effect of a

caregiver who can help young children manage their reactivity to these early stressors. Interventions are needed to build the capacity for caregivers (including the early childhood workforce) to build resilience in young children exposed to early adversity. This article shares best practices from the field of early childhood mental health consultation (ECMHC) as a strategy to help reduce the impact of stressors on young children. ECMHC embedded with child care, focused on children in foster care, and lessons learned from early work on ECMHC in home visiting are highlighted as examples of interventions to build the buffering capacities of important adults in children's lives. Policy recommendations are offered for integrating mental health services into early childhood settings to build resilience in high-risk children and families.

In the United States, a significant minority of young children are growing up in homes that are characterized by at least one sociodemographic stressor, such as extreme poverty or a single-parent household (Jiang, Ekono, & Skinner, 2015). Although the presence of these stressors alone does not determine poor child development outcomes, recent research has suggested that the link between exposure to stress and longer term negative impacts is mitigated by the presence of a buffering adult caregiver (Shonkoff, Boyce, & McEwen, 2009). Researchers have coined the term *toxic stress* to

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describe exposure to stressors—in the absence of a nurturing caregiver—that can lead to a prolonged activation of the body's stress-response system. Toxic stress in very young children can result in long-term changes to their brain's architecture (National Scientific Council on the Developing Child, 2005/2014). In addition, data from the Adverse Childhood Experiences Study provides compelling longitudinal evidence that early adversities have long-term effects on lifelong health outcomes (Felitti et al., 1998). Finally, the legacy of resilience literature shows that having at least one competent caregiver and learning adaptive coping skills can foster resilience in children exposed to early adversity (Masten, 2001). We believe these converging lines of research, taken together, provide a scientific rationale for scaling up interventions that can build the capacities for adult caregivers to buffer exposure to young children's exposure to stressors.

To that end, in this article we focus on the use of early childhood mental health consultation (ECMHC) as a support to home visitors and child care workers who are serving young children exposed to or at high risk for early adversity. We begin with a brief overview of toxic stress and related adverse outcomes (see Ha and Granger, 2016, for an extensive discussion of the neurobiology of adversity). We then describe how ECMHC is defined and implemented and provide a summary of the evidence for its effectiveness in early childhood (EC) settings. Next, we provide several examples of how ECMHC has been integrated into child care and home visiting in the service of young children experiencing early adversity. We focus on children in foster care who are served in child care settings as an example of how ECMHC builds the capacity of other adults in the child's life to serve as buffers of toxic stress. Home visiting is highlighted as a strategy that is used both domestically and internationally as a way to reach some of the most vulnerable pregnant women and families with young children. We conclude with reflections on the importance of integrating mental health expertise across a range of settings to address the needs of these children and their families, including a few examples of more intensive interventions that should be a part of the broader continuum of services available to young children at risk for poor outcomes due to early adversity.

CHILDREN'S EXPERIENCE OF TOXIC STRESS

During the EC period, a time of rapid brain development, toxic stress can lead to overproduction of neural connections in the areas of the brain involved in fear, anxiety, and impulsive responses, while fewer neural connections are produced in areas of the brain dedicated to reasoning, planning, and behavioral control (National Scientific Council on the Developing Child, 2005/2014). Toxic stress not only disrupts brain architecture but also affects the long-term functioning of the biological stress system, leading to permanent changes so "high alert" is triggered at lower thresholds (see Ha & Granger, 2016). This overactivation of the stress-response system increases the risk of stress-related diseases and even cognitive impairment as children move through childhood and into adulthood (Shonkoff et al., 2009). There is also research that suggests that some children who have experienced trauma may have an underactive stress response system. Whether underactive or overactive, when the body's release of stress hormones follows an atypical pattern children are at increased risk for problems with physical and emotional health (Ha & Granger, 2016).

Given the long-term consequences of adversity that occurs during the early years of life, the high rates of maltreatment of very young children are particularly concerning. In the United States, in fiscal year 2013, children age 5 and under made up 48% of children entering foster care, with children under age 1 making up the largest group (17% of all children entering care; U.S. Department of Health and Human Services, Administration for Children and Families, 2013). Infants and very young children who have experienced abuse or neglect are at high risk for a range of poor outcomes. For example, they are more likely than others to display attachment difficulties (Barnett, Ganiban, & Cicchetti, 1999). As these children become older, they are likely to have low social status, poor joint play skills, and inaccurate interpretation of social cues. Ultimately they are at higher risk than their peers for mental health problems, such as depression, disruptive behavior disorders, posttraumatic stress disorder (PTSD) and other anxiety conditions, depression, and disruptive behavior patterns (Brown, 2003; Kolko, 2002).

Young children who experience trauma are more likely to have brain changes that make it more difficult to be "school ready." Early childhood trauma has been associated with a smaller

cortex, which is responsible for memory, focus and attention, and thinking and planning, ultimately affecting a child's ability to learn and to manage his or her emotions (National Scientific Council on the Developing Child, 2011; Zero to Six Collaborative Group & National Child Traumatic Stress Network [NCTSN], 2010). As these children enter school, their ability to focus on learning is hindered. Experiences of early adversity can also overwhelm children's ability to cope with thoughts and emotions related to the trauma they have experienced. This may result in feelings of fear, hopelessness, and helplessness. Although very young children cannot tell us that they feel afraid, overwhelmed, or helpless, their behaviors provide us with important clues about how they are affected (NCTSN, 2008; Zero to Six Collaborative Group & NCTSN, 2010). Young children who are just learning how to control or regulate their emotions and behaviors can be profoundly affected by trauma. The behaviors that result can be difficult for adults around them to understand and to manage.

Often, exposure to early traumatic experiences leads to additional adversities, such as separation from parents and placement in foster care. Unfortunately, the systems designed to protect children often inflict additional traumas on children in the form of disruptions to children's developing relationships, such as multiple foster placements and school or child care changes. Multiple placements, restrictive care, and longer foster care stays are all predictive of poorer child outcomes (Newton, Litrownik, & Landsverk, 2000). The social services system is often overburdened and ill equipped to meet the unique needs of very young children exposed to early adversity. For example, fewer than one third of children in foster care nationwide receive mental health services (Rosenfeld et al., 1997). Furthermore, most services are targeted to older children, with services for the very youngest children being particularly underdeveloped (Knitzer, 2000).

CURRENT APPROACHES TO REDUCING THE IMPACT OF ADVERSE EARLY EXPERIENCES

As our knowledge of the long-term impact of early adversity has grown, there has also been growth in the continuum of services and supports designed to both prevent and ameliorate these effects on young children and their families. For example, the U.S.

federal government has recently funded a significant expansion of evidence-based home visitation services to families at high risk for adverse childhood experiences. These models often enroll pregnant women and provide home-based coaching to families up through the child's third birthday; some serve children up through age 5 ("Home Visiting," <http://www.acf.hhs.gov/programs/ecd/home-visiting>). Although the specific approaches vary, commonalities among many of the effective services include an emphasis on building the capacity of the caregiver to provide sensitive, nurturing, consistent caregiving; taking steps to increase a child's sense of safety; and intentional teaching of social and emotional skills to young children.

Most interventions for young children and their families with experiences of early adversity are largely designed to support children's relationships with the key adults in their lives. A core premise in the field of infant mental health is that babies' emotional, social, and cognitive development occurs in the context of their caregiving relationships (Osofsky & Lieberman, 2011). Secure attachments support the infant's exploration of the world and provide the foundation for healthy development. Attachment is linked to the ability to learn, to control one's behavior, to have school success, and to be able to form relationships with others. Children who are unable to form and maintain an attachment to at least one stable, trusted adult suffer. Disrupted attachment contributes to emotional, social, and behavior problems and can have negative effects on the developing brain (Mennen & O'Keefe, 2005). The results can be delays in learning, dysfunction in other relationships, and problems regulating emotions. Attention to children's attachment is essential for improving outcomes for children with early adversities that have resulted in disrupted relationships, such as placement in foster care (Mennen & O'Keefe, 2005). Furthermore, there is evidence that children's biological stress response systems are malleable and that interventions focused on improving parenting and family relationships can normalize the child's physiological response to stress (Ha & Granger, 2016).

Although support for the parent-child relationship is a primary concern, support for other relationships is also important. Parents are usually the primary attachment figure for a child, but other adults in the child's life can also be stable attachment figures. For many children

with early adversity, their relationship with their primary caregiver may be compromised because the trauma involved the caregiver (Zero to Six Collaborative Group & NCTSN, 2010). These children may be able to compensate for their loss by forming attachments to other caring adults (e.g., foster parents or child care providers) who are a regular part of their life and understand the child's need for closeness and security—even when the child's behavior makes that difficult. Children can also benefit from attachment to more than one person. This means that secure attachments with teachers or caregivers can be helpful for young children (Shonkoff & Phillips, 2000).

This is particularly important given the fact that the majority of young children spend a lot of time in out-of-home care, and children who have experienced early adversities are no different. Anecdotal reports indicate that most children in foster care attend child care while their foster parents work. There have been increasing calls to attend to the quality of the experience foster children have in child care, in particular the nature of their relationship to their caregiver (Conners-Burrow, Patrick, Steier, & Lloyd, 2013). Nurturing relationships are critical, and it is also important to ensure stability in relationships between children and their caregivers. Reducing the number of moves between both homes and child care centers can promote the development of supportive relationships with teachers and peers and enhance social-emotional development (Christian & Poppe, 2007).

ECMHC

ECMHC is being implemented in more than half of the states and in many communities in the United States (Duran et al., 2009). This approach teams a mental health professional with an EC provider in an ongoing problem-solving and capacity-building relationship (Cohen & Kaufmann, 2000, 2005; Donohue, Falk, & Provet, 2000). At its core is the formation of a collaborative relationship between a consultant with mental health expertise and an EC provider or parent (Johnston & Brinamen, 2006). ECMHC can address multiple goals, including promoting universal approaches for social-emotional development; early identification of children with problem behaviors, who may need referral for developmental and mental health assessment, diagnosis, and treatment;

reducing problem behaviors and increasing social skills in children who may be at risk for developing a clinically significant disorder without targeted interventions; promoting inclusion of children with disabilities; and promoting the social-emotional development of all children in the program by improving the climate, structure, and operation of the EC program.

In child care, ECMHC seeks to improve children's social emotional well-being through changes made in the EC environment (e.g., routines, changes to the classroom layout) and through the acquisition of new skills by the EC teachers. Mental health consultants build on the capacity of EC professionals to improve behavior management and enhance social skills in the children in their programs. These approaches may target an individual child who is presenting with a specific problem behavior, or build skills in the entire group of children in a classroom. At times, mental health consultants may provide some additional direct services (e.g., observing individual children, conducting screenings, or modeling effective practices), but these activities are implemented with the goal of building the skills of the EC professional (Brennan, Bradley, Allen, & Perry, 2008; Hepburn, Petty, Shivers, & Gillam, 2013).

Empirical support for ECMHC in child care comes from several reviews of the published and unpublished literature. Brennan et al. (2008) identified 26 studies that reported data on the effectiveness of ECMHC with respect to staff- and program-level outcomes. These studies provided evidence that ECMHC helped increase staff self-efficacy/competence and confidence in dealing with troubling or difficult behaviors of young children in their care. In several studies, staff who received consultation support had improved sensitivity and lower job-related stress. In addition, consultation helped improve overall quality of early care and education settings and was linked to reduced staff turnover.

Perry, Allen, Brennan, and Bradley (2010) conducted a systematic review of the literature and identified 14 rigorous studies that reported on child-level outcomes. These studies had at least one of the following characteristics: publication in a peer-reviewed journal, use of a randomized control trial design, and/or inclusion of a comparison group. Overall, ECMHC services were consistently associated with reductions in teacher-reported externalizing behaviors. Teacher ratings of prosocial

behaviors were improved in the majority of the studies that reported on this domain. Recently, Hepburn, Perry, Shivers, and Gilliam (2013) updated these findings and summarized the results from seven statewide ECMHC evaluations that were completed after the research syntheses were published. The findings underscored the growing evidence base that ECMHC is associated with improvements in teacher- and child-level outcomes as well as positive changes in the classroom climate.

The evidence for the effectiveness of ECMHC in home visiting is not as robust, but a growing number of states are implementing this as part of the federally funded Project LAUNCH (Linking Actions for Unmet Needs in Children's Health) grants. The Substance Abuse and Mental Health Services Administration (SAMHSA) provides funding to states and tribal communities to promote and prevent mental health problems in pregnant women and children up to age 8. One of the required strategies is ECMHC, and many of the grantees are implementing and evaluating strategies for embedding mental health consultants into home visiting programs because of the high level of need resulting from exposure to early adversity (Goodson, Mackrain, Perry, O'Brien, & Gwaltney, 2013).

Across both settings, the primary instrument of intervention in ECMHC is capacity building; that is, helping staff and caregivers acquire knowledge, attitudes, and behaviors that will help them support the social and emotional health of young children. The consultant works with and through staff and caregivers, building their capacity to problem-solve and change practices that will help them change their behaviors to be more effective in their role in working with young children, including those who have experienced early adversity.

ECMHC FOR CHILDREN IN FOSTER CARE

Arkansas' ECMHC program, Project PLAY (Positive Learning for Arkansas' Youngest), has sought to draw attention to the need to support young foster children in their child care settings. State-level data suggest that most foster children are placed in child care centers that are not quality rated and that they have frequent disruptions to their care (Connors-Burrow et al., 2013). While assisting state partners in designing training and policy solutions to this

problem, the Project PLAY team began prioritizing ECMHC services to child care programs in which foster children are enrolled. The goal is to assist these programs in improving the quality of care provided and to help teachers understand and address the unique needs of young children who have experienced trauma.

In many ways, ECMHC in these centers looks very much like consultation to any child care center. Consultants recognize that nurturing, responsive caregiving is the foundation of a well-functioning EC classroom and essential for building social-emotional competence in all young children. However, the need to increase the teachers' capacity to provide consistent, nurturing caregiving takes on extra urgency when they are providing care to children who have experienced trauma. Thus, consultants work to build teachers' capacity to engage in positive adult-child interactions with children as a group and with each individual child. They encourage teachers to spend time talking and listening to children at their eye level, providing generous attention to each child. They help teachers learn to follow the child's play lead and show their enjoyment at being with the children. For children with a history of trauma, they support teachers in developing positive discipline techniques and discourage the use of punishment to guide children's behavior.

Consultants help teachers understand the connection between children's experiences with trauma and their behavior in the classroom. Recognizing that children who have experienced trauma may have delays in their social and emotional skills, Project PLAY consultants help teachers learn strategies for modeling and direct teaching of these skills. For example, teachers are trained and supported in their use of strategies to increase emotional literacy, helping children learn to identify and appropriately express their feelings. Consultants give teachers tools to help children learn to solve their conflicts peacefully using simple problem-solving techniques. Though useful for all children, these strategies can be especially helpful for foster children who may have had very little modeling of appropriate interactions in their home.

Consultation also focuses on supporting other aspects of quality child care. In a quality classroom, the staff-child ratio is low enough for teachers to give plenty of attention to each child, there are a variety of toys and learning materials within the children's reach, and

safety and hygiene routines are carefully followed (American Academy of Pediatrics, 2002; Child Care Aware, 2015). Consultants commonly help teachers and directors recognize when concerns in these areas have begun to impede healthy relationships between teachers and children. One classroom factor that is particularly important for children with traumatic experiences is having a daily schedule that is child centered, predictable, posted, and directly discussed and taught to children (in particular, preschool children). Children thrive in a predictable environment and tend to do best when they have regular routines and they know what to expect each day. This predictability is important for reducing anxiety in young children and is especially important for children in foster care. Children who have experienced abuse or neglect may be prone to anxiety because their environment has already proven to be unpredictable and often chaotic, and this anxiety can impair their ability to learn and interact with others (National Scientific Council on the Developing Child, 2010). Consultants help teachers understand that frequent upheavals to their daily routine can be anxiety provoking and should be avoided.

Staff stability is another aspect of quality child care that is often a focus of consultation. Consultants work with directors to understand the importance of stable relationships to young children and help them think about ways to support staff and minimize staff turnover or other staffing changes (e.g., frequent moving of teachers or children to different classrooms) that create disrupted relationships for children. In a child care setting, babies who are securely attached to a caregiver explore, play, and interact better than babies whose caregivers change frequently (Raikes, 1996; Shonkoff & Phillips, 2000). These important relationships develop over time, and they cannot fully develop if the child experiences frequent disruptions in child care providers. Though important for all children, stable caregiving relationships take on additional importance for foster children, whose early relationships have already been interrupted and damaged. Consultants often work with teachers and directors on stress management, conflict resolution, or other issues that are associated with staff turnover.

Project PLAY consultants also work with directors and teachers to build their relationship with their child welfare partners. They encourage teachers and directors to attend case

planning meetings with the child welfare team and share information about how the child is doing in child care. In response to feedback from child care providers who felt they were in the dark when working with foster children, the Project PLAY team partnered with the state child care and child welfare agencies within the Department of Human Services and developed a communication toolkit designed to promote information sharing that is in the best interest of the child. The toolkit includes a format for two-way information sharing as well as a booklet for child care providers with strategies to support children who have experienced trauma (available at <http://www.projectplay.uams.edu>).

Results from multiple evaluations of Project PLAY suggest the program is having success in improving the child care experience for young children (Conners-Burrow et al., 2013; Conners-Burrow, Whiteside-Mansell, McKelvey, Vermani, & Sockwell, 2012). The most recent evaluation report includes data collected since Project PLAY began to prioritize services to child care centers that serve young foster children. The Project PLAY evaluation study is designed to assess change over time in teachers, classrooms, and children. Part of the evaluation includes independent observations of the classroom by trained research assistants. The most recent evaluation report examined 89 teachers who completed the consultation and examined pre–post consultation ratings of teacher–child interactions using the Arnett Caregiver Interaction Scale and the Preschool Mental Health Climate Scale (Arnett, 1989; Gilliam, 2008). Significant increases were seen in teacher sensitivity (e.g., speaking warmly to the children, seeming to enjoy the children, being at their eye level, etc.), and decreases were seen in less desirable teacher behaviors (e.g., seeming distant or detached, speaking harshly). Results from the Preschool Mental Health Climate Scale documented similar increases in teachers' positive behaviors as well as increases in use of developmentally appropriate practices, appropriate use of directions and rules, support for children through transitions, teaching feelings and problem solving, and more (Whiteside-Mansell, Kyzer, Adams, & Conners-Burrow, 2014).

Evidence also suggests that children are benefiting from these changes. During classroom visits, research staff measure child behavior—both positive and negative. The evaluation

team assesses children's interactions with peers and teachers using the Child Interaction subscale of the Preschool Mental Health Climate Scale. This scale measures positive behaviors such as whether children appear happy and well adjusted; interact well with peers and staff; and are engaged, cooperative, and attentive. Significant improvements were seen in child interactions measured before and after consultation. Research assistants also count all acting-out behaviors (verbal and physical aggression and other disruptive behaviors) that occur in a 45-minute period in the classroom. In 54 classrooms receiving classroom-level consultation, there were significant decreases in the number of incidents involving behavior problems among children in the classroom.

ECMHC IN-HOME VISITING

As part of the passage of the Patient Protection and Affordable Care Act in 2010, the U.S. Congress authorized \$1.5 billion to expand the availability of evidence-based home visiting programs across the country. This program—the Maternal Infant and Early Childhood Home Visiting program—requires state and tribal grantees to select from among an approved list of home visiting models that researchers have designated as effective (see <http://homvee.acf.hhs.gov>). These home visitation models are staffed by paraprofessionals (e.g., Parents as Teachers, Healthy Families America) or by nurses or social workers (e.g., the Nurse–Family Partnership). Working with parents in their homes, home visitors support parenting skills and family functioning, emphasize safety in the home, promote maternal and child health, and ensure referrals and access to needed services.

Home visitation services are often targeted to families living in poverty and thus at high risk for child maltreatment. These risk factors often coincide with a higher incidence of maternal depression, substance abuse, and domestic violence—which are some of the most pernicious experiences reported in the Adverse Childhood Experiences Study (Felitti et al., 1998). Maternal depression is a particular concern given the high prevalence rates in the families served in home visiting: Estimates of the percentage of mothers served by home visiting programs who are experiencing depression range from 28% to 61% (Ammerman, Putnam, Bosse, Teeters, & Van Ginkel, 2010).

Other rates of risk factors for early adversity are equally alarming: Seventy percent of women in a Healthy Families program reported they had experienced at least one violent trauma in their lives (Stevens, Ammerman, Putnam, & Van Ginkel, 2002). Even more concerning are the low rates of treatment and follow-through on referrals for mental health services. One researcher reported that fewer than one quarter of women who screened high for depressive symptoms actually got mental health services within 6 months of enrollment in a home visiting program (Tandon, Parillo, Jenkins, & Duggan, 2005). Untreated depression in the first year of a baby's life can seriously undermine the formation of attachment and limit cognitive development, and it is a significant risk for abuse and neglect (Burke, 2003; Field, 2010; Grace, Evindar, & Stewart, 2003).

One reason for this lack of follow-through for mothers experiencing these risk factors is that home visitors often report feeling ill-equipped to support families struggling with depression (Harden, Denmark, & Saul, 2009; Tandon, Parillo, Mercer, Keefer, & Duggan, 2008). These clients may be described as “noncompliant” and are often difficult to engage because of their depressive symptoms. Under the Maternal Infant and Early Childhood Home Visiting program home visitors receive extensive training on the specific evidence-based models that they are implementing and the curricula that go with these models; however, many do not get skills-based training and coaching in techniques such as Motivational Interviewing, which can be essential in helping a family agree to see a mental health or substance abuse counselor (Miller & Rollnick, 2002). In addition, although many of the home visiting models require reflective supervision, home visitors report wanting more guidance and detailed supervision about how to work with families who are depressed, in abusive relationships, and/or are substance abusers (Tandon et al., 2008).

One way that home visiting programs have begun to address the complex needs of families has been the integration of ECMHC. A recent article summarized the efforts of eight Project LAUNCH grantees that were implementing ECMHC in 12 different home visiting models (Goodson et al., 2013). Three common consultation strategies were being implemented by the mental health professionals to support the home visitors' work with families experiencing

adversity. The consultants provided reflective supervision—both one on one with individual home visitors and in groups—that built staff capacity to engage hard-to-reach clients. In addition, the mental health consultants provided case consultation for home visitors who were concerned about a specific family. This service could also include going along on a home visit with the home visitor to observe and support the home visitor in his or her rapport-building. Last, and less common, some ECMHC projects also provided short-term mental health therapy for families who might be in crisis. This was more often in locations that lacked appropriate community-based providers. In addition to these consultative services, all of the EMCHC in-home visiting projects were engaged in workforce development and skill-building in areas such as Motivational Interviewing.

At present, there are limited published studies of the effectiveness of ECMHC in-home visiting, but the Project LAUNCH grantees are required to conduct a local evaluation, and several of the sites are gathering formative and summative data. Initial data suggest that home visitors are reporting gains in knowledge, but at this time it is unknown whether these knowledge gains led to actual changes in practice. Similarly, an earlier effort, Zeanah, Larrieu, Boris, and Nagle (2006) documented a strong feasibility of adding an infant mental health specialist to a Nurse–Family Partnership program, but these authors did not report data on whether this approach led to changes in outcomes for the families at highest risk. This is an area ripe for future research, so that the effectiveness of ECMHC in-home visiting can catch up with the evidence from ECMHC in child care settings.

A CONTINUUM OF MENTAL HEALTH SERVICES AND SUPPORTS

For young children affected by trauma who need support beyond consultation or home visiting, there are mental health services with demonstrated effectiveness. Like the other supports described, they have a strong focus on building the capacity of the caregiver to provide nurturing and consistent care to the child, thereby strengthening the attachment and increasing the child's sense of safety. Two well-known examples are child–parent psychotherapy (CPP) and parent–child interaction therapy (PCIT). CPP is an evidence-based, manualized treatment

for children from birth through age 5 who have experienced traumatic stress and, as a result, are experiencing behavioral problems, attachment difficulties, and/or signs of early mental health problems, including PTSD. The main goal of CPP is to strengthen the relationship between a child and his or her parent as a way to rebuild the child's sense of safety and attachment, and to improve the child's outcomes. The components of CPP include psychoeducation about trauma and child development, behavioral management, enhancing safety, affective regulation, enhancing the child–parent relationship, processing of the trauma, and continuity of daily living. CPP is typically delivered in weekly sessions over the course of 1 year and has been shown to significantly reduce children's PTSD and behavioral difficulties, improve children's attachment security, and improve maternal PTSD symptoms and other mental health problems (Cicchetti, Toth, & Rogosch, 1999; Lieberman, Ghosh Ippen, & Van Horn, 2006; Liberman, Van Horn, & Ghosh Ippen, 2005; Toth, Maughan, Manly, Spagnola, & Cicchetti, 2002; Toth, Rogosch, Manly, & Cicchetti, 2006). CPP is listed in the National Registry of Evidence-Based Programs and Practices (NREPP) and is supported by research evidence from the California Evidence-Based Clearinghouse for Child Welfare (CEBC, 2009; National Registry of Evidence-Based Programs and Practices [NREPP], SAMHSA, 2010).

PCIT is another empirically supported, manualized approach to therapy that is appropriate for parents with their young children. PCIT was originally developed to reduce child behavior problems and reduce parenting stress (Eyberg et al., 2001; Hood & Eyberg, 2003; Schuhmann, Foote, Eyberg, Boggs, & Algina, 1998). However, well-designed studies have also shown that PCIT is effective in improving outcomes of child physical abuse and neglect, in particular the reduction of re-reporting (Chaffin & Friedrich, 2004). PCIT involves a therapist who coaches a parent in using new skills while the parent is playing with the child. The first phase of treatment focuses on teaching the parent positive attention skills to strengthen the parent–child attachment. When the parent masters these skills, the family moves on to the second phase, which addresses appropriate limit-setting and consistent discipline. PCIT has been used successfully with both maltreating families and foster families with the potential to strengthen the foster parent–child relationship,

reduce risk for placement disruptions, and increase reunification rates (McNeil, Herschell, Gurwitch, Clemens-Mowrer, 2005; Timmer et al., 2006). PCIT is also listed on SAMHSA's NREPP and supported by strong research evidence by the CEBC (2009; NREPP, SAMHSA, 2010).

REFLECTIONS ON ADDRESSING EARLY ADVERSITY

Although there is a growing number of evidence-based treatments for very young children who have experienced the effects of early adversity, the research on the long-term impacts argues in favor of prevention as a priority for public and private investment. This approach builds on the downpayment made in expanding evidence-based home visiting services to families who can benefit from additional services and support starting during pregnancy. It also acknowledges the vital role that those who spend many of their waking hours with other people's children play in mitigating the risk factors to which young children may be exposed in their homes and communities. ECMHC is a strategy of embedding mental health expertise into the settings and services that serve young children and their families. An increasingly rigorous evidence base suggests that this type of integrated intervention can improve outcomes for vulnerable children and adults.

As a result, we are seeing an expansion of ECMHC from child care to home visiting, as well as to other settings in which young, at-risk children are living, learning, and playing. Brinamen, Taranta, and Johnston (2012) described efforts that are underway to adapt this approach for families in the San Francisco Bay area who are in homeless and domestic violence shelters. With the staggering number of young children who are homeless—a 2014 report placed this estimate at 1 in 30 children in the United States—there is a pressing need to attend to the mental health of the families who are living in shelters (Bassuk, DeCandia, Beach, & Berman, 2014). Because the social service systems for these families have historically been arranged around the best way to address the needs of the adults in the families, an EC mental health consultant can “give voice to the child's experience” and attend to the subjective experiences of the staff, parents, and children (Brinamen, et al. p. 288). Being homeless is

traumatic on multiple levels for young children: The lack of secure housing often is the result of cascading events, including deep poverty, financial insecurity, a limited social support system, and, often, domestic abuse (Bassuk et al., 2014). Embedding a professional with EC mental health expertise can help mitigate the effects of these traumatic events and support positive parenting in what is an often-chaotic and highly stressful setting.

The work underway in San Francisco and Arkansas through Project PLAY also calls attention to the need to expand access to ECMHC to other parts of the child-serving system. Through Project LAUNCH, many grantees are expanding ECMHC to schools for children from ages 5 to 8 in highly stressed neighborhoods. For example, in Prince George's County, Maryland, the LAUNCH grant has supported two full-time mental health professionals who are implementing ECMHC in 10 schools in areas identified for the Transforming Neighborhood Initiative. Consultants identify children in need of individualized support and deliver evidence-based interventions to improve the emotional climate of all the classrooms serving young children (Nadiv & Perry, 2014). Grantees in other LAUNCH sites are integrating ECMHC into primary care settings, such as pediatricians' offices (Godoy, Carter, Silver, Dickstein, & Seifer, 2014).

One of the most compelling findings from the Adverse Childhood Experiences Study was the high prevalence of exposure to these risk factors: Almost two thirds of the more than 17,000 participants reported at least one of the 10 adverse experiences had happened during their own childhood (Centers for Disease Control and Prevention, 2014)—and this was a healthy sample of people enrolled in the Kaiser Health System in California, more than 90% of whom had at least a high school degree. Nearly 1 in 5 reported three or more adverse childhood experiences that placed them at a greater risk for a broad array of long-term health risks. This high prevalence underscores the necessity of attending to the needs of young children in families from all racial and ethnic groups and across sociodemographic levels. The data in the companion paper authored by Ha and Granger in this issue provide a current picture of what neuroscience tells us about the physiological processes of early adversity. The hopeful part of that picture is the evidence that biological stress

response systems are malleable and that we can make positive changes in children's physiology when we improve their relationships with the important adults in their lives. As researchers and policy makers work together to close the gap between "what we know and what we do" (National Scientific Council on the Developing Child, 2007), ECMHC should be part of the bridge to a more evidence-based and effective service system.

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