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Poverty, Trauma, and Infant Mental Health

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The majority of young children in the public health sector who come to the attention of the mental health system have a range of needs that often are the result of the link between poverty and health problems across the life span. The inverse association between socioeconomic status (SES) and indices of both physical and mental health has been well established through extensive research. In particular, poverty during early childhood is associated with increased adult health problems and shorter life spans, regardless of the SES that the person has achieved in adulthood (Lawlor, Sterne, Tynelius, Davey Smith, & Rasmussen, 2006; Poulton et al., 2002). In light of the early childhood origins of the overlap between poverty and health problems, infancy and early childhood mental health interventions need to be integrated with other systems of care that address the well-being of the child in the context of the family's environmental circumstances.

Poverty and Health Problems

Growing empirical evidence shows that the links between poverty and health problems in later life are mediated by the increased exposure of children in poverty to chronic risk factors in the forms of child abuse and neglect, severe maternal depression, parental substance abuse, harsher parenting, and family and community violence as well as to greater exposure to physical risks, including substandard housing, lack of access to resources, and environmental toxins (Evans, 2004; Repetti, Taylor, & Seeman, 2002). The stressors associated with poverty affect children as well as adults. For example, poverty is associated with higher basal measures of blood pressure and with higher activity of the brain centers associated with stress responses in both children and adults (Chen, Matthews, & Boyce, 2002; Evans & English, 2002). Moreover, children's stress hormone levels correlate with mother's SES and depressive state (Lupien, King, Meaney, & McEwen, 2000), suggesting an intergenerational transmission of stress dysregulation from mothers to children. Children in the child welfare system have a greater prevalence of mental health problems compared with those in the general population (Dore, 2005; Leslie, Hurlburt, Landsverk, Barth, & Slymen, 2004). The National Center for Children in Poverty has summarized major policy concerns for children's mental health (Masi & Cooper, 2006). The high prevalence of mental health problems among children is a major focus of concern, with one in five children having a diagnosable mental health disorder (Mills et al., 2006).

Quality of parenting has been identified as a key factor in enabling young children to cope adaptively with adverse environmental circumstances. Physical well-being and cognitive, social, and emotional development are highly interrelated; all domains of development are negatively affected when the child's physiological responses to stress remain activated at high levels over long periods of time, with adverse effects on the developing brain architecture that is the substrate for learning, behavior, and health (Carrion, Weems, Ray, & Reiss, 2002; DeBellis, Baum, et al., 1999; DeBellis, Keshavan, et al., 1999; Farah et al., 2006; Gunnar, 2003). Parental unavailability or unresponsiveness and harsh parenting are associated with negative developmental outcomes in infants and young children that range from higher levels of stress hormones to an increased incidence of mental health problems, learning difficulties, and behavioral disturbances (Gunnar, Fisher, & the Early Experience, Stress and Prevention Science Network, 2006; Osofsky, 2004). These findings make a compelling case for the importance of early intervention with parents in the public health sector. Several longitudinal studies have documented the long-term beneficial effects of a two-generation focus on early intervention, with services addressing the needs of both

Abstract
Young children growing up in poverty face chronic risk factors, including abuse and neglect, severe maternal depression, parental substance abuse, harsh parenting, and family and community violence as well as greater exposure to physical risks, including substandard housing, lack of access to resources, and environmental toxins. The authors offer suggestions for raising awareness, providing education and training across systems that serve young children and their families, and developing increased capacity for those professionals in the field of infant and early childhood mental health to respond effectively.

the mother and the child. Longitudinal findings show improved outcomes for both, as manifested in fewer reports of child abuse and neglect, better school performance, fewer placements in special education classes, higher rates of high school graduation, fewer repeat pregnancies, longer intervals between pregnancies, higher rates of employment, lower dependence on welfare, and lower rates of juvenile crime and adult arrests (Masse & Barnett, 2002; Olds, Sadler, & Klitzman, 2007; Schweinhart et al., 2005). Economic analyses to ascertain the cost-effectiveness and social value of these early intervention investments document that the benefit–cost ratios range from 2:1 to 17:1, depending on the program (Center on the Developing Child at Harvard, 2007).

Although effective for nonclinical sectors of the population, programs designed for families in poverty have not addressed the exponential challenges posed by the overlap of poverty; exposure to violence and trauma; and parenting problems associated with depression, traumatic stress, and other emotional problems (Harris, Lieberman, & Marans, 2007; Osofsky, 2004). The consequences of early trauma constitute a major public health problem because children exposed to violence and other chronic trauma are more likely to suffer from traumatic stress, depression, anxiety, conduct disorder, learning problems, and substance abuse, and are more likely to engage in violent and criminal behavior. The incidence of violence affecting young children is so disturbing that the Centers for Disease Control equated it to an epidemic. Similarly, the president of the American Psychiatric Association stated, "What cigarette smoking is to the rest of medicine, early childhood violence is to psychiatry" (Scharfstein, 2006, p. 2). Coordinated services and interagency collaboration are particularly relevant for children exposed to violence and their families (Harris et al., 2007 ; Harris, Putnam, & Fairbank, 2006).

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Poverty, Minority Status, and Environmental Factors

There is a disproportionate impact of chronic trauma and adversity on children from marginalized minority backgrounds. Poverty and minority status are associated with increased cumulative exposure to violence within the family and in the community, with the result being significant mental health disparities between poor and minority children and the rest of the population (President's New Freedom Commission on Mental Health, 2003; U.S. Department of Health and Human Services, 2001). These disparities, in turn, perpetuate poverty by closing off opportunities for learning, work, and self-advancement because of depression, traumatic stress, and learning difficulties. These issues were illustrated poignantly for children and families living in the aftermath of Hurricane Katrina (Osofsky, Osofsky, & Harris, 2007).

The overlap between poverty and environmental stressors is starkly illustrated by a report (Benson & Fox, 2004) showing that the likelihood of domestic violence increases as family income decreases—from 3% incidence of domestic violence among families earning more than $75,000 per year to 20% incidence of domestic violence among families with a yearly income of less than $7,500. Combined with findings that infants, toddlers, and preschoolers are more frequently the witnesses of domestic violence than older children, these striking data illustrate the importance of a cross-disciplinary and multisystematic integration of services on behalf of young children and their families.

Efforts to address the psychological effects of multiple environmental stressors are marred by four interrelated obstacles:

1. The overlap of poverty and adversity has mutually reinforcing effects on the mental health of adults, affecting their capacity to provide adequate parenting.
2. Infants, toddlers, and preschoolers in the birth-to-5 year old age range have the highest incidence of maltreatment-related morbidity and mortality but the lowest access to mental health services because of the widespread perception that young children are not affected by trauma and are immune to mental health problems (National Center for Child Abuse and Neglect, 1995).
3. There is a lack of training among service providers about the health, emotional, and behavioral manifestations of environmental adversity and traumatic stressors. As a result, assessment and treatment for these problems are not integrated into services offered by community agencies and systems of care.
4. There is a lack of coordination between mental health services and other systems of care. Children and families with multiple needs are overrepresented in primary medical care, child care and schools, family resource centers, domestic violence shelters, child protective services, and the legal system, but they are seldom referred for mental health services. Models of care that incorporate mental health trauma principles into other service systems are urgently needed.

There is little question that children's successful mastery of cognitive, emotional, and social skills in conjunction with physical health is crucial for optimal development and ability to contribute to society. Researchers also know that the healthy development of young children at high risk because of poverty, family dysfunction, or other risk is enhanced by high-quality interventions in the first 3 years that include supporting parental needs, developing parenting skills, and children participating in quality child care and

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Poverty during early childhood is associated with increased adult health problems and shorter life spans.

pre-kindergarten programs. Researchers have found that home visiting that starts early and continues for an extended period of time has long-term beneficial effects on both maternal and child functioning (Daro, 2006; Kitzman et al., 2000; Olds et al., 1997, 2007).

Learn More

Child Trauma Research Project
http://psych.ucsf.edu/research.aspx?id=1554
The Child Trauma Research Program offers assessment and treatment to children from birth to 5 years old who experience domestic violence or other interpersonal trauma.

The National Child Traumatic Stress Network
www.nctsnet.org
The National Child Traumatic Stress Network was established to improve access to care, treatment, and services for traumatized children and adolescents exposed to traumatic events.

Young Children and Trauma: Intervention and Treatment
J. D. Osofsky, (Ed.) (2007)
Foreword by Kyle D. Pruett
New York: Guilford Press

Psychotherapy with Infants and Young Children: Repairing the Effects of Stress and Trauma on Early Attachment
A. F. Lieberman & P. Van Horn (2008)
Washington, DC: ZERO TO THREE

Thus, it follows that young children, especially those at risk because of poverty and exposure to trauma, can benefit significantly from a continuum of interventions and services. This continuum, or system of care for infant mental health, must involve a multidisciplinary cadre of professionals, including those in primary health, dental care, mental health, child care, early intervention including home visitation, child welfare, and—for children in the foster care system—the judicial system (e.g., judges, lawyers, and child advocates).

Conclusion

Major changes are needed at all system levels in order to provide support and nurturance for young children growing up in poverty with chronic risk factors including abuse and neglect, severe maternal depression, parental substance abuse, harsh parenting, and family and community violence as well as greater exposure to physical risks, including substandard housing, lack of access to resources, and environmental toxins. There is a need to raise awareness, provide education and training about infant mental health principles across systems that serve young children and their families, and develop increased capacity in the field of infant and early childhood mental health. This field of study needs to be introduced in social work undergraduate and graduate schools, clinical and counseling psychology, early education, and child psychiatry residency programs as well as in opportunities for in-service training. Clinicians who provide services in public mental health clinics need to be trained to provide intervention and services to the youngest children who present at the clinics with their parents or caregivers. Finally, a coordinated system is needed that focuses on social, emotional, and behavioral well-being for children from birth to 5 years old. Five possible approaches that researchers can use to expand on this description are included in the paragraphs that follow.

First, infant and young child mental health services need to be incorporated and integrated into the overall child and family mental health system as a vital part of the child-serving systems. At present, children less than age 5 years old are seldom identified by primary care providers or child care providers as needing mental health services, with a concomitant scarcity of referrals to mental health programs. The stigma associated with mental health problems and the fear of "labeling" children at such a young age are powerful reasons for this situation, as is lack of knowledge about the mental health needs of infants and young children. These obstacles can be addressed by providing more accessible consultation, assessment, and treatment services in ecologically acceptable settings, including homes, child care centers, Head Start and Early Head Start Centers, schools, family resource centers, and community centers.

Second, education on infant mental health and the science of early childhood development needs to be incorporated into all training programs that interface with infants, young children, and their families. Research information about the impact of cumulative adversity and trauma on early development and adult outcomes should become part of this education. The educational outreach needs to occur in graduate training programs for mental health professionals within their professional disciplines, including psychology, social work, child psychiatry, and mental health counseling. Training on principles of infant mental health needs to be incorporated more broadly into the curricula for medical students and physicians, especially pediatricians and family practitioners, nurses, dentists, occupational therapists, and physical therapists. Professionals in the legal and judicial systems who participate in decision making for young children also need systematic training in early childhood development. Incorporating this material in family law courses in law school is recommended as an important step toward this goal. Law enforcement officials who intervene in cases of domestic violence, abuse and neglect, and other violence also need this education, as do those service providers who work in domestic violence shelters and batterers' programs.

Third, education on the social and emotional needs of infants and young children needs to be a key part of the orientation and

training that occurs at initial employment for individuals working in child welfare agencies; those agencies and individuals providing early intervention services; and teachers in child care centers, Head Start, and Early Head Start. Follow-up training and consultation should be incorporated into the work environment. Parents also need education on the social and emotional needs of young children, including understanding not just the child's behavior but also how they may experience their world (Siegel & Hartzel, 2004). It cannot be assumed that just because an individual becomes a parent, he or she is knowledgeable about how to optimally raise a child and "do no harm." Family resource centers and child care centers are user-friendly settings in which to provide this information.

Fourth, systematic links need to be built between adult programs (including mental health and substance abuse programs) and the child mental health system. At present, adult programs are usually offered in different institutions that are not systematically linked with child-oriented institutions. As a rule, therapists who treat adult clients do not inquire into the parenting roles of their clients or make the well-being of their clients' children a focus of their work. Service providers for adult clients with mental health or substance abuse problems must be educated to realize that their clients' children are affected by their parents' problems and to intervene actively on their behalf, because such action benefits the children directly and because the mental health of adults improves when they feel increasingly competent as parents (Lieberman, Ghosh Ippen, & Van Horn, 2006).

Fifth, prevention is of the utmost importance. If infant mental health principles are to be truly effective, primary health care and mental health professionals must learn ways to intervene as early as possible—for example, during the prenatal period when risk is identified, in newborn nurseries and at hospital visits, and through active, consistent home visiting programs. Pediatricians and pediatric medical practitioners need to be educated on "red flag" behaviors to note in pediatric clinics and emergency rooms so they can systematically refer young children who may be traumatized or who may need mental health evaluation and services. Paying attention to the needs of the youngest children—our most vulnerable citizens—will both prevent human tragedy and save on the costs of later repair and rehabilitation that may be needed because of early abuse and neglect.

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Infants, toddlers and preschoolers are more frequently the witnesses of domestic violence than older children.

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