

Chapter 14

Sustaining Progress in Preventing Child Maltreatment: A Transformative Challenge

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Introduction

Developing an effective prevention response to maltreatment has long been stymied by the sheer breadth of behaviors and social conditions associated with the terms child abuse and neglect (Daro 1988; Helfer 1982; Daro and McCurdy 2007). Parental behaviors considered as abusive or neglectful include, among others, the willful or intentional physical beating of a child; the failure to provide for a child's basic emotional and physical needs; overt emotional abuse of a child through continuous belittling, inappropriate control or extreme inconsistency; and the sexual mistreatment of a child or use of a child for sexual pleasure (Myers 2006). Social norms and public policies that condone and, sometimes, promote corporal punishment or high levels of violence and sexually explicit language in the media as well as child poverty, inadequate housing, failing educational systems and limited access to preventive health care also represent, in the eyes of some, society's collective maltreatment of its children (Garbarino 1995; Straus 2000). Given this diversity in perspectives, it is understandable that the field has struggled with defining the problem's scope, consequences, and appropriate interventions to both remediate its effects and prevent its occurrence.

Setting aside the issue of social conditions and inadequate welfare and support systems, the number of children directly abused or neglected is substantial. One of the earliest and most rigorous studies on the annual incidence of maltreatment estimated that in 1968 between two and four million families either failed to act or used physical force with the intent of hurting, injuring or killing their children (Gil 1970). Since that time, repeated household surveys and national incidence studies consistently document a problem of notable proportion and one that affects children of all ages and socio-economic groups (Finkelhor et al. 2005; Gelles and Straus 1988; Sedlak and Broadhurst 1996; Sedlak et al. 2010).

More recently, child abuse reporting statistics as well as federally funded national incidence studies have observed a notable decline in certain types of maltreatment offering some evidence that investments in treatment and prevention strategies are yielding results (Finkelhor 2008). For example, the Fourth Federal National Incidence Study on Child Maltreatment (NIS-4) completed in 2010, reported a 19 % reduction in the overall rate of child maltreatment since the 1993 incidence study (Sedlak et al. 2010). The most recent study found significant drops in the rates of sexual abuse, physical abuse, and emotional abuse, changes that have been mirrored for several years in the administrative data maintained by state child welfare agencies (U.S. Department of Health and Human Services 2011a).

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Unfortunately, these reductions are not consistent across populations or communities. For example, only minimal changes have been observed in reported rates for child neglect among the nation's poorest children and the number of child abuse fatalities, the vast majority of which involve children under the age of five, have increased in recent years (U.S. Department of Health and Human Services 2011a). And while declining, the absolute number of children confirmed as victims of maltreatment remains high. Indeed, state and local child protective services (CPS) agencies received an estimated 3.3 million referrals alleging child abuse or neglect in 2010. These referrals included more than 5.9 million children and, of those, approximately 695,000, or 9.2 per 1,000, were determined to be victims of maltreatment (U.S. Department of Health and Human Services 2011a).

Although reductions in the documented cases of maltreatment are uneven and many children continue to be victimized, the overall trend suggests that comprehensive prevention strategies, high-quality clinical interventions for victims and perpetrators, and policies and laws that hold those who harm children accountable for their actions all have the capacity to keep children safe (Finkelhor 2008; Daro 2010a). The critical question moving forward, however, is how to effectively extend and deepen this capacity.

Today, the United States and many world economies are facing significant challenges. Public safety nets as well as social and health service systems are operating with restricted budgets even as an increasing number of children are reared in households with fewer financial and human resources (Addy and Wight 2012). High unemployment rates among those just entering the work force, the absence of middle income jobs for those lacking advanced education and training, and the growing number of children being raised in households with a single caretaker create environments that can elevate parental stress and potentially create a higher risk for maltreatment (McLanahan et al. 2010). In order to address this increased need with diminishing public resources, the next generation of prevention strategies will need to be more effective and more efficient.

The purpose of this chapter is to take stock of where the prevention field is at and to identify those areas that offer the richest opportunities for doing better. The chapter is not simply a review of exemplary prevention programs but rather an overview of how the field has evolved and the core issues and challenges it faces moving forward. Beginning with a prevention history, the chapter examines the various stages through which the field has evolved, briefly summarizing the major gains observed during these stages. The chapter then summarizes the research emerging from four "pillars of prevention planning" which currently frame the field and generate the greatest interest among policy makers, practitioners, and researchers. These include a primary focus on strategies that target a child's first few years of life and strengthening early parent-child relationships; public policy initiatives making investments in a growing number of evidence-based program models with demonstrated success in achieving targeted outcomes; the emphasis on implementation research to insure program replication occurs with consistent fidelity and quality; and the importance of creating effective service delivery systems capable of sustaining and extending the reach of promising interventions. The chapter concludes with a discussion of the challenges facing the field and outlines a set of promising pathways available for improving prevention's reach and effectiveness.

What Has Been Accomplished

Several policy and contextual factors have influenced the general structure and focus of the prevention field over the past 40 years. At the most general level, efforts to prevent child maltreatment have moved through multiple stages – public recognition of the problem, experimentation with a wide range of prevention programs addressing one or more factors believed to increase a child's risk for maltreatment, an intentional focus on services targeting pregnant women and new parents, and the evolution of broadly defined preventive systems of care and service integration across diverse domains

(Daro and Cohn-Donnelly 2002; Daro 2009). At each stage, public policy and interventions have been shaped by research and practice lessons from the previous stage.

As initial awareness and understanding of the issue grew in the late 1970's, the field moved into the development and replication of a diverse set of interventions designed to both remediate the negative impacts of abuse and prevent its recurrence and initial occurrence (Cohn 1983). These programmatic investments followed two distinct paths – interventions targeting reductions in physical abuse and neglect (including emotional neglect and attachment disorders) and interventions targeting reductions in child sexual abuse (Daro 1988, 2010b). Programs in the first group emanated from a research base that suggested physical abuse and neglect resulted from a parent's lack of knowledge, resources and emotional capacity. These prevention strategies included, among others, services to new parents, general parenting education classes, parent support groups, family resource centers, and crisis intervention services such as hotlines and crisis nurseries (Cohn 1987). In contrast, the primary target population for sexual abuse prevention has been potential victims, not potential perpetrators. Strategies within this framework included a number of educational-based efforts, provided on a universal basis, to children on the distinction between good, bad and questionable touching and the concept of body ownership or the rights of children to control who touches their bodies and where they are touched (Wurtele and Miller-Perrin 1992). These educational programs also encouraged children and youth who had been victimized to report these incidences and seek services.

While this broad array of interventions most certainly assisted many families and addressed several of the most egregious problems and lack of options identified in early clinical studies, not all families were well served by this system. This prevention “continuum”, while logical, missed an important aspect underlying ecological theories of maltreatment: the additive and interdependent impacts of multiple factors on a parent's ability to care for her child (Daro 1993). Further, program evaluations and basic research on the profound impacts of abuse and neglect on a young child's developmental trajectory and her capacity to form stable relationships as an adult, resulted in the prevention field placing primary emphasis on investments in services for new parents, particularly home based interventions (Carnegie Task Force 1994; Shonkoff and Phillips 2000).

With these lessons in mind, the field is now focusing on ways to better coordinate and integrate services provided through multiple domains and alter the context in which parents rear their children (Daro and Dodge 2009). The goal is shifting from individual level change to achieving population level change by creating safe and nurturing environments for all children, communities in which parents are supported through both formal services and normative values that foster mutual reciprocity. Strategies for creating these types of safe and nurturing environments are far from self-evident. As Melton, Thompson, and Small have noted, achieving child protection becomes a shared, moral responsibility “not merely to prevent wrongdoing, but to achieve positive obligations as well” (2002, p. 11). Although such systems are not fully operational in any community, the goal of altering both the individual and the context in which she lives potentially provides a more potent programmatic and policy response (Daro et al. 2009).

Moving forward, child abuse prevention efforts will continue to evolve in response to at least four trends framing the current research and policy landscape. First, a broad range of research and practice experiences suggest directing prevention resources to pregnant women and new parents is the most promising approach for achieving a meaningful reduction in population level maltreatment rates. Second, public and private programmatic investments are being directed to an increasing number of programs with evidence of effectiveness, as determined through rigorous research. Third, more focused attention is being paid to how programs are being implemented, documenting the degree to which program standards are being systematically followed over time. Finally, growing attention is being paid to how individual services are linked within a coordinated system of care and the attributes required for sustaining such systems over time. These characteristics are not unique to child abuse prevention efforts nor do they account for all of the investments currently being made in reducing the

likelihood for maltreatment across diverse populations and circumstances. However, they are dimensions that are framing an increasing proportion of the field's research, practice and policy agendas. The following sections summarize key research in each of these areas.

Early Childhood Matters

While initiating prevention services at the time a child is born has long been a core component of child abuse prevention efforts, new advances in neuroscience have given rise to stronger empirical evidence supporting this approach. Such research has highlighted in very dramatic and visual ways the negative impacts that poor parenting and stress can have on a child's developing brain and the longer term implications of this damage into adulthood. During early childhood, neural connections in the brain are being formed, and "serve and return" activities – when an adult responds to an infant's coos and other verbalizations in a controlled manner – are instrumental to the healthy development of motor skills, language, memory, emotion, and behavioral control. Attentive care giving from adults is absolutely essential during formative years when the brain is most sensitive to external forces (Center on the Developing Child 2012).

In 2011, a collection of medical bodies published several academic journal articles and disseminated a press release calling attention to child maltreatment and other forms of toxic stress in the lives of children (Committee on Psychosocial Aspects of Child and Family Health et al. 2011; Shonkoff et al. 2011). Each publication identifies the field of human development as multidisciplinary, and emphasizes the importance of collaborative efforts and information exchange between the fields of neuroscience, molecular biology, genomics, developmental psychology, epidemiology, sociology, and economics. They link the effects of toxic stress to the failure to develop coping skills and adaptive capabilities and "unhealthy lifestyles" (e.g. substance abuse, poor diet, lack of exercise) that can lead to fragmented social networks and financial hardship in adulthood. Additionally, they reiterate the need for adult caregivers to buffer children to keep stress levels within a healthy range (Committee on Psychosocial Aspects of Child and Family Health et al. 2011). In an eco-bio-developmental (EBD) framework that describes the "inextricable interaction between biology (as defined by genetic predispositions) and ecology (as defined by the social and physical environment)", nature and nurture are highlighted as critical and intertwining components of human development (Shonkoff et al. 2011, p. 234).

Technological and methodological advances have played a large part in our rapid understanding of cognitive development. New MRI and fMRI capabilities and human and animal studies have led to a better understanding of both functional and structural changes in the developing brain (Blakemore 2011), and early life stress can now be connected to cognitive impairments in adolescence (Mueller et al. 2010). A number of studies have tested the neuroendocrine system that helps the body to maintain balance when experiencing child maltreatment and other stressful situations through the regulation of cortisol levels. Findings have shown atypical cortisol levels associated with abuse or neglect (Oosterman et al. 2011), a caregiver experiencing high stress (Fisher and Stoolmiller 2008), exposure to prenatal substance abuse (Fisher et al. 2011a), and time in the foster care system (Fisher et al. 2011b, c; Pears et al. 2011). These findings lead researchers and policymakers to raise questions about the types of interventions that will most effectively ensure healthy brain development, but also about whether it is possible for interventions to change neural processes in brains that have already undergone damage due to trauma. Some researchers suggest that the most recent findings on neural plasticity provide evidence that it may be possible to design interventions to reverse negative effects on brain development caused by environmental trauma in childhood, particularly in regard to executive function development (IOM and NRC 2012; Bryck and Fisher 2011).

Indeed, many interventions have proven effective in alternating the negative impacts of early trauma (Barnett et al. 2008; Bernard et al. 2012; Dozier et al. 2009) and improving the development of executive function (National Scientific Council on the Developing Child 2011). However, the prevention field has continued to place emphasis on expanding research and investments in programs targeting new parents. As discussed in the subsequent section, the provision of home based interventions offered at the time a woman becomes pregnant or gives birth are among the most widely disseminated child maltreatment prevention strategies (Daro 2010b). Although findings remain inconsistent across program models, target populations, and outcome domains, the approach continues to demonstrate impacts on child maltreatment frequency and harsh punishment (Chaffin et al. 2012; DuMont et al. 2010; Lowell et al. 2011; Olds 2010; Silovsky et al. 2011), parental capacity and positive parenting practices (Connell et al. 2008; Dishion et al. 2008; DuMont et al. 2010; LeCroy and Krysik 2011; Nievar et al. 2011; Roggman et al. 2009; Zigler et al. 2008) and healthy child development (DuMont et al. 2010; Shaw et al. 2009; Lowell et al. 2011; Olds et al. 2007). In addition, repeated follow-ups on families enrolled in Nurse Family Partnership's randomized clinical trials support the long-term efficacy of early intervention on parents (Eckenrode et al. 2010) and children (Kitzman et al. 2010; Olds 2010). Given the empirical strength of these findings and the strong support home visiting has from policymakers, we anticipate that the prevention field will continue to focus on extending the availability of such early intervention efforts for new parents.

Although home-based interventions have the most robust data base, a number of parenting education and group-based interventions also have achieved improvements in parental capacity, particularly in cases where they have targeted risk factors associated with child abuse and neglect such as substance abuse, mental illness, domestic violence, and child conduct problems (Barth 2009). A 2011 review of 46 randomized control trial evaluations of parenting programs focuses on long term outcomes across multiple developmental periods and finds that existing programs show a variety of positive effects up to 20 years after the intervention occurred (Sandler et al. 2011). Specific parenting program evaluations were conducted on *The Incredible Years*, an evidence-based parenting program that treats child conduct problems (Letarte et al. 2010; Marcynyszyn et al. 2011; Webster-Stratton et al. 2011), and *Parents Anonymous*, a mutual self-help group (Polinsky et al. 2010).

In addition to offering direct services to new parents, greater consideration is being given on how best to use existing service delivery systems that regularly interact with families to address the potential for maltreatment. For example, the medical field has long sought ways to better address healthy child development and child maltreatment within clinical settings. Historically, the traditional check-up appointment has been plagued by barriers preventing health professionals from taking up this responsibility. Doctors are oftentimes uncomfortable discussing sensitive issues, and they lack the training to instigate such conversations and the ability to recognize key warning signs. Additionally, adequate and comprehensive screening tools have not been made available to all primary care providers (Dubowitz et al. 2009). The *Healthy Steps* program, an evidence-based model which places child development specialists within selected pediatric practices, was initially created in the 1980s to address this issue. Today, *Healthy Steps* is available in 17 states, and has demonstrated consistent impacts on child health, child development and school readiness, and positive parenting practices (Caughy et al. 2003; Minkovitz et al. 2001, 2007).

More recently, the *Safe Environment for Every Kid (SEEK)* was created to help health professionals address risk factors for maltreatment through a training course, the introduction of a *Parent Screening Questionnaire*, and the addition of an in-house social worker team to work with families. Two studies were recently conducted to test existing SEEK programs: one to determine outcomes for children and families and one to measure effects on the health professionals participating in the intervention (Dubowitz et al. 2009). The first was a randomized trial conducted between 2002 and 2005 in resident clinics in Baltimore, Maryland. Those families enrolled in the SEEK treatment group showed significantly lower rates of maltreatment across all measures (Dubowitz et al. 2009). Two years later, a second study was conducted to determine if the program changed doctor attitudes, behaviors, and

competence in addressing child maltreatment in their patients (Dubowitz et al. 2011). Eighteen private practice primary care clinics participated in a cluster randomized control trial. The pediatricians from the SEEK group significantly improved in their abilities to address substance use, intimate partner violence, depression, and stress, and they reported higher levels of comfort and perceived competence (Dubowitz et al. 2011).

Continued advancements in neuroscience, medicine, psychiatry and psychology increase our understanding of child development, and in turn, improve the scientific foundation of successful interventions to support healthy families. While the link between early experiences and optimal child development is becoming clearer, how to systematically intervene in this period remains a challenge. The period from birth until about 5 years of age is a period where families are not universally anchored to formal supports. From a policy standpoint, once children enter school, it is much easier to determine children's needs, monitor their progress, their challenges, and engage with families. Before kindergarten, it is much harder to establish systematic connections with the children and families that would benefit the most from programs designed to optimize developmental outcomes, teach good parenting techniques, and develop protective factors. Parenting needs vary widely based on factors like culture and income level, and thusly, successful techniques for engaging parents in different communities and across different populations vary. These differences are difficult to measure, and generally, parents improvise with what is available to them. Despite the challenges of early intervention, the quality of programs being developed and the diversity of strategies being employed are demonstrating that measurable and meaningful improvements can be achieved early in a child's life in a number of core outcome domains, including child maltreatment.

Investing in Evidence-Based Programs

In the current economic and political climate, public policy increasingly supports the implementation of evidence-based, tested programming. President Obama's administration has worked with the Office of Management and Budget (OMB) to roll out a series of "evidence-based initiatives" with the main goals of expanding effective social programs, eliminating ineffective programs, advancing evidence-based programming, and creating the opportunity for high quality research and evaluation (Haskins and Baron 2011, p. 6). This emphasis on selecting and replicating evidence-based programs have fostered several large scale federal initiatives that either directly, or indirectly, expand prevention services that reach families at risk of maltreatment.

Most notable has been the passage of the Maternal, Infant, and Early Childhood Home Visiting program (MIECHV), which was authorized as a part of the Affordable Care Act of 2010 (U.S. Department of Health and Human Services 2011b). Over 5 years, this program will allocate \$1.5 billion worth of grants to states to implement evidence-based home visiting programs. The program is administered through the Health Resources and Services Administration (HRSA) and the Administration for Children and Families (ACF). The initial grant required that all state applications include a comprehensive needs assessment to identify the communities most at-risk for poor maternal and child health. In the assessment, states took stock of the communities' greatest deficiencies, assets, and resources, and they created a plan to address the unique needs of that community.

Federal regulations required that 75 % of state funding be invested in evidence-based program models approved by HRSA. In 2009, the federal government funded Home Visiting Evidence of Effectiveness (HomVEE) to conduct a systematic review of the research available on 22 home visiting programs. Of the original 22, nine programs met the evidence threshold and were subsequently

approved by HRSA for state implementation.¹ Through implementation of these programs and the development of coordinated early intervention systems, states are required to set and achieve benchmarks in three of six core domains: maternal and child health, childhood injury prevention, school readiness and achievement, crime or domestic violence, economic self-sufficiency, and efforts to coordinate with existing community resources.

Following a similar process of interagency collaboration and investment in evidence-based programs, the U.S. Department of Health and Human Services in partnership with the U.S. Department of Education established a \$500 million competitive grant competition to improve access to high quality early education programs. Specifically, the Race for the Top – Early Learning Challenge (RTT-ELC) assists states in achieving three goals: (1) increase the number of low-income and disadvantaged infants, toddlers, and preschoolers who are enrolled in a high quality education program; (2) create an integrated system of programs and services; and (3) require that assessments conform with the standards of the National Research Council in the area of early childhood education. In October of 2011, 35 states, Puerto Rico, and Washington DC applied for grants of \$50–\$100 million. The amount awarded was determined by the relative population of low-income children served by the state. The states recommended for funding were California, Delaware, Maryland, Massachusetts, Minnesota, North Carolina, Ohio, Rhode Island, and Washington.²

This emphasis on supporting evidence-based interventions also is reflected in current support for teen parents. Encouraged by a growing evidence base surrounding teen pregnancy prevention programming, the Obama Administration commissioned a literature review on existing research to inform a decision to launch a federal initiative in this area. In the review, program models were identified that were associated with high quality research, two of which showed sustained reductions in teen pregnancy in randomized control trials (Haskins and Baron 2011).³ In 2010, under the Teen Pregnancy Prevention Initiative (TPPI), the Office of Adolescent Health (OAH) awarded \$75 million to programs that had high quality research supporting their effectiveness. Seventy-five programs were chosen from 32 states.⁴ Another \$15 million was awarded to support promising strategies to second tier “demonstration programs” that have the potential to contribute new innovative approaches to addressing teen pregnancy.⁵ Lastly, OAH partnered with the Centers for Disease Control (CDC) to support community-wide models in eight locations.⁶

Finally, the strategy has led to additional services on programming designed to improve father engagement in caring for young children. The Department of Health and Human Services (HHS)⁷ has established a \$150 million initiative to promote “healthy marriage promotion and responsible fatherhood.” Under this initiative, the Administration for Children and Families (ACF) provides a resource

¹The nine evidence-based programs chosen as “national models” and green-lighted for implementation as part of the MIECH-V program are: (1) Child FIRST, (2) Early Head Start-Home Visiting, (3) Early Intervention Program for Adolescent Mothers (EIP), (4) Family Check-Up, (5) Healthy Families America (HFA), (6) Healthy Steps, (7) Home Instruction for Parents of Preschool Youngsters (HIPPY), (8) Nurse Family Partnership (NFP), and (9) Parents as Teachers (PAT). For more information on the home visiting models assessed for effectiveness, visit the U.S. Department of Health and Human Services Home Visiting Evidence of Effectiveness website: <http://homvee.acf.hhs.gov/Default.aspx>.

²Department of Education website: <http://www2.ed.gov/programs/racetothetop-earlylearningchallenge/awards.html>.

³More information about evidence-based programs identified by the review can be found at the Office of Adolescent Health website here: <http://www.hhs.gov/ash/oah/oah-initiatives/tpp/programs.html>.

⁴More information about individual projects is available from the Office of Adolescent Health here: <http://www.hhs.gov/ash/oah/oah-initiatives/tpp/grantees/tpp-tier1.pdf>

⁵Demonstration programs funded by OAH: <http://www.hhs.gov/ash/oah/oah-initiatives/tpp/grantees/tpp-tier2.pdf>

⁶Information on community-based teen pregnancy prevention efforts can be found at the CDC site here: <http://www.cdc.gov/TeenPregnancy/State-Community-Orgs.htm>.

⁷HHS Promoting Responsible Fatherhood website: <http://fatherhood.hhs.gov/2010Initiative/index.shtml>.

called the National Responsible Fatherhood Clearinghouse (NRFC). NRFC is a media campaign disseminating information about responsible fatherhood and healthy marriage with the help of a website featuring aggregate resources available to individuals and families.⁸ Additional monies fund activities like counseling, mentoring, marriage and relationship education, and the Strengthening Families Evidence Review, a database of research on fatherhood programming.⁹ Increasing the accessibility to information and services for the public could contribute to the reduction of child maltreatment rates by preventing damaging parenting practices from ever occurring.

Obama's evidence-based initiatives to support healthy families and positive parenting are based on a blueprint that identifies the target social problem, chooses model programs that are proven to work through rigorous and high quality research, funds the large-scale implementation of model programming, and requires continued evaluation of ongoing interventions (Haskins and Baron 2011). While these methods are logical, responsible, and could lead to a reduction in programming costs in the future, the current economic crisis has created a political climate where sound research is not a sufficient reason for expanding investments (Haskins and Baron 2011). The need for greater fiscal austerity presents a danger to all of the current evidence-based initiatives and may lead to an overall downsizing of social spending in the United States over the next several years, a move that not only dampens enthusiasm for investing in quality research but also may well reduce the availability of services to families at risk for maltreatment.

Understanding Program Implementation

With a growing policy focus on the implementation of evidence-based models in large scale initiatives, it becomes necessary for research to test and examine how best to introduce these models into a diverse array of community settings. Implementation responsibilities include staff training and credentialing, fidelity to protocol, engagement of community members, connection of participants to other existing services and programs, continued evaluation of program components, attrition rates, and mostly importantly, positive outcomes for parents and children. There is common consensus that preventive strategies should be assessed in terms of their capacity to achieve both immediate and distal outcomes for children, parents and families. That being said, there is less understanding about which aspects of our service delivery system support these outcomes, even after rigorous evaluations prove a model's overall effectiveness. We have a propagating list of models proven to elicit positive outcomes, but far fewer evaluations have been done that test the actual process of implementation and dissemination (Mildon and Shlonsky 2011).

There is an existing body of literature on the subject of program implementation (Durlak and DuPre 2008), and in 2005 the National Implementation Research Network published a valuable step-wise process for program implementation (Fixsen et al. 2005). For any organization thinking about bringing their program model to scale, it is important to first clarify exact goals. There are three different ways of "going to scale" identified in the literature: expansion, which increases the scope of operation; replication, which involves getting others to import the model; and collaboration, which is forming partnerships to divide the responsibility of going to scale (Cooley and Kohl 2005). Before initiating any of these types of scaling up, it is recommended that an organization, after clarifying what is being brought to scale, test and refine the model, conduct a needs assessment and allot enough time for the site to develop readiness and capacity. Site readiness is essential to implementation success and most replication failures can be linked to inadequate site preparation or readiness (Elliot

⁸ACF maintains the NRFC website to provide up to date information to families: <http://fatherhood.gov/home>.

⁹ACF OPRE resources on fatherhood programming research: http://www.acf.hhs.gov/programs/opre/strengthen/proven_promising/index.html.

and Mihalic 2004). Additionally, a third party assessment of the implementation often provides other critical elements to the process of scaling up and helps accurately determine the impacts (Cooley and Kohl 2005). The main lesson the literature conveys is that for effective replication, it is essential for a site to develop a clear plan and allow enough time for readiness so as not to rush to implementation.

Program fidelity is another critical issue to consider when bringing a model to scale. Today, few evaluations have identified the specific components that can be used to determine program fidelity, but a history of research on the subject sheds some light on current efforts (Gearing et al. 2011). In 2009, the National Evidence-Based Practices (EBPs) Project published findings on a study in which interventions were evaluated for their use of a new implementation model that utilized fidelity feedback reports. Among the critical factors they identified: strong on-site leadership committed to high fidelity outcomes; effective educational trainings and materials provided to a skilled and competent workforce; ongoing technical assistance; and routine feedback to providers on the clinical aspects of their work (Bond et al. 2009). Unique challenges exist in measuring fidelity in child welfare systems, and while some measures of fidelity (e.g. frequency and dosage) are easily quantified, others are more subjective and rely on the practitioner's professional judgment (Kaye and Osteen 2011).

In a study of the implementation of one child safety program, model developers and local practitioners worked together to establish both fidelity instruments and measurement instruments. The observed model was successful in part because it was inclusive and built capacity amongst stakeholders, and it could be replicated in other sites in the future (Kaye and Osteen 2011). "Safeguarding fidelity" in one's interventions requires high quality training programs, an evidence base that is easily understood by practitioners and includes outcomes for interventions with diverse participants, and staff that are experienced in a number of different protocols. Additionally, clear and comprehensive program materials are essential, clinical outcome data should be collected, and staff should be both evaluated and supported at all steps of the process (Mazzucchelli and Sanders 2010).

In some cases the program model needs to be adapted to fit a specific population. Ensuring that the adaptation does not compromise the fidelity of the model is important to sustaining impacts. How do we effectively implement evidence-based programs with high fidelity, but also with adaptability to cultural, socioeconomic, and demographic difference? Those involved in the successful implementation of the universal, community-based Positive Parenting Program (Triple P) in different settings have offered findings from evaluations of such efforts. They conclude that strict adherence to manualized treatment does not necessarily lead to the best outcomes and believe it is possible to train practitioners to adapt to the circumstances of their work without moving outside the evidence-base (Mazzucchelli and Sanders 2010).

Taking a program to scale often raises questions about the sustainability of the program or initiative. Common sustainability challenges for prevention programs include: securing funding that supports services and system functions without compromising quality or the program model's design; demonstrating efficacy of the model and ensuring replication with quality; and maintaining the program characteristics that made the program successful in the past (Elliot and Mihalic 2004). When planning strategic implementation of an initiative, it is important to incorporate institutionalization of the program, to build community ownership from the start, and to secure long-term sustainable funding opportunities (Chavis and Trent 2009).

Building Service Delivery Systems

Maximizing prevention efforts at the population level requires new understanding of how to construct and sustain effective state systems, local community collaboratives, and robust community-based organizations. All stakeholders in the child welfare system, from the perspective of prevention to deep-end service provision, agree that greater focus must be paid to building human service

delivery systems that facilitate pragmatic collaboration. In the current economic climate, pressure mounts to provide effective and efficient systems of care. Up until now, previous research efforts in the area of agency-collaboration have been predominantly descriptive, and for the most part they provide a summary and history of relevant research on the topic (Tseng et al. 2011). When considering changes to systems of care to increase the potential for agency collaboration, it is beneficial to first establish a framework to guide efforts. In the conception of this foundation certain questions should be asked, i.e. are these changes structural or operational and do they attempt to achieve long term or short term impacts? What is the collaborative's current "developmental" stage? (Tseng et al. 2011). The developmental stage of the system is important because different factors are crucial to the success of a collaborative at different times throughout the process. For example, in the formation stage, communication between member parties is essential as roles and responsibilities are assigned, and an overall system of operation is established. In the stage of conceptualization, the identity of the group takes precedence as a mission statement is created, goals and strategies are set, and so on (Tseng et al. 2011). Through the collection and categorization of data collected from successful collaborative systems, researchers will be able to determine which aspects of the process are necessary to achieve positive outcomes, and thusly, will have the basic tools with which to improve social service systems overall.

System building efforts require a firm and well-researched framework, but they also require attention to both individual organizations and the people they employ. Current work in organizational theory can provide useful guidance for establishing an organizational environment that is not only open to change, but one that fosters innovation. A review of relevant literature suggests that individuals are more likely to go along with change within their organization if (1) they have been trained in the new procedures and policies in advance of implementation; and (2) when they feel they are working in an environment with a "learning culture" (Choi and Ruona 2011). First, employees must be made to feel that the impending change is not only necessary, but likely to be successful. Therefore, investing in informing and training the entire organization about new upcoming initiatives is essential to the process (Choi and Ruona 2011, pp. 47–49). Second, contextual factors like environment and leadership are highly influential. As a result, a culture of learning must be established early, so that all members of an organization buy in to the idea that learning is a perpetual process and the best organizations are able to adapt easily to new improvements (Choi and Ruona 2011, p. 60).

In a study to determine if organization type (public vs. private) or organizational support influence the attitudes of providers towards the use of evidence-based programs, results indicate that providers working within private, for-profit organizations have more positive attitudes toward innovations like evidence-based programming and are more open to implementing evidence-based interventions (Aarons et al. 2009). Currently, a movement is underway to make government organizations and agencies more efficient by becoming more responsive to the needs of their client and changes in the environment (Daniels and Sandler 2008). The findings of Aarons and colleagues (2009) suggest that while a movement to redesign government with private business models in mind exists, there is still a long way to go before public agencies are as deft and open to the implementation of cutting edge programming. In the meantime, additional resources and attention should be paid to public institutions implementing new evidence-based programming.

Data-sharing is another important issue facing agencies that work together to benefit children and families. A 2011 study on data-sharing in a hospital setting for the purpose of quality improvement showed findings similar to those indicated as important to overall system-building efforts. In order for a hospital to excel in data-sharing efforts it should have strong organizational leadership, organizational reverence for the data, a strong vision for organizational goal attainment, data to track service quality and program outcomes, and staff who share an understanding of the importance of the collaborative effort (Korst et al. 2011). Results intended to increase data-sharing in hospitals can be extrapolated to agency collaboration efforts because in each instance separate and somewhat

autonomous departments/agencies must work to meet goals designed to improve overall efficiency and effectiveness, thusly affecting outcome measures for clients.

These findings can be easily applied to data-sharing to promote child maltreatment prevention. In fact, a 2011 Government Accountability Office (GAO) report found that strengthening the national data on child fatalities could aid future prevention efforts (Brown 2011). The federal National Child Abuse and Neglect Data System (NCANDS) does not require inclusion of all available information regarding the circumstances of child deaths, and it is likely that a number of child deaths are not counted in NCANDS at all (Brown 2011). Challenges in data collection at the local level are caused by inconsistent interpretations by law enforcement, medical examiners, and child welfare workers. At the state level, coordination efforts across jurisdictions and state agencies can fail due to confidentiality issues (Brown 2011). The GAO recommends that the HHS invest in strengthening data quality, expanding available fatality information, and improving information-sharing (Brown 2011). Researchers call attention to the potential of new technologies in developing much needed longitudinal, multi-sector, multi-dimensional administrative data bases (Duncan et al. 2008; Jonson-Reid and Drake 2008). Better data on child maltreatment occurrence will lead to research that can shed light on how to build better prevention interventions and program components. With regard to the overall quality and efficiency of service delivery systems, future improvements will be dependent on successful collaborative initiatives, organizational and community buy-in, a fostered organizational “learning culture,” and the smart collection, analysis, and sharing of data.

Current Debates Facing the Field

Ecological theory has been used for several decades to frame the child abuse prevention paradigm, recognizing that most maltreatment stems from a complex web of factors within a person’s personality, family history and community context (Belsky 1980; Bronfenbrenner 1979; Garbarino 1977; Cicchetti and Rizley 1981). In addition to articulating a nested set of domains governing human behaviors, ecological theory identifies a set of risk factors as well as protective factors. As such, the theory underscores the importance of crafting prevention strategies that seek to reduce the interpersonal and environmental challenges families face and to build a network of protective or supportive factors that can help families cope with risks that are not easily eliminated or modified.

Although the theory has strong heuristic capabilities and has been useful in outlining the array of factors that contribute to abusive and neglectful behavior, it has demonstrated more limited utility as a policy and practice framework for several reasons. First, ecological theory, by definition, suggests prevention efforts are needed at multiple levels of the social ecology. Unfortunately, the more successful interventions, as noted earlier, are well-focused and build their strategies around a limited number of causal pathways. Indeed, multifaceted initiatives that attempt to alter an array of variables at multiple ecological levels frequently struggle with implementation issues and a sense of mission drift as they attempt to address myriad reasons parents may struggle to care for their children (Daro and Dodge 2009). Second, responsibility for health, education, economic well-being, housing, and child protection is distributed across many federal and state agencies, each of which define core outcomes and standards of best practice within their own disciplines and sphere of influence. Developing, managing and sustaining programs that cut across these defined areas in the manner suggested by an ecological framework is, at best, challenging. Finally, measuring outcomes and success is easier at the participant level than at a population level. As such, the prevention response has been more focused on creating a series of interventions that target distinct populations rather than efforts to alter community context or normative values.

In short, we have a theoretical framework that many in the field embrace at direct odds with the prevention field's current programmatic initiatives. Although there have been notable gains in both the field's awareness and understanding of maltreatment, the current prevention service network and system has failed to reach deep into the at-risk population and has not created the contextual and normative change necessary to maximize the safety and healthy development of the nation's children. Crafting a prevention framework that better aligns our programmatic efforts with our theoretical explanation for maltreatment requires policy, practice and research communities to address how resources are allocated along at least three continua:

- Universal versus targeted approaches to service delivery
- Evidence-based programs versus innovation
- Direct services versus infrastructure

None of these debates have an absolute answer nor can they fully be resolved through the empirical process. However, creative problem solving is best served when diverse opinions are recognized and openly debated. Effective policy directions are often those that capture the most promising elements of both ends of a continuum rather than limiting the choice to one end or the other. Within the child abuse prevention field, we believe these three dimensions represent this type of fertile opportunity for new learning.

Universal Versus Targeted Prevention Efforts

Much of the prevailing research on the effectiveness of various prevention programs argue for investing resources in targeted as opposed to universal services (Karoly et al. 1998; Heckman 2011). Targeted programs generally produce stronger outcomes with their participants, in part, because such participants have a higher likelihood to experience difficulties in the absence of intervention and, therefore, have more to gain if interventions are successful. As such, it is not surprising that the effect sizes in randomized trials of targeted programs exceed the effect sizes of programs that engage a broader spectrum of participants (Horowitz and Garber 2006). Although those engaging in high quality prevention services do indeed benefit from early intervention, it is equally true that many of the most difficult and challenged families fail to fully engage in these services (Daro et al. 2003; Guterman 2001; Navaie-Waliser et al. 2000). And once enrolled, they fail to stay enrolled for sufficient time to achieve targeted program objectives (Duggan et al. 2000; McCurdy and Daro 2001).

Further, the high cost of these interventions suggest care is needed if they are to be targeted solely on the basis of various demographic indicators of risk such as young maternal age, poverty, or single parent status. While low-income parents, those raising children on their own, and those birthing children before their own developmental trajectory has been stabilized face significant challenges, not all poor parents, teen parents or single parents require intensive, long term interventions to avoid abusive or neglectful behaviors.

Beyond these logistical challenges, targeted prevention programs suggest that struggles with parenting are limited to only certain segments of the population and that most parents have no need for additional assistance to avoid acts of abuse or neglect. This strategy does little to create a collective commitment to child well-being or to draw the public together in a shared obligation to insure the optimal health and development of all children. Targeted prevention efforts reinforce a stark line between parents that can meet their obligations and those that cannot, contributing to society's "coming apart" which as long troubled many social policy scholars (Bellah 1985; Murray 2012; Wuthnow 1991).

Moving forward, it seems prudent for prevention advocates to invest some resources in strategies that provide universal offers of assistance to parents at critical inflection points in the

parenting process where the demands of caregiving are high. Possible timing for such universal assistance might be at the time a child is born, the transition to toddlerhood, and the onset of puberty. Limited evidence exists regarding the capacity of such interventions to have meaningful impacts on child maltreatment rates. However, initial findings regarding the benefits of universal assessments and offer of assistance at birth are promising (Alonso-Marsden et al. 2011; Dodge et al. 2012; Daro et al. 2005; Fischer et al. 2008) as are findings on the impacts of multi-tiered prevention strategies (Prinz et al. 2009; Sanders et al. 2003). The eventual impacts of this type of embedded system on child development outcomes and parental behaviors are not yet known because studies are now in progress. And, as with all interventions, ultimate impacts will be a function of implementation quality, the universal outreach system's ability to identify accurately the level of support parents require, and the capacity of local formal and informal resources to meet identified demands.

Evidence-Based Interventions Versus Innovations

As discussed earlier, public investments are increasingly being directed to program models identified as being "evidence-based" and ongoing assessment or monitoring of program effects are being built into service operations (Haskins and Baron 2011). This new clarion call for evidence-based decision-making is re-framing the process through which prevention strategies are selected for replication. When faced with the need to select a given strategy or define a specific service delivery process, policy makers, agency directors and direct service staff are asked to view those decisions through an "evidence-based" lens. Competing alternatives are weighted in relation to their ability to demonstrate significant and meaningful impacts on their target population. The evaluative findings included in such assessments generally reflect findings from clinical randomized trials or, in some instances, carefully crafted quasi-experimental designs (Tseng 2012). The logic behind this decision-making framework is that such standards increase the likelihood that programs and policies will reflect rigorous thinking and will, therefore, increase the odds that public and private resources will be invested in strategies most likely to achieve policy or programmatic objectives.

Although no one can seriously disagree with the importance of reviewing empirical findings before allocating public funds, the ability of existing evidence-based approaches to realize desired objectives is neither absolute nor sustainable. The strategy insures that one is implementing programs that have demonstrated effects. It cannot, however, insure that such effects will continue to occur indefinitely, particularly when the underlying characteristics of the population shift or the service and policy context is altered. Even if the population and context remains stable, research has repeatedly demonstrated that attempts to replicate strong programs often fail to adhere to program standards in such critical dimensions as dosage and duration or capture the original intent or manner in how such services should be delivered (Durlak and DuPre 2008).

This lack of certainty in replication and potential decline in relevance underscores the importance of also investing in innovations or alternative service delivery methods, which while untested, may provide important insights into extending the effectiveness of prevention services. Maximizing the benefits and minimizing the limitation of "rational decision-making" requires a more nuanced application of the concept. A rigid adoption of a decision-making process that would suggest you design a program, test it, determine that it works, and then market it without a clear pathway for learning how to do better will not create an informed program planning process. The policy target or message should not be simply a mandate to adopt empirically-based practice, but rather to establishing an implementation and decision-making process that will insure continuous program improvement.

Direct Service Investments Versus Infrastructure

As we have noted, many barriers exist in replicating programs with quality and extending the availability of services to those families facing the most difficult circumstances. While some of these barriers lie within the programs themselves, attention has shifted to consider the elements of context that support or complicate the initial implementation and sustainability of the most promising interventions (Tibbits et al. 2010; Wandersman et al. 2008). Just as any physical structure requires strong infrastructure, social service programs benefit from an array of elements that strengthen their capacity to deliver services at high quality and with consistency over time. Some have conceptually organized these elements into three groups – foundational infrastructure (planning and collaboration); implementation infrastructure (operations and workforce development); and sustaining infrastructure (fiscal capacity, community and political support, communications and evaluation) (Paulsell et al. 2012).

Investing all prevention dollars into program replication is insufficient for creating the type of prevention system needed to both strengthen programs and sustain them over time. Comprehensive planning efforts, establishing, staffing and sustaining robust collaborative networks, and staffing prevention programs with a diverse and well-trained work force will require substantial public investment. Just as one would not build a subdivision without adequate investments in streets, public utilities or police and fire services, continuous replication in individual interventions without a comparable investment in the efforts need to sustain them over time is unlikely to achieve desired outcomes.

Prevention Strategies for the Twenty-First Century

Moving forward, child abuse and neglect prevention planners will face many external challenges. However, they also will have a vast body of existing knowledge and many bright spots of innovation. Technological advancements in social media and improved access to the internet present exciting new opportunities to engage parents, to provide information while maintaining privacy, and to increase contact (Benedetti 2012). And, as we have indicated, much can be learned from successes and failures in other fields. All of these events will continue to inform the work of maltreatment prevention just as they have throughout history.

There are no guarantees of success. However, several promising pathways exist that, if pursued, can enhance our learning and potentially improve our capacity to prevent maltreatment. These strategies include the following.

End our singular focus on child abuse prevention and embrace the need to promote healthy child development: Preventing child abuse may best be served by shifting our focus from a singular emphasis on reducing negative behaviors to a more aggressive emphasis on promoting child well-being. Such change in focus, in addition to capturing the full spectrum of behaviors and outcomes parents' desire for their children, offers the possibility of engaging a broader array of scholars studying individual and systemic pathways that support positive child development and health promotion.

Extend the promise of equal opportunity to all children by offering support at the time a child is born: A core value in the United States is a commitment to equal opportunity, to offering all citizens the chance to advance their economic and social standing. Historically, this concept has been best exemplified by our commitment to universal public education and to creating a pathway to literacy and economic success. By initiating offers of support to all children at the time of birth, we have the capacity to establish this value at the earliest point in a child's life and reinforce the shared need for support all parents face.

Offer families choice in how they secure the help they need by engaging a range of stakeholders and drawing together both formal and informal sources of support: The public health perspective is grounded in the belief that collective goals are best realized when individuals act in ways supportive of their own health and the health of their children (Wallack and Lawrence 2005). Reduction in the rate of smoking, fatalities due to drunk driving and the increased use of safety devices such as car seats have, at their core, a set of specific behaviors around which individual citizens feel empowered to take personal action to insure collective outcomes. Community child abuse prevention will become a reality when a comparable set of behaviors are in place that will facilitate the ability of parents to provide nurturing and supportive environments for their children and to help others in their community achieve these same outcomes.

Continue to rigorously evaluate all of our assumptions – do not assume all ideas are worth replicating and once we do replicate, check to be sure we are replicating with quality and fidelity to the concept: Assessing the impacts of our efforts is an ongoing challenge. Achieving meaningful change in our capacity to prevent child abuse will not rest in the simple replication of what we know works but rather in the commitment to continuous program improvement and learning.

Build collaboratively not just at the institutional level but among the professions leading the field – make interdisciplinary thought and practice a reality in workforce development: An early feature of the child abuse prevention response included a focus on multidisciplinary teams in which a diverse array of professionals shared their unique perspectives on the factors contributing the abusive and neglectful behaviors and how best to remediate its effects (Schmitt 1978). Despite this commitment to multidisciplinary learning and case planning, relatively little progress has been made in breaking down walls across various disciplines. Correcting this shortcoming is a critical feature for enriching our interventions as well as building a stronger systemic response.

Conclusion

Child maltreatment policy and practice innovations have a long history of responding to new learning generated by careful research. Most recently, this reliance on doing what the research suggests may be promising has resulted in a particular concentration on supporting programs that engage pregnant women and new parents. Focusing on a child's first years of life provide a promising foundation on which to build the institutional infrastructure needed to produce sustained reductions in all forms of maltreatment. In maximizing the benefits of targeting prevention services to this population, public policy is directing its investments to evidence-based interventions which have been subject to rigorous evaluation and found to produce positive effects. Moving forward, it will be increasingly important to track program implementation to assure that services are delivered in the manner intended and with the recommended dosage and duration. When high quality services are diluted or implemented with staff poorly trained or inadequately supervised, positive outcomes and effect sizes suffer. Investing in evidence-based programs will not advance the prevention mission unless comparable and consistent attention is paid to how these programs are replicated.

Finally, the future of prevention lies only in part on the replication of promising program models. Perhaps more important will be insuring that such programs are effectively linked together into a coordinated system of care. As suggested by ecological theories of human development, combating child abuse as well as other threats to child well-being requires myriad efforts that address the quality of the parent–child interaction as well as the quality of the context in which parent rear their children. Simultaneously addressing these multiple threats to child well-being will require a network of interventions, greater collaboration, and outcome alignment among those agencies that direct their resources to families and young children and help to shape the communities in which children live.

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