The Future of Children
PRINCETON-BROOKINGS

Preventing Child Maltreatment

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A COLLABORATION OF THE WOODROW WILSON SCHOOL OF PUBLIC AND INTERNATIONAL AFFAIRS AT PRINCETON UNIVERSITY AND THE BROOKINGS INSTITUTION

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Introducing the Issue

Christina Paxson and Ron Haskins

In 2007, the families of 1.86 million American children were investigated for child maltreatment, and 720,000 children—more than one in every hundred—were identified by state agencies as having been abused or neglected, most often by one of their parents. More than 1,500 children died as a result of maltreatment.[1] Not all children who are maltreated come to the attention of the child protection system (CPS) and not all child deaths caused by maltreatment are recorded as such. These high rates of maltreatment are a cause for grave concern. Maltreatment often has profound adverse effects on children's health and development. It can lead to permanent physical and mental impairments. A large body of research indicates that maltreated children are more likely than others to suffer later from depression, post-traumatic stress disorder, substance abuse, poor physical health, and criminal activity.[2]

After children have been identified by CPS as having been maltreated, their families are likely to enter the child welfare system, a complex web of social and legal services whose purpose is to ensure children's safety. The child welfare system in each state typically involves public agencies, such as departments of child and family services, which investigate reports of child maltreatment; private and not-for-profit organizations, which provide services to families; family courts, which make decisions about placing children into foster homes and terminating parental rights; and foster families and group homes, which are paid to care for children who are removed from their homes. The system is expensive. In 2007, state and local public child welfare agencies spent more than $25 billion for case management, administrative expenses, services to families and children, foster care, adoption services, and a variety of administrative and other services.[3] Taking into account the costs of hospitalization, mental health care, and law enforcement that stem directly from maltreatment, the total for direct expenses is $33 billion. Of this, a large share is spent on the approximately 500,000 children living in foster care.

In light of the toll that maltreatment takes on child well-being, as well as its high financial costs, the expert contributors to this volume explore the vexing question of how to prevent

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child abuse and neglect. Although several previous volumes of *The Future of Children* have addressed child maltreatment, none has focused explicitly on prevention. A 2004 volume examined best policies and practices in foster care. A 1998 volume considered how to protect children from abuse and neglect through improving the child protection system. Much of the material in both these volumes remains relevant today. But because both volumes examined primarily what happens to children and their families *after* the children are maltreated, neither explored how maltreatment might have been averted before it came to the attention of CPS.

Contributors to the current volume present the best available research on policies and programs designed to prevent maltreatment. They examine the gradual—and still partial—shift in the field of child maltreatment toward a "prevention perspective" and explore how insights into the risk factors for maltreatment can help target prevention efforts to the most vulnerable children and families. They assess whether a range of specific programs, such as community-wide interventions, parenting programs, home-visiting programs, treatment programs for parents with drug and alcohol problems, and school-based educational programs on sexual abuse, can prevent maltreatment. They also explore how CPS agencies, traditionally seen as protecting maltreated children from further abuse and neglect, might take a more active role in prevention.

Definitions: What Are We Trying to Prevent?

There is no single definition for child abuse and neglect. The federal Child Abuse Prevention and Treatment Act, as amended by the Keeping Children and Families Safe Act of 2003, sets a *minimum* standard for child abuse and neglect, which is "any recent act or failure to act on the part of a parent or caretaker, which results in death, serious physical or emotional harm, sexual abuse or exploitation, or an act or failure to act which presents an imminent risk of serious harm."

Recently, the federal Centers for Disease Control and Prevention (CDC) highlighted the need for a set of uniform definitions. A CDC report issued in January 2008 offers five categories and definitions of maltreatment.[4] Physical abuse is "the intentional use of physical force against a child that results in, or has the potential to result in, physical injury." Sexual abuse is "any complete or attempted (non-completed) sexual act, sexual contact with, or exploitation (that is, noncontact sexual interaction) of a child by a caregiver." Psychological abuse is "intentional caregiver behavior … that conveys to a child that he/she is worthless, flawed, unloved, unwanted, endangered, or valued only in meeting another's needs." Neglect is "failure by a caregiver to meet a child's basic physical, emotional, medical/dental, or educational needs." Failure to supervise is the "failure by the caregiver to ensure a child's safety within and outside the home given the child's emotional and developmental needs."

While most state definitions are broadly consistent with the CDC definitions, state statutes vary widely in the details. States are free to set their own definitions of child abuse and neglect, provided they meet the federal minimum standard. For example, the definition of abuse used by New York requires that the child suffer or be at risk of suffering from death or physical injury.[5] Arkansas, by contrast, defines abuse in terms of specific actions, such as shaking a child or striking a child on the face or head, which need not result in serious injury.[6] States also vary widely in what they consider child neglect. As

noted in the article by Fred Wulczyn in this volume, such differences in how states define maltreatment, as well as in how they handle reports of maltreatment, make it hard to compare state maltreatment rates.

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Uniform definitions are important for reporting purposes. Accordingly, in reporting data to the National Child Abuse and Neglect Data System (NCANDS), states usually combine "failure to supervise" with neglect and often make "medical neglect" a category of its own. According to NCANDS data from 2007, 59.0 percent of maltreatment victims were neglected, 10.8 percent were physically abused, 7.6 percent were sexually abused, 4.2 percent experienced psychological maltreatment, and 13.1 percent of victims experienced multiple kinds of maltreatment.[7]

The concept of "maltreatment prevention" itself falls into three categories. Primary prevention aims to stop maltreatment before it can happen. Secondary prevention aims to prevent maltreated children from being abused or neglected again. Both forms of prevention make use of interventions such as parent education, mental health and substance abuse treatment programs for parents, and other family support services. Because preventing a recurrence of maltreatment requires first detecting maltreatment, secondary prevention also involves identifying and referring suspected cases of child maltreatment to CPS for investigation. Tertiary prevention aims to prevent or mitigate the damage to children that results from maltreatment.

In this volume, we focus on primary and, to a lesser extent, secondary prevention and thus on the interventions, such as parent education, common to both. We do not, however, explore how to improve the detection and reporting of maltreatment (which falls under secondary prevention). Nor do we consider tertiary prevention.

How Do We Know Which Interventions Are Effective?

Contributors to this volume review evidence on the effectiveness of numerous prevention programs, paying special attention to the quality of the evidence. Studies that assess prevention interventions rely on a diverse set of research methods, some of which produce more definitive evidence than others. The "gold standard" research method assigns participants randomly to treatment and control groups to test for the effects of interventions. But even randomized assessments of similar interventions can yield different results. For example, a randomized evaluation of the Nurse-Family Partnership program in Elmira, New York (examined in greater detail below), found that it reduced substantiated cases of child maltreatment, but evaluations of other home-visiting programs failed to find an impact on substantiated cases. These apparently contradictory results may be driven by differences in how programs were designed and implemented or differences in the families that were eligible for the intervention. For these reasons, it is important to understand the details of programs that appear to be most successful.

Researchers have conducted relatively few experimental evaluations of prevention programs. Many "quasi-experimental" evaluations, however, compare groups of children or families who have received an intervention with matched (but not randomly assigned) groups that have not. For example, one carefully conducted quasi-experimental study, based on the Chicago Longitudinal Study, compared children who had attended Chicago Child-Parent Centers (CPCs), which combined preschool education and family support services to low-income families.[8] This study concluded that children who had attended CPCs had significantly lower rates of maltreatment by age seventeen than similar children who had attended alternative full-day kindergarten programs. Although studies such as this are quite valuable, some caution is required in drawing inferences based on their results. The families that choose to participate in programs, and the communities that welcome participation in community-wide interventions, may be different from families or communities that do not choose to be involved.

The absence of uniform definitions for child abuse and neglect can also complicate assessing the efficacy of specific prevention programs or policies. A program that improves parenting skills, for example, would be said to prevent child maltreatment only if it shifted some parents over a threshold that demarcates "abusive" and "non-abusive" (or "neglectful" and "non-neglectful") behavior. But because these thresholds between maltreating and non-maltreating behavior are blurry and vary across states, it may be tempting for analysts to discard the focus on preventing maltreatment as measured by administrative records from CPS, and instead consider whether programs have broader beneficial effects on the well-being of children and families as measured by tests or interviews with parents or professionals. Indeed, many of the evaluations discussed in this volume do not directly measure maltreatment from CPS administrative records, but instead examine how programs influence parental reports of maltreatment or other behaviors, such as spanking, that are assumed to be positively associated with maltreatment risk. Parental reports of abusive or neglectful behaviors could be superior to administrative records because they may pick up instances of maltreatment that have not come to the attention of CPS. However, parental reports may be unreliable. Furthermore, preventing families and children from becoming involved in the child welfare system is itself an important policy goal. For these reasons, this volume places greater reliance on studies that examine how programs or policies influence the chance that a child will come to the attention of CPS.

What the Volume Tells Us

The volume opens with two articles that lay the groundwork for those that follow. The first discusses how the field of child maltreatment has come to realize the importance of a prevention approach that is driven by investments in families and children. The second examines the characteristics of children and families that are associated with an elevated risk of maltreatment and explains how those characteristics may be used to target prevention efforts. The following three articles scrutinize a variety of prevention programs—community-wide prevention efforts, parenting programs, and home-visiting programs—that often involve health care professionals, social workers, child care staff, or schoolteachers. The next two articles consider unique prevention issues: preventing abuse and neglect by parents with drug or alcohol problems and preventing sexual

abuse. The final article discusses the role the child protection system has so far played in prevention and how that role might change in the future.

The Prevention Perspective

Matthew Stagner and Jiffy Lansing, both of Chapin Hall at the University of Chicago, note that the child welfare system has historically been geared toward preventing further abuse and neglect of children who have already come to the attention of CPS. No one would argue that preventing the recurrence of maltreatment is unimportant. But primary prevention efforts offer the promise of reducing the number of children who need such protection and minimizing the costly services required to undo the damage done by maltreatment. Stagner and Lansing call for a new framework, with prevention efforts focusing on investments in children, families, and communities. They cite many possible approaches to prevention: parent education programs to improve the care children receive in their homes, support groups to reduce negative parenting behaviors, home-visiting programs to deliver services to vulnerable families, and community-based programs to orchestrate prevention services and build communities that support families.

But can the promise of primary prevention be realized? To answer that question, it is essential to know which prevention approaches are most effective and—because budgets are tight—to understand how best to reach the children and families at risk of maltreatment. Some prevention programs, such as media campaigns, are "universal" and directed to all families. Some interventions, such as home-visiting programs, are highly targeted to individual families at risk. Other programs fall along a continuum between the two extremes. Media campaigns, for example, can be targeted to neighborhoods in which maltreatment rates are high. Both targeted and universal programs can be worthwhile. Because universal programs spread spending widely across many families, the "treatment" any family receives will not be intensive. But the field of public health boasts highly successful universal programs, such as the "Back to Sleep" campaign to prevent Sudden Infant Death Syndrome.[9] Targeted programs, by contrast, treat fewer families in a more intensive (and, typically, more expensive) manner. As long as the programs are effective and reach the right families, however, the larger per-family investment of targeted programs may be worthwhile.

How Epidemiological Data Can Help Shape Prevention

Fred Wulczyn, also of Chapin Hall at the University of Chicago, presents and analyzes data on the incidence and distribution of child maltreatment and shows how such data can inform the design and implementation of prevention programs. He notes that the fraction of children identified as victims of maltreatment declined from the mid-1990s to the year 2000, but has since remained stable at approximately 12 per thousand children. The causes of the decline remain in doubt, although reductions in teen childbearing, in crack cocaine and other drug use, and in child poverty are all possible explanations. Nonetheless, rates of maltreatment remain high by historical standards.

Wulczyn identifies a number of risk factors for maltreatment. The first is a child's age. In 2000, for example, the victimization rate for infants (under age one) was 16 per thousand children, higher than the rate for children of any other age. The second-highest rate, that for one-year-olds, was less than half that for infants. Wulczyn also presents evidence that

poverty and race are risk factors for maltreatment, with poor children having markedly higher rates of maltreatment than non-poor children and black children having higher rates than white children. Although there is no simple explanation for racial differences in maltreatment rates, the evidence suggests that black children have higher rates in part because of the interweave between poverty and race. Children in families with substance abuse problems are also at a sharply elevated risk of having maltreatment cases substantiated and are also more likely to be placed in foster care than other maltreatment victims. Overall, these findings suggest that prevention efforts may be best targeted toward families with infants living in impoverished communities, especially if the parents have substance abuse problems.

Community-Wide Prevention Programs
Noting that maltreatment rates vary sharply across communities, Deborah Daro, of Chapin Hall at the University of Chicago, and Kenneth Dodge, of Duke University, examine community-wide interventions to prevent maltreatment in high-risk communities. The two key goals of such interventions are to foster community-wide norms of positive parenting and to coordinate the patchwork of individualized family services in most communities. Although few such interventions have undergone rigorous evaluation, a few carefully evaluated programs show promise.

The Triple P–Positive Parenting Program has perhaps the best evidence of actually preventing maltreatment. It combines universal and targeted elements, ranging from media campaigns, to appointments with individual parents in easy-to-access settings such as preschools and physicians' offices, to formal group parenting seminars and individualized behavioral interventions. To better integrate services, the Triple P model offers training to local service providers. Triple P is the only intervention identified by Daro and Dodge that assigns communities randomly to its program, thus permitting a rigorous evaluation of its effects. In addition, some non-experimental research concluded that Triple P communities had lower rates of victimization, out-of-home placements, and hospital admissions for injuries than did matched comparison communities.

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Parenting Programs
In addition to being key to community-wide interventions, parenting programs are also offered as "stand-alone" services to families that maltreat their children or are at high risk of doing so. Richard Barth, of the University of Maryland, highlights the many forms that parenting education can take, from residential programs for parents struggling with substance abuse and mental illness, to programs designed to reduce child conduct problems (which may place children at risk of maltreatment), to parent support groups, parent-child therapy, and home-visiting programs. Although some of these interventions are known to be effective in reducing child conduct problems,

few have been rigorously evaluated for effectiveness in reducing child abuse.

Because parenting programs take so many forms, Barth emphasizes the need to identify the elements that make some programs more effective than others. Characteristics of successful programs include high-intensity treatment, well-trained staff, a practical focus on specific parenting skills, and the ability to engage and motivate parents at high risk of maltreating their children. Finally, Barth stresses the need for multiple types of services that parents can access through multiple referral routes. Evaluating the effectiveness of these programs is essential, says Barth, but the programs that are studied must, first, be designed to be responsive to the ages and problems of the children and families and not one-size-fits-all.

Home-Visiting Interventions

One highly popular strategy for delivering a range of family services is home visiting. Most home-visiting programs do not focus exclusively on preventing abuse and neglect; some do not even include maltreatment prevention as a goal. Nevertheless, such programs offer services, such as social support, referrals to community resources, parenting "coaching," health information, and educational materials, that may help prevent maltreatment.

Mindful that the youngest children are at highest risk for maltreatment, Kimberly Howard and Jeanne Brooks-Gunn, of Columbia University, assess the effects of home-visiting programs geared to infants and young children in preventing maltreatment. They review randomized evaluations of nine programs, offered in thirteen sites, which include different design elements and target different populations of children. The evaluations did not all assess the same family outcomes. Only five sites (covering four programs) tracked whether families in the treatment groups were less likely to experience substantiated child abuse and neglect; only five sites (three programs) collected parent reports of abuse and neglect. Evaluations were more likely to assess changes in parenting responsivity and sensitivity, depression, and parenting stress, all of which are, however, linked with how parents treat children.

Overall, the evaluations provide little evidence that home-visiting programs reduce maltreatment as measured by substantiated cases of child abuse and neglect. Only one study—of the Nurse-Family Partnership (NFP) trial in Elmira, New York—showed that families in the treatment group were less likely to experience maltreatment. By contrast, evaluations of Hawaii Healthy Start, Healthy Families America (in two sites), and Early Start indicated that home visiting did not prevent maltreatment under the substantiated cases definition.

Despite sparse evidence that home visiting reduced substantiated cases of child abuse and neglect, some programs resulted in fewer parental reports of maltreatment, and more programs resulted in more sensitive and less harsh parenting, as well as improved home environments. The studies yielded mixed findings on child health and safety, the quality of the home environment, depression and parenting stress, and child cognition.

Overall, these findings paint a somewhat disappointing picture of the value of home-visiting programs in preventing child abuse and neglect. It does not follow, however, that the programs are of no value. Indeed, as noted, many set out not to reduce maltreatment, but to improve parenting skills, encourage healthy child development, and

help families attain economic self-sufficiency. The research does suggest that home-visiting programs are more effective at preventing maltreatment among low-income teenage mothers than among other groups. One program—the Nurse-Family Partnership—delayed second births among teenage mothers, an outcome that could protect the first child, as well as reduce maltreatment overall by lowering the number of at-risk younger siblings born to teen mothers. The evidence also indicates that more intensive programs are more effective. Taking these findings together, it may make sense to invest in intensive home-visiting programs for high-risk groups such as first-time teen mothers, rather than providing less intensive programs to a wider array of families.

Maltreatment and Parental Substance Abuse

Noting that parental abuse of alcohol and other drugs is linked with elevated rates of child abuse and neglect, Mark Testa, of the University of Illinois–Urbana-Champaign, and Brenda Smith, of the University of Alabama, examine how maltreatment can be prevented in substance-abusing families. Testa and Smith stress that parents who abuse drugs and alcohol usually face other problems, such as mental illness, poverty, and domestic violence. The co-occurrence of those multiple problems not only complicates the task of discerning whether it is substance abuse itself, or the accompanying conditions, that heightens the risk of child maltreatment, but also underscores the need to provide such parents with services that extend beyond treatment for substance abuse. As Barth notes in his article, substance abuse treatment rarely includes a parenting component.

Few high-quality studies examine whether substance abuse treatment is effective in reducing child maltreatment. Testa and Smith, however, discuss promising evidence from a program that assigned substance-abusing families (whose children had been removed) to "recovery coaches," who focused on removing barriers to drug treatment and helping parents stay in treatment. The program raised slightly the reunification rates of parents and children and lowered substantially the chance that parents subsequently gave birth to substance-exposed infants.

Active debate continues over whether newborns who test positive for intrauterine substance exposure should be removed from their families and, if so, under what conditions they should be returned. In Illinois—one of several states that treats intrauterine exposure to illegal drugs as evidence of maltreatment—approximately 50 percent of substance-exposed infants are removed to foster care, and rates of reunification are low. Reunification often hinges on completion of drug treatment programs leading to complete abstinence from drugs. It is unclear, however, whether abstinence should be used as a litmus test for reunification. Testa and Smith suggest that reunification could take place after parents have engaged in drug treatment, rather than after they stop using drugs altogether.

Child Sexual Abuse

David Finkelhor, of the University of New Hampshire, examines two quite different strategies for preventing child sexual abuse. The first, offender management, aims to keep sexual predators away from children by means of offender registration systems, background checks for employment or volunteer work, community notification, restrictions on where sex offenders can reside, and lengthy prison sentences. The second strategy, education, teaches children how they themselves can reduce their chances of being victimized.

Offender management strategies offer little robust evidence that they are effective. One flaw in programs that aim to fence sex offenders off from children is that most sexual abuse is perpetrated not by strangers, but by family members or family acquaintances. Offender management policies also rest on the mistaken stereotype that most sex offenders are incorrigible recidivists, and thus fail to allocate scarce management resources strategically. Finkelhor thinks more use of promising tools to distinguish high-risk offenders from low-risk offenders would improve offender management programs. In addition, based on the assumption that getting caught is a strong deterrent to future offending, he urges enhanced efforts to detect and arrest previously undetected offenders.

The second strategy to reduce sexual abuse and its consequences is to teach children how to identify situations where sexual abuse could occur, how to refuse sexual advances or break off physical contact at an early stage, and how to summon help from nearby adults once inappropriate contact has begun or appears imminent. Education programs, although lacking true experimental evidence, do have some promising empirical support. Children are able to learn these techniques, and children who participate in the programs show less evidence of self-blame than nonparticipants if they are subsequently sexually abused. Children who participate in these programs are also more likely to exhibit self-protective behaviors in simulated situations. As Finkelhor points out, learning protective behaviors and using them in simulated situations is not the same as being able to avoid sexual abuse, but the strategies used in education programs to prevent sexual abuse do parallel those that have shown success in clinical trials in other prevention efforts such as in bullying and dating violence.

Prevention and the Child Protection System

Like Stagner and Lansing, Jane Waldfogel, of Columbia University, notes that the child protection system's traditional focus on investigating reports and dealing with substantiated cases of maltreatment has been broadened in recent years to include prevention. Using national data on the progression of maltreatment cases from reports of suspected cases, to investigations of reports, to handling of both substantiated and unsubstantiated cases, Waldfogel shows that CPS agencies could expand their role in prevention through services to families whose cases are unsubstantiated. Such services include individual and family counseling, respite care, parenting education, home visiting, housing assistance, substance abuse treatment, and day care. These same services, of course, are also given to families with substantiated cases of abuse. There is little evidence, however, that the services are effective. In 2005, for example, 6.6 percent of open CPS cases had new incidents of substantiated cases of maltreatment within six months of being opened—a disturbingly high number when one considers that these are the cases that have come to the attention of the CPS professionals.

Implications

The articles in this volume have a host of implications, many supported by good evidence, for the field of child maltreatment prevention. Most researchers and CPS workers believe that prevention holds the key to reducing child maltreatment in the United States and to bringing down its well-documented long-term costs, both human and financial.

One implication that cuts across the articles is the importance of accurate risk assessment. The classic approach to prevention is to

identify those who are at risk for a condition and then to intervene to prevent them from getting an acute case of that condition. Risk assessment is never perfect. Experience and evidence both show that risk factors that can predict a given condition also identify many people who never get the condition; in addition, many people who are not at risk can nonetheless wind up with the condition. In the case of child maltreatment, for example, Wulczyn shows convincingly that infants are far more likely to be maltreated than children of any other age. Yet the overwhelming majority of infants are never maltreated, and many children are maltreated who are not infants. Adopting a preventive intervention and applying it to all infants would mean investing resources in many families that do not need the intervention and missing some that do.

The hope of developing an epidemiological profile that reveals precisely which families need intervention is a chimera. Nonetheless, it is possible to identify the types of families most at risk as well as the communities where large shares of such families live. In his article Wulczyn identifies four risk factors that are consistently correlated with maltreatment—the child's age, race, poverty, and parental drug involvement. Another risk factor is single parenting. These five factors interact in complex ways, but children who are characterized by all five are at far higher risk for maltreatment than children who have only one. As we discuss below, children whose families have been referred to CPS but whose cases have not been substantiated are also at higher risk, as are children from impoverished neighborhoods. None of these factors can perfectly identify children at risk for maltreatment, but they can be used to guide the targeting of interventions.

Though it is possible to identify families and communities at elevated risk for child maltreatment, the nation's child welfare system does not have adequate resources to provide prevention programs for the families and communities most at risk. Every day parents at risk bring their babies home from the hospital without any formal guidance on child rearing or information on where to turn if they have problems. Instead of taking a more prevention-oriented approach to child maltreatment, states across the nation have enacted mandatory reporting laws that require professionals who come into contact with children to report all instances of suspected abuse or neglect. Every community has a reporting system that both professionals and other concerned citizens must or can use to report abuse. But the reporting system itself, vital though it may be, is largely incapable of primary prevention because it is based on evidence that abuse or neglect has already occurred.

Even so, advocates of primary prevention would do well to attend carefully to the current system for handling maltreatment reports and deciding which families need services or need even to have their children placed in out-of-home care to prevent further maltreatment. In her article, Waldfogel provides a comprehensive flow chart that details what happens after a maltreatment report is filed. Indeed, that flow chart provides a broad representation of how the child protection system works. Of the 6 million reports to CPS in 2006, 3.5 million (60 percent) were screened into the system as being at least plausible instances of maltreatment that required investigation. Of the 3.5 million cases that were investigated, 1 million (30 percent) were substantiated as maltreatment. About 600,000 of these 1 million cases were opened for services and 220,000 (37

percent of the open cases) were judged to be so serious that the child was removed from the home. Surprisingly, of the 2.5 million cases that were not substantiated, 750,000 were nonetheless opened for services and in 100,000 (13 percent) of these the child was placed in out-of-home care.

The hope of developing an epidemiological profile that reveals precisely which families need intervention is a chimera. Nonetheless, it is possible to identify the types of families most at risk as well as the communities where large shares of such families live.

We draw two lessons for prevention from this summary of how CPS functions. The first, to which we return below, is that communities with large numbers of maltreatment reports or of screened-in or substantiated cases are prime targets for community-wide prevention. It is a good bet that communities with disproportionately high levels of maltreatment under any of these measures (reports, substantiated reports, family taken into the child protection system for services, child removal, termination of parental rights) would also be communities likely to have the epidemiological characteristics identified by Wulczyn as predictive of abuse and neglect. A second lesson is that the progression of cases suggests a need for preventing cases at each level of Waldfogel's flow chart from progressing to the next level. Along with Stagner and Lansing, we define primary prevention as providing help to at-risk families before maltreatment occurs. Under the Waldfogel schema, reported cases that were not screened in and screened-in cases that were not substantiated could be considered prime cases for some type of action that, under our definition, would be primary prevention.

The 30 percent of unsubstantiated cases that are nonetheless opened for services by CPS constitute a special type of prevention. Even though the reported maltreatment was not formally substantiated, something about the cases—perhaps having previous reports or substantiated cases on the same family—convinced investigators that a problem existed and that something should be done to help the family. Whether we call these cases primary prevention matters less than recognizing that children from these families are likely to be at elevated risk and that public funds should be invested to prevent maltreatment (or additional maltreatment).

The risk to the families reported to CPS is even greater if a parent is addicted to drugs or alcohol. Although estimates vary widely, perhaps as many as half (some estimates are even higher) of all parents who have committed substantiated child maltreatment are addicted. Many policy makers seem to believe that placing these parents in drug treatment programs would be an effective strategy for preventing abuse. But as Testa and Smith demonstrate, that approach has three flaws. First, most drug treatment programs are not effective. Second, even effective programs tend to require many years of treatment and follow-up before the addiction is broken, raising the question of what happens to the children of program participants in the meantime. Third, and most important, because

addiction is almost always accompanied by problems such as mental illness, homelessness, or domestic violence—all of which are also correlated with maltreatment—drug treatment alone is not enough. Effective treatment requires progress on all fronts.

Two recommendations by Testa and Smith carry important implications for prevention. First, addictions alone are not a sufficient reason for removing children from their homes. As shown by a host of studies, being in the child protection system itself is a risk factor both for further maltreatment and for many years of shuffling back and forth between the homes of strangers.[10] Every unnecessary removal of a child from home is a threat to the child's well-being, exactly the opposite of the outcome that prevention programs are designed to promote. Second, CPS agencies should require drug-addicted parents with substantiated maltreatment reports to enroll in drug treatment within a few months and allow them up to eighteen months to show progress in all problem areas, including addiction. In the absence of measurable signs of progress on every front, it makes sense to implement a permanency plan for the child that involves placement with relatives or in an adoptive home. This is a worthwhile prevention proposal, although allowing a year rather than eighteen months for parents to show measurable progress might be even better.

A family's neighborhood can also be a risk, or a protective, factor for child maltreatment. The availability of parks and other recreational facilities; the proximity, number, and quality of facilities that provide education, child care, mental health counseling, medical treatment, and other services; and the existence of positive social relationships among neighborhood residents all have been shown to influence the frequency of child maltreatment within communities. And as evidence has mounted that the physical and social characteristics of communities can affect the incidence of child maltreatment, researchers and practitioners have begun to design interventions to influence community characteristics in such a way as to prevent child maltreatment.

According to Daro and Dodge, however, only one program—Triple P–Positive Parenting Program—provides solid evidence that community-wide initiatives can prevent child abuse. The program consists of five levels of intervention. The most general level, which can reach nearly everyone in the community, is a media-based campaign that teaches the basics of positive parenting, including the major Triple P message: how to promote child safety, manage child behavior, use effective discipline, and ensure basic health care. This parenting message is communicated through relatively low-cost newspaper articles, newsletters, mass mailings, presentations at community forums, and a community website. Triple P reserves the more intensive, and expensive, treatments for progressively smaller groups of families that are at progressively greater risk for maltreatment. The final and most intensive level is individual family treatment, which, like all other levels, is organized around the Triple P positive parenting message. Triple P has its own tested family treatment program, but other programs or effective elements of several programs to help individual families could also be used.

It might, for example, be possible to integrate any of several home-visiting programs into a Triple-P type of graduated approach to prevention. Cost considerations seem certain to dictate that all community-wide programs use a multi-stage approach like Triple P. The

success of a Triple P-like program hinges in large part on the success of the intensive family intervention reserved for the highest-risk parents. As noted, one widely used family intervention is home visiting, whereby trained professionals visit parents in their homes and administer a standard program that can range in intensity from one visit to multiple visits over months or even years. Although Howard and Brooks-Gunn were unable to find consistent evidence that the nine home-visiting programs they examined reduced the substantiated incidence of child maltreatment, some of the programs had positive effects in areas of family life related to child abuse risk. For example, at least two (and often more) programs reduced parent reports of abuse, increased child health and safety, improved the child's home environment, increased parent responsivity and sensitivity to the child, reduced harshness, reduced parent stress or depression, and improved child cognition. Thus, the programs may affect the incidence of maltreatment even though the effects are difficult to document. Howard and Brooks-Gunn conclude that the programs would be most likely to reduce child maltreatment if service providers were to follow faithfully and completely the protocols of the various programs, employ well-trained staff, and evaluate their programs' outcomes continuously. For the field of child maltreatment prevention, then, the conclusion is that carefully implemented programs delivered to parents in their homes may have a role to play in preventing child maltreatment, though the evidence is equivocal.

The evidence on preventing sexual abuse is only somewhat less equivocal. Surprisingly, the offender management strategies that have attracted considerable media attention and widespread public support offer little to no evidence of effectiveness. As David Finkelhor shows, it is simply not known whether registering sex offenders, notifying communities when offenders move in, controlling where convicted offenders can live, and imposing longer prison sentences reduce sexual offending. Based on research and experience with sexual abusers, it seems unlikely that these strategies will ever work. As Finkelhor explains, they are based largely on mistaken stereotypes and unfounded assumptions about sex abusers. Not least, offender management interventions focus on previous offenders, when most known acts of sexual abuse are committed by offenders with no previous record of abuse. Thus, even if previous offenders are supervised or rehabilitated, the nation will still face a serious sexual abuse problem because of the frequency of new offenses.

Given the lack of evidence that offender management efforts are effective, it is fortunate that schools, religious groups, and youth-serving organizations are now operating programs that teach children what to do in situations of potential abuse, how to stop potential offenders, and how to find help. Such programs also teach children not to blame themselves if they are victimized, a tertiary prevention strategy aimed to head off emotional problems often triggered by abuse. Research provides modest evidence that these courses can successfully impart to children, even preschool children, the necessary concepts and skills without increasing children's anxiety. Although there are no well-designed studies providing evidence that these programs prevent sexual abuse, there is reason to believe that they might, and they do provide evidence of other beneficial effects, such as increased disclosure and less self-blame following abuse. Expanding these programs may be justified.

A final possibility for preventing abuse and, especially, neglect that was not directly examined by any of the articles is lower birth rates for young unmarried women who are at increased risk for committing abuse or neglect. A recent careful study by Robert George, Allen Harden, and Bong Lee at the University of Chicago showed that young teen mothers in Illinois were more than twice as likely as other mothers to have their children removed and placed in foster care during the first five years after birth.[11] Extrapolating from this finding, Saul Hoffman has estimated that preventing these births would save about $2.3 billion in public funds and would reduce the foster care caseload by 58,000 cases.[12] Prevention among this high-risk group could take the form of discouraging first births to teens and encouraging delays in childbearing by teens after a first birth. Strong evidence from many random-assignment programs indicates that teen births can be delayed.[13] Similarly, home-visiting programs have been effective at reducing second births to young mothers. Evidence from both types of programs suggests that preventing births to mothers at high risk for having children who are maltreated may be a promising strategy. It should, however, be stressed that the evidence that reducing teen births will reduce maltreatment is, at this point, only suggestive. Rigorous evaluations, such as those that have been conducted for home-visiting programs, would be worthwhile.

Where We Go from Here

Waldfogel's article paints a somewhat dismal picture of the state of efforts to prevent child abuse and neglect in the United States. Although it is difficult to compute total U.S. spending on prevention programs, it appears that the sum of federal, state, and local outlays on primary prevention is small relative to the total spent on secondary and tertiary prevention. In addition, relatively few prevention programs have been rigorously evaluated. Yet the evidence reviewed in this volume suggests several promising strategies to prevent child abuse and neglect. Two steps are now in order. The first is to redouble efforts to collect evidence on program effectiveness. Focusing on collecting evidence does not mean putting prevention efforts on hold until more is known about "what works." Rather, it means constructing programs in ways that make it possible to evaluate rigorously their effects. The second step is to fund prevention programs. As Waldfogel notes, prevention efforts have increased in recent years, in part because of changes in the Child Abuse Prevention and Treatment Act when it was reauthorized in 2003. More generally, policy makers have shown increased interest in strengthening early childhood programs by expanding home-visiting programs and improving the quality of child care. These initiatives, if properly designed and targeted, could well help prevent child abuse and neglect.

Endnotes

1. U.S. Department of Health and Human Services, Administration on Children, Youth, and Families, *Child Maltreatment 2007* (Washington: U.S. Government Printing Office, 2009). The figures for investigations come from appendix table 2.4 and exclude Maryland and Michigan because of a lack of data. The figures for victimizations come from appendix table 3.1 and also exclude Maryland and Michigan. The number of fatalities is from table 4.1. The states of Maryland, Massachusetts, Michigan, and North Carolina are not included in the count of fatalities.

2. Studies on the short-term and long-term consequences of maltreatment are reviewed in the first article of this volume. See also Jack P. Shonkoff, W. Thomas Boyce, and Bruce S. McEwen, "Neuroscience, Molecular Biology, and the Childhood Roots of Health Disparities: Building a New Framework for Health Promotion and Disease Prevention," *Journal of the American Medical Association* 301, no. 21 (2009): 2252–59.

3. Cynthia Scarcella and others, *The Cost of Protecting Vulnerable Children,* vol. V: *Understanding State Variation in Child Welfare Funding* (Washington: Urban Institute, 2006); Ching-Tung Wang and John Holton, "Total Estimated Cost of Child Abuse and Neglect in the United States" (Chicago: Prevent Child Abuse America, September 2007).

4. R. T. Leeb and others, *Child Maltreatment Surveillance: Uniform Definitions for Public Health and Recommended Data Elements,* Version 1.0 (Atlanta: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, 2008).

5. The specific language in the statute is "death, serious or protracted disfigurement, protracted impairment of physical or emotional health, or protracted loss or impairment of the function of any bodily organ." Soc. Serv. Law § 371.

6. Ann. Code § 12-12-503.

7. U.S. Department of Health and Human Services, *Child Maltreatment 2007* (see note 1).

8. A. J. Reynolds and D. L. Robertson, "School-Based Early Intervention and Later Child Maltreatment in the Chicago Longitudinal Study," *Child Development* 74, no. 1 (2003): 3–26.

9. National Institute of Child Health and Human Development, "SIDS: 'Back to Sleep' Campaign," see www.nichd.nih.gov/sids.

10. Joseph J. Doyle Jr., "Child Protection and Child Outcomes: Measuring the Effects of Foster Care," *American Economic Review,* forthcoming.

11. R. M. George, A. W. Harden, and B. J. Lee, "Effects of Early Childbearing on Child Maltreatment and Placement in Foster Care," in *Kids Having Kids: Revised Edition,* edited by R. Maynard and S. Hoffman (Washington: Urban Institute, 2008).

12. Saul D. Hoffman, *By the Numbers: The Public Costs of Teen Childbearing* (Washington: National Campaign to Prevent Teen and Unplanned Pregnancy, October 2006).

13. Douglas Kirby, *Emerging Answers 2007: New Research Findings on Programs to Reduce Teen Pregnancy* (Washington: National Campaign to Prevent Teen and Unplanned Pregnancy, 2007).

Progress toward a Prevention Perspective

Matthew W. Stagner and Jiffy Lansing

Summary

Matthew Stagner and Jiffy Lansing chart developments in the field of child maltreatment and propose a new framework for preventing child abuse and neglect. They begin by describing the concept of investment-prevention as it has been applied recently in fields such as health care and welfare. They then explain how the new framework applies to maltreatment prevention, noting in particular how it differs from the traditional child protective services response to maltreatment.

Whereas the traditional response aims to prevent a recurrence of maltreatment once it has already taken place, the new framework focuses on preventing maltreatment from occurring at all. Rather than identifying risk factors for maltreatment and addressing the problems and deficiencies of the primary caretaker, the new framework focuses on strengthening protective factors and building family and social networks to reinforce the ability of parents to care for their children. Whereas the orientation of the traditional child welfare service approach is legal and medical, the new framework has a more developmental and ecological orientation. It aims to build on the strengths children have at particular points of the life stage and enhance the social context of the child. Rather than putting families into the hands of unknown professionals who shuffle them from one program to another, including foster care, the investment-prevention model seeks to integrate professionals and paraprofessionals from the family's community into their everyday life, as well as to ensure an interconnected system of services. Finally, rather than seeking to minimize harm to the child, it aims to maximize potential—to strengthen the capacity of parents and communities to care for their children in ways that promote well-being.

Researchers have struggled to define maltreatment, identify its causes, and assess its consequences and costs. In recent years, however, researchers have clarified the severe consequences of child maltreatment and highlighted several risk factors. They have also developed new prevention interventions based on a variety of theories explaining why maltreatment takes place. Stagner and Lansing conclude with a brief survey of these new prevention interventions. The task for researchers now, they say, is to conduct rigorous evaluations of the interventions to demonstrate the benefits of prevention.

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Prevention can be conceptualized as investing in future outcomes by influencing current behavior or conditions. Expenditures made now, if they change conditions or behavior, may stave off future problems that cost more than the prevention efforts, even when future costs are discounted. The concept is common enough in everyday life: a regular oil change puts off costly engine troubles; regular dental checkups help avoid expensive and painful dental surgery; wearing a seat belt limits the harm caused in the event of a crash. Investing time, energy, and money now may prevent future costly problems. The likelihood of cost savings at the individual or community levels can, when recognized by the individual or community itself, motivate preventive action. Not everyone, however, takes preventive action even when it appears to be in his or her best interest. Among the barriers to investing in prevention are inadequate resources, failure to grasp the benefits, failure to understand the causes, and indifference to the consequences.

Successfully implementing prevention requires identifying and defining clearly the social problem to be prevented. It also requires accurately calculating the costs of the social problem and comparing them with the costs of preventive action. Finally, it requires establishing a clear linkage between the causes of the social problem and the behavior or condition change that can prevent the later problem. This linkage provides a framework for the preventive intervention.

Prevention practices have been developed in fields from health care to crime control, drawing on a variety of theoretical and practical approaches. For example, one way to prevent disease (and to avoid the high costs of medical treatment) is by distributing health information on the negative consequences of smoking and poor nutrition. Another is to promote health positively and proactively through interventions, such as nutritional assistance in the Women, Infants, and Children (WIC) program. Yet other ways include imposing legal consequences, as with mandatory seat belt laws, or making adjustments to the environment, such as installing cameras and increasing police presence in areas identified as "hot spots" for criminal activity. For such prevention policies to succeed, it is necessary to make accurate assumptions about the risk factors that influence behavior or conditions.

Preventing problems, rather than responding to them after they have occurred, appeals to Americans. Doing so is, however, sometimes ethically or socially complex. For example, the ethical implications of emergency contraception as a means to prevent pregnancy complicate the development and implementation of public policies. Sometimes policy efforts are complicated by social norms that seem to contradict the aims of prevention efforts. Teen birthrates, for example, are influenced by the norms of the context within which the individual functions. Research indicates that social factors such as not being in school three months post-partum and having many friends who are adolescent parents are factors in predicting a second birth among teenage mothers.[1] In many real-life situations, it can be difficult to generate appropriate normative standards to aid targeting prevention efforts to those who need it most.

Access to services alone is not sufficient to fulfill prevention goals: the services must be responsive to local norms and build support from within the community in order to reach those at risk. Such norms are particularly

difficult to generate from the top down in a society that is multicultural and constantly adapting to technological advances, new political attitudes, and changing economic conditions. A bottom-up approach, grounded in local contexts, may prove to be more effective.

In this article we set forth a framework for prevention of child maltreatment and explore how child maltreatment policy has developed in its support of prevention. We review research findings on the consequences of child maltreatment, the risk factors for maltreatment, and the theoretical perspectives that connect causes to possible interventions. We conclude by surveying some types of interventions that fit this developing framework on prevention. Child maltreatment prevention has recently moved away from individually focused responses to instances of abuse or neglect and toward a more community-focused system of shared responsibility for the well-being of children.[2] Prevention efforts increasingly aim to strengthen the capacity of parents and communities to care for their children in ways that promote well-being.[3]

In 2002, Tom Corbett and Rebecca Swartz championed an investment-prevention (IP) framework for welfare reform that transcends the established "silos" within which programs traditionally operate by connecting services and interventions through systems of collaboration that address long-term problems and prevent future ones.[4] They suggested that such a model would decrease welfare dependence, increase employment, and decrease poverty. This IP approach can serve as a model framework for maltreatment prevention as well. The IP approach acknowledges the importance of identifying which services would benefit broad segments of the population and which would best be targeted to specific groups. Rather than addressing individual deficits, the IP approach focuses on how aspects of the individual and his or her community can help improve functioning.

Social science researchers have recently made significant progress in understanding the complicated phenomenon of child maltreatment and in considering how American society can best respond to it. Increasingly, that response incorporates an investment-prevention approach. The articles in this volume lay out some of the best current thinking on the prevention of child maltreatment.

The Evolution of Child Maltreatment Prevention in the United States

Child maltreatment prevention has evolved in a complex policy environment over the past forty years. Despite decades of public efforts to combat abuse and neglect, child maltreatment remains a significant social problem in the United States. Finding the most effective ways to prevent maltreatment could reap significant benefits both for individuals and for society, but the best ways to identify and respond to those at risk of maltreatment remain elusive.

Modern perspectives on child maltreatment can be traced to the early 1960s, when advances in radiological technology enabled physicians to visualize and document abuse.[5] In 1962, Dr. Henry Kempe published the first empirical work on the scope of "battered child syndrome," describing for the first time the medical aspects of child abuse.[6] Kempe's study documented more than 300 cases of suspected maltreatment discovered in emergency rooms. It provided insight into the scope of the problem, served as a model for similar scientific surveys, and offered

"diagnostic clues" for physicians and other frontline responders. It also made an explicit public policy recommendation to develop an official reporting system to protect children who are suspected of being victims of abuse.

In response to Kempe's call for action, states began to develop response systems and reporting laws. The laws required professionals working with children, such as doctors, teachers, and therapists, to report suspected cases of child maltreatment to a state agency.[7] For states that adopted official reporting systems, Congress authorized grants to be used to protect children against abuse. By 1967, in what Barbara Nelson calls "one of the most rapidly adopted legislative trends in the twentieth century," all states and the District of Columbia had passed some form of reporting laws.[8] The medical field continues to have a strong influence over child maltreatment intervention, though state reporting and response systems now focus on social, rather than medical, services.

During the 1960s and 1970s, these newly developing social service channels motivated the public to begin reporting suspected abuse. David Gil's 1965 public opinion poll revealed that although only 23 percent of respondents said that they would report families they suspected of being involved in child maltreatment to the police, 45 percent said they would report such suspicions to social service agencies.[9] The increase in formalized channels for reporting helped to build the field of child maltreatment prevention as a scientific and applied endeavor. It also advanced the professionalization of practitioners working with children and families affected by maltreatment. The focus of these systems, however, was on responding to reports of maltreatment, rather than on prevention.

The federal Child Abuse and Neglect Prevention and Treatment Act (CAPTA) was signed into law in 1974. Though "prevention" was part of the title, the initial legislation was largely based on preventing the recurrence of child maltreatment through establishing reporting laws and child protective service systems. CAPTA's initial guidelines encouraged states to establish specific agencies to track and investigate reports of maltreatment with the aim of protecting the children from future harm after a report was made.

Most interventions in the child maltreatment field are now geared toward families first known to authorities after maltreatment occurs. In 2006, charges of abuse or neglect were substantiated for an estimated 905,000 children.[10] In nonfatal cases of substantiated abuse, nearly three-quarters of victims (74.7 percent) had no history of prior confirmed victimization, and about 10 percent were infants under the age of one year, meaning, for first children, there was little time to intervene.[11] One study found that approximately 19 percent of fatalities caused by child maltreatment occurred in infants under the age of one year. Almost a third of these infants—32.7 percent—were less than one week old.[12]

The CAPTA legislation, which has gone through many amendments, was most recently reauthorized as the Keeping Children and Families Safe Act of 2003. This latest incarnation highlights the growing interest in preventing maltreatment before it occurs by directly funding child maltreatment prevention. The law also funds assessment, investigation, prosecution, and treatment activities and supports research, evaluation, technical assistance, and data collection activities. It established the Office on Child Abuse and Neglect within the federal bureaucracy.

Child maltreatment policy efforts are complicated by social mores, such as continuing corporal punishment in some schools, violence in the media, or neighborhoods with entrenched poverty, and by public policies, such as those that lead to poor educational systems or limited access to health insurance.[13] Over the past few decades, public consciousness about child maltreatment has been raised by professional recognition of the problem, scientific research on the causes and effects, increased media attention to incidents of abuse, and advocacy for policy developments. New policy developments include flexibility in eligibility requirements and federal funding to support community-based early interventions, family-strengthening efforts, early education programs, and child welfare system infrastructure enhancements.[14]

Challenges in Developing a Prevention Approach

Several barriers have slowed development of a prevention orientation in the field of child maltreatment. The first has been difficulties in defining the problem to be prevented. The second has been a failure to understand the full consequences and costs of child maltreatment. The third has been incomplete understanding of the causes of maltreatment and the ways in which intervention might interrupt those causes.

Definitions

A clear definition of child maltreatment continues to elude experts in the field. CAPTA sets forth a minimum definition of child abuse and neglect as any recent act or failure to act on the part of a parent or caretaker that results in death, serious physical or emotional harm, sexual abuse, or exploitation; or an act or failure to act on the part of a parent or caretaker that presents an imminent risk of serious harm.[15] Although the medical field is uniquely positioned to identify physical maltreatment of children after the fact, experts broadly agree that child maltreatment can involve harm that leaves no physical evidence.

Over the past few decades, public consciousness about child maltreatment has been raised by professional recognition of the problem, scientific research on the causes and effects, increased media attention to incidents of abuse, and advocacy for policy developments.

The definition of child maltreatment now includes physical, emotional, psychological, and sexual abuse, as well as "neglect."[16] Neglect is an imprecise term that can encompass caregivers' neglect of physical needs such as food, clothing, and shelter, neglect of education, neglect of medical care, and emotional neglect. The term *neglect* is also susceptible to cultural interpretations of parenting practices in the United States.[17] In some cultural enclaves, it is not considered neglectful for children to stay in the home unsupervised because of the proximity of extended family or close ties in the neighborhood. In others, some medical interventions are avoided because of religious beliefs. Depending on the context and legal standards of neglect, these culturally specific practices could be considered child neglect and children could be removed from the

home if other strategies are not employed to promote parental behavioral change. Because CAPTA's definitional framework sets only minimum standards, the details of a definition fall to state policy makers, with the result that definitions of, and legal consequences for, child maltreatment vary by state.[18] For this reason, researchers must take into account the range of state definitions when aggregating and interpreting state data.

State definitions remain broad enough to require practitioners in the medical, social services, educational, and legal fields to make case-by-case clinical judgments, some of which can be individually biased or systematically flawed.[19] Despite decades of federal and state legislation, these issues continue to challenge the field and heighten the importance of defining child maltreatment and its consequences.

Consequences

Both short- and long-term effects of maltreatment can be severe, for individual children as well as for society. The most serious consequence is the death of the child. In 2006, 1,530 children died as the result of abuse or neglect in the United States.[20] In addition, many early childhood deaths attributed to accidents or sudden infant death syndrome (SIDS) may be due to maltreatment.[21] Despite imprecise reporting, child maltreatment is the leading cause of injury-related death for children less than one year of age.[22]

A number of studies indicate that child maltreatment inhibits successful development. Some immediate consequences include physical injuries,[23] delayed physical growth,[24] neurological damage,[25] and cognitive and language deficits.[26] Moreover, these consequences are often interrelated. Penelope Trickett and Catherine McBride-Chang found in a review of research that maltreatment had psychobiological consequences, perhaps as a stress reaction.[27] Maltreatment affects development and adjustment, as well as relationships with parents, other adults, and peers. Problems include aggression, withdrawal, and isolation.

Maltreatment can directly affect a child's brain. Danya Glaser found a stress response in the brain in maltreated children, as well as biochemical, functional, and structural changes that are not part of the stress response.[28] She concluded, "There is considerable evidence for changes in brain function in association with child abuse and neglect." These neurobiological findings explain some of the emotional, psychological, and behavioral difficulties facing maltreated children.

Many of the consequences of maltreatment continue into adulthood. Child maltreatment is associated with long-term psychological and emotional problems such as depression, self-injurious behavior, and increased risk of suicidal ideation;[29] increased risk of substance abuse, aggression, and criminal activity;[30] and post-traumatic stress disorder.[31] Cathy Widom found that abused and neglected children had higher rates of adult criminality than a matched control group.[32] Amy Silverman and several colleagues found that abused children were functioning more poorly at age twenty-one than were non-abused peers.[33] Robin Malinosky-Rummell and David Hansen reviewed seven areas of possible long-term consequences of childhood physical abuse and found that physically abused children demonstrate significantly elevated levels of nonviolent criminal behavior.[34] Relational problems associated with the effects of child maltreatment can cause further harm and significant costs to society. [35] The effects of maltreatment, in short, compromise lifetime productivity.[36]

Causes

Policy makers need to understand the wide range of potential causes of child maltreatment before they can develop a clear framework or theory for intervening. One task is to understand risk factors associated with child maltreatment. Another is to consider a range of theories that can tie these risk factors together and provide insights for prevention.

Child maltreatment is associated with many risk factors. Some involve the child, some the parent, and some the context in which the family lives. For example, one clear risk factor is the child's age. Many studies indicate that the younger a child is, the higher the risk for severe or fatal maltreatment.[37] Since 1983, about one-fifth of all children who are admitted to foster care because of maltreatment are less than a year old.[38]

Parent risk factors are heterogeneous and cannot be characterized by a single psychological orientation or social situation. Risk seems to be related to both internal factors (competencies and vulnerabilities that the parent brings to the situation) and external factors (stressful or socially isolating factors that would affect anyone in that situation).[39]

Contextual risk factors that contribute to maltreatment risk include small, sparse social networks[40] and community disorganization and violence.[41] Some data also suggest correlations between child maltreatment in the home and domestic violence, substance abuse, single parenting, and teen pregnancy.[42] Among contextual risk factors, the relationship between poverty and maltreatment is particularly complex. Maltreatment is more commonly reported to child welfare agencies in poor and extremely poor families than in families with higher incomes.[43] It is unclear whether the discrepancy in rates of reporting accurately reflects maltreatment incidents. The higher rate for families in poverty may be skewed by data collection methods,[44] disparity in services to populations in different geographical areas, and professional bias. One study found significant underreporting by hospitals of white and wealthy families of children alleged to be victims of abuse or neglect.[45] That finding suggests the need for caution in causally linking low socioeconomic status with higher rates of child maltreatment. Nonetheless, research does suggest a direct link between social stressors, especially perceived economic stress, and higher rates of child abuse.[46]

Building a Theoretical Basis for Prevention

The many risk factors for and causes of child maltreatment complicate efforts to conceptualize effective policy mechanisms for prevention. In one such effort, the Children's Bureau outlined five protective factors that may diminish the likelihood of maltreatment: nurturing and attachment between family members; knowledge of parenting and child development; parental emotional resilience; social connections for parents; and concrete supports such as food, clothing, housing, transportation, and services.[47] Although the prevention field now recognizes the interdependence of multiple causes of child maltreatment, many interventions focus on addressing one particular risk factor. The result is a wide range of disconnected and under-funded prevention activities.[48]

The five protective factors associated with maltreatment can be interpreted in numerous ways to build a theory for prevention. Deborah Daro has identified four common theoretical perspectives on prevention. The first, psychodynamic theory, posits that if parents better understand and accept their

role as parents, they will be less abusive. The second, learning theory, is that if parents better understand how to care for their children, they will be less abusive. The third, environmental theory, is that if parents have access to more and better resources, they will be less likely to abuse. The fourth, ecological theory, is that child abuse will decline if a network of community support can compensate for individual, situational, and environmental shortcomings.[49]

The theoretical orientation of prevention is often linked to questions about targeting—that is, determining which families should be the focus of the intervention. The interventions themselves may focus on characteristics as different as poverty, family dysfunction, or individual behaviors. But for targeting to have a chance to work, researchers must develop effective programs that address the appropriate causes for the appropriate population segments.

Increasingly, research has deepened analysts' understanding of the multiple and overlapping risk factors that contribute to social problems such as crime, family violence, and substance abuse.[50] Because child maltreatment is subject to so many risk and protective factors simultaneously, analysts must determine whether increasing parental knowledge, changing parental attitudes and behaviors, or influencing the contexts in which families function will be the most effective strategy in particular situations. It is also important to consider the delivery of the program (the style, substance, and location) to understand which strategies are appropriate for particular populations and contexts.

Robert Gordon, in the area of disease prevention, and later Karol Kumpfer and Gladys Baxley, in the area of substance use, proposed a three-tiered classification system for preventive intervention: universal, selective, and indicated.[51] The child maltreatment prevention field has translated these tiers as follows. Universal prevention efforts attempt to influence the attitudes and behaviors of the population at large to achieve primary prevention. Targeted (selective) efforts aim specific programs at particularly defined "at-risk" populations to achieve secondary prevention. And indicated efforts are designed to prevent further maltreatment where abuse has already been reported. Universal and targeted approaches are considered to be "before-the-fact" prevention efforts, while indicated interventions are "after-the-fact" approaches.

Each tier of this framework has different goals and requires different approaches.[52] Universal and targeted prevention approaches aim to stem maltreatment before it starts by minimizing identified risk factors for maltreatment and maximizing protective factors. Numerous prevention approaches can be applied both universally and to targeted groups. As Neil Guterman notes, enrollment strategies in prevention programs rarely represent purely universal or targeted approaches.[53] Many interventions that can be implemented universally, such as those that distribute educational materials and operate family support groups, can also be implemented with populations assessed to be at-risk. And, in fact, considerations such as funding sources and service availability often outweigh strategic intention in decisions about whether interventions will be offered universally or targeted to particular groups. The U.S. historical and political context also influences intervention funding and targeting questions. Strong views about both the privacy of the family and the right of parents to raise their children as they see fit, as well as value judgments about whether families

"deserve" to receive public support, continue to shape the structure and content of intervention policy.[54]

Indicated interventions, the third tier of child maltreatment prevention, were the first to be federally mandated and institutionalized. Such interventions, which serve families where maltreatment has already occurred, begin with monitoring by professionals who have contact with children, such as teachers and school administrators, doctors, therapists, and even bus drivers. Sometimes, child welfare agency intervention takes the form of removing the child from the family of origin and placing him or her in foster care. At other times, child welfare intervention involves referral to services in the community. It is worth noting that placement decisions affect families of color and impoverished families at disproportionate rates.[55]

Trade-offs and Challenges in Targeting

Proponents of targeting to specific subpopulations argue that public funds should be spent where they are most needed and can achieve the best results. Successful targeting thus requires accurate benefit-cost analysis. Which interventions, targeted on which families, are most likely to avoid the severe consequences of maltreatment? Researchers have yet to develop fully the rigorous intervention evaluations needed to inform such analysis. This volume outlines the progress made in making informed targeting decisions.

Demographic-based targeting strategies have been more successful than others, in part because they serve more or less as universal interventions for specific subpopulations, such as first-time parents or families of low socioeconomic status.[56] As such, they lessen the likelihood of stigmatization and more easily facilitate peer networks. They also lessen the need to enforce eligibility criteria or provide alternatives to those who may benefit from some form of assistance but are not eligible for the particular program.

Because child maltreatment is subject to so many risk and protective factors simultaneously, analysts must determine whether increasing parental knowledge, changing parental attitudes and behaviors, or influencing the contexts in which families function will be the most effective strategy in particular situations.

Demographic factors can be used to identify geographic areas where interventions can be targeted—for example, neighborhoods with inadequate social or human services capacity or areas that offer institutional structures on which to build, such as hospitals or community colleges. Demographic factors also may identify natural access points within an under-served community, such as a church, beauty shop, or shopping mall, which can be used to build existing informal networks into broader systems of support.

Unlike targeted interventions, universal prevention approaches educate the general public about the consequences of child maltreatment and provide information about and

access to resources. One mass media universal approach uses everyday language and compelling images in television, radio, print, and billboard public service messages. First implemented during the 1970s, that approach continues to be considered a vital component of comprehensive maltreatment strategies.[57] Yet Deborah Daro and Karen McCurdy find little evidence that it has positive effects on either maltreatment or related outcomes such as parental attitudes, knowledge, and behaviors, parent-child interactions, and child outcomes.[58]

Ascertaining whether programs are well-targeted is challenging as well. Targeting at levels other than universal sometimes requires assessing which families may be at risk. Researchers have developed tools to help identify parents and caregivers who are likely to maltreat again, but results suggest further refinement is needed to improve the accuracy of such assessment instruments.

Risk assessment tools are often highly inaccurate.[59] Reviews of formalized risk-assessment methods call into serious question the use of such professionally administered checklists in child protection decision-making.[60] One review of risk assessment instruments used by child protective services indicates that 13 percent to 25 percent of the families identified as likely to abuse their children again do not in fact repeat the abuse and that 14 percent to 86 percent identified as unlikely to abuse again later do repeat the abuse.[61]

Evaluations of programs that employ screening measures that include families with a low risk of maltreatment can show inflated rates of success. On the other hand, evaluations of programs accurately targeted to families with greater risk of maltreatment may show lower rates of overall success (though potentially greater benefit). This highlights the role of screening and assessment in targeting interventions. Because of the complexity of assessing child maltreatment prevention programs, recent efforts in program development, implementation, and evaluation have focused on determining "best practices" rather than on evaluating the impact of program models themselves.[62]

Benefits of Successful Prevention Efforts

Although researchers have documented with increasing clarity the consequences of maltreatment and have gained a better understanding of the costs of interventions and how to target, they have been less successful in identifying rigorously the benefits of various prevention interventions. Results from meta-analyses that use statistical techniques to summarize the outcomes of child maltreatment interventions are mixed.[63]

Measuring the costs and benefits of child maltreatment programs is complex. Reporting inconsistencies and discrepancies plague some seemingly simple-to-determine costs, such as death and treated injury. These outcomes, for example, are often attributed to other causes.[64] Despite evidence linking maltreatment with longer-term, negative behavioral outcomes, it is impossible to pinpoint maltreatment as the sole or primary contributor to psychosocial problems, delinquency, educational difficulties, criminality, or engaging in risky behavior.

Some studies, however, do present findings on the cost of maltreatment. Ching-Tung Wang and John Holton, using direct and indirect costs, estimate the nationwide annual costs of child abuse and neglect at $103.8 billion in 2007 dollars.[65] And Robert Caldwell performed a state-level comparative analysis

of the costs associated with child maltreatment and the costs of providing child maltreatment prevention services to all first-time parents.[66] Including costs associated with low-birth-weight babies, infant mortality, special education, protective services, foster care, juvenile and adult criminality, and psychological services, Caldwell estimated the cost to Michigan of child maltreatment at $823 million annually. Such costs suggest that successful prevention programs could reap significant savings.

Some prevention programs show positive results. The most promising appear to be those that focus on early intervention—identifying risk factors as early as possible in order to provide services that lessen the impact of those factors on a child's development. These risk factors can include infant or child health or disability but can also include risk factors for maltreatment. Key assumptions of early intervention include the cognitive advantage hypothesis (increasing children's cognitive skills early supports individual development) and the family support hypothesis (participation enhances parenting practices, attitudes and expectations, and involvement in children's education). The function of early intervention is to identify and serve special needs early in life in order to increase the developmental and educational gains of the child and improve the functioning of the family, thereby reaping societal and cost-saving benefits in the long term.[67] An evaluation of the Healthy Families Alaska Program, for example, found that it reduced parental stress and improved child development.[68] The benefits possible from maltreatment prevention programs may be comparable to those of early childhood education, a specialized focus of early intervention with an increasing flow of federal funds. Participating in early childhood education, for example, has been shown to improve educational performance, raise earnings, and decrease criminal behaviors later in life.[69] And the return for investing in high-quality early childhood programs and services can be substantial. Based on the gains cited above, James Heckman has calculated a cost-benefit ratio of approximately $7 for every $1 invested in high-quality early childhood experiences for at-risk children.[70]

Possible Approaches to Preventing Child Maltreatment

In the following section we briefly describe various types of interventions and the risk and protective factors they aim to influence. We provide a quick overview to suggest the range of approaches and the trade-offs within each. We also align the interventions with Daro's four theoretical perspectives outlined above. In the remainder of the volume, contributors examine these and other interventions in greater detail.

Education (Learning Theory)

Distributing educational materials to a family when a baby is born is one effective way to teach new parents about healthy parent-child interaction and child care practices. In a randomized trial using culturally sensitive videotapes that illustrated both successful and unsuccessful strategies for feeding infants, parental attitudes and parent-child interactions during feedings significantly improved among first-time African American teen mothers in the intervention compared with those in the control group.[71]

Support Groups (Learning, Environmental, and Ecological Theories)

Support groups provide formal peer support facilitated by a trained professional. They also encourage participants to create their own informal support networks. Most support

group models seek to enhance protective factors such as improved parent-child interaction and communication as well as to reduce negative behaviors.[72] When support groups are offered through public education systems, early education programs such as Head Start, or child care centers, they often include opportunities for parent-child interactions and early childhood education interventions aimed at children.[73]

Daro and McCurdy's analysis of parent education and support groups shows promising positive effects on parental attitudes, knowledge, and behaviors.[74] And Abt Associates' national evaluation of family support services found that group-based parenting education and support produced larger positive effects on children's cognitive and socio-emotional development than did home-visiting services.[75]

Home Visitation (Learning, Environmental, and Ecological Theories)

A promising means of delivering targeted services to individual families is home visitation. Because very young children can suffer from especially high rates of maltreatment, the most promising programs appear to be those that focus on early intervention. Having a trained professional or paraprofessional deliver services in the home rather than in a professional office or community center makes it possible to tailor services to each family's needs. Home visitors can also assess environmental factors that influence the family's child-rearing practices. Because such services can initially be provided to all families identified by demographic or geographic risk factors, they also function as an assessment for further services. Studies evaluating home-visiting programs show some positive results, but at the same time they make clear that a program's services must be appropriately configured and delivered to be effective.[76]

Community Programs and Broad Public Policies (Environmental and Ecological Theories)

Community-based programs address socio-economic risk factors by providing access to services and financial support. By linking parents to local support networks (both formal and informal), they also address risk factors associated with social isolation and community context. Families facing limited access to child care or reliable transportation are often unable to sustain involvement in structured groups.[77] Strategic placement of programs within the local community may increase the likelihood of participation, facilitate support networks, and provide information. Such programs can include voluntary home-visiting programs, parent support groups, and family support center programs.

The field stands ready to experiment more broadly and to learn more about the possibilities of a range of approaches to preventing maltreatment.

Public policies that provide maternity and paternity leave, as well as child care subsidies, can also be seen as community-level supports. Paid maternity leave promotes parent-child attachment in the crucial early months of life and alleviates the financial stress of loss of income. Free or subsidized child care promotes work by easing the burden of child care costs. Both maternity

and paternity leave and child care policies can promote child and family well-being, enhance the quality of family and community life, and promote self-sufficiency. Moreover, such policies enhance the business community's perception of the value of child rearing and its commitment to promoting healthy families.

Individual or Family Therapy (Psychodynamic Theory)

Most often provided after maltreatment has occurred, these therapeutic approaches are sometimes part of the service plan requirements for children returning from substitute care to their parents. Psychotherapy presumes that maltreatment occurs because of the parent's maladaption to earlier-in-life experiences and is the result of unconscious unresolved conflict being acted out in the family context. The psychodynamic therapist helps the client acknowledge the existence and consequences of the maladaption, while working with the client to develop strategies for change, including competencies associated with identifying, establishing, and maintaining supportive social networks.[78] Family therapy provides a professionally guided exploration of family roles and dynamics that aims to improve family and individual functioning.[79]

Psychiatrists often use play therapy to help young children express and understand past events in order to increase the likelihood of resilience and decrease the likelihood of their developing maladaptive coping techniques.[80] There is very little systematic evaluation of these types of interventions, which are as yet provided only to families already in the child welfare system. The individualized and long-term nature of this treatment makes it a costly intervention, even if successful at preventing future maltreatment. Perhaps the greatest potential benefit is for society. By fostering resilience and adaptability in victims of maltreatment, successful psychodynamic therapy could preclude their future involvement in the child welfare system as parents.

Conclusion

Child maltreatment prevention has evolved greatly since the "discovery" of child abuse by the medical profession and the American public about a half century ago. It has been difficult for the child maltreatment field to focus on primary prevention given the vast increase in reports of child abuse and neglect in the intervening years and given the legal mandate to investigate and respond to all of these reports. But the consequences of maltreatment are now well documented, and the trade-offs of various types of targeting are better known. The field stands ready to experiment more broadly and to learn more about the possibilities of a range of approaches to preventing maltreatment. These approaches increasingly appear to reflect the investment-prevention paradigm. They are focused on recognizing and strengthening protective factors, building social networks, maintaining awareness of family and community contexts, integrating professionals and natural helpers into the everyday lives of families, intensifying system approaches by stepping outside of traditional service silos and partnerships, and exploring new ways of integrating services and aspects of the child welfare system. In systematically testing such approaches, the field of child maltreatment prevention will have a greater impact on families by reducing the severe consequences of child maltreatment.

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Epidemiological Perspectives on Maltreatment Prevention

Fred Wulczyn

Summary

Fred Wulczyn explores how data on the incidence and distribution of child maltreatment shed light on planning and implementing maltreatment prevention programs. He begins by describing and differentiating among the three primary sources of national data on maltreatment.

Wulczyn then points out several important patterns in the data. The first involves child development. Based on official reports, maltreatment rates are highest during certain periods of children's lives, especially infancy and adolescence. Bringing a new baby into the home, in particular, heightens stress and increases the risk of maltreatment by parents, who tend to be younger and less experienced as parents. These data patterns should help shape strategies that target these families.

A second pattern in the data involves social context and the contribution of race and poverty to maltreatment. Children of color, for example, are much more likely than white children to be reported. Research, however, suggests that when the whites and minorities who are being compared live in a similar social context, disparities in maltreatment rates narrow to some extent. What scholars must examine more closely is the means by which community processes contribute to maltreatment. Thus, the question for researchers is not whether investments in communities are an important part of the prevention strategy, but rather what type of investment is most likely to replace what is missing in a given community.

Wulczyn also explores substance abuse and maltreatment recurrence. He points out that substance abuse not only increases the risk that a parent will neglect a child but also appears to affect that child's experience in the child welfare system: when substance abuse is part of an allegation history, decisions affecting the child tilt in favor of deeper involvement with the system. Patterns of recurrence mirror those already described. Base rates of recurrence are about 9 percent but are higher for infants when allegations involve substance abuse and when children received services following the initial report.

Wulczyn stresses that much more research remains before analysts understand the mechanisms that underpin these persistent patterns—knowledge that is essential to designing sound interventions.

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According to federal data, roughly 905,000 U.S. children were abused or neglected in 2006.[1] A 2005 study by David Finkelhor and several colleagues cited by the Centers for Disease Control and Prevention estimates that approximately 8.7 million of the nation's children—about one in every seven—have been maltreated.[2] A recent California study estimates that 38 percent of black children and 20 percent of white children will have had contact with the child welfare system (including maltreatment reports) by age seven.[3] Not surprisingly, the effects of child abuse and neglect are far-reaching. In early childhood, maltreatment can impair brain development and regulatory functioning; later in childhood, maltreatment-related problems such as poor school performance, increased disruptive behaviors, and depression emerge; once maltreatment victims reach adulthood, they are more likely to abuse substances. These are just a few of the ways maltreatment affects the children involved (to say nothing of how it affects others in the family).

The need for effective preventive programs is clear. The question is where to invest, on whose behalf, and when in the life cycle. Maltreatment involves children of all ages. In 2006, for example, 11 percent of the victims reported to state child welfare agencies were under the age of one. That same year, twelve- to fifteen-year-olds accounted for almost one in five victims. Because of the many different populations of children and youth at risk, interventions must be aligned with the unique developmental phase that each group represents: a one-size-fits-all solution will not accurately address the variety of issues these children present. Perpetrators of maltreatment also span a wide age range. According to National Child Abuse and Neglect Data System data, nearly 75 percent of all perpetrators were between the ages of twenty and thirty-nine, an exceptionally wide age band when viewed through the joint perspectives of life span development and intervention design.[4] Although perpetrators tend to be parents (more than half are mothers), relatives abuse children, too. In the case of sexual abuse, relatives make up the single largest group—30 percent—of all perpetrators.

Maltreatment is also linked with poverty and its associated burdens: single parenthood, social isolation, unemployment, poor education, and residential segregation among non-whites.[5] That said, maltreatment is not restricted to poor communities; nor do all similarly poor communities have comparable rates of maltreatment.[6] Among states reporting to the National Child Abuse and Neglect Data System, the average maltreatment rate in the ten states with the lowest poverty rates was 9.2 per thousand, compared with 13.3 per thousand in the states with highest poverty rates.[7] In 2000, the maltreatment rate reported for white infants living in low-poverty counties (5.4 per thousand) exceeded the rates reported for all older white children living in high-poverty counties (2.8 per thousand to 4.9 per thousand).[8]

My goal in this article is to show how data on the incidence and distribution of maltreatment might be used to strengthen prevention programs in the face of the myriad challenges—individual, family, and community—facing the child welfare system. Investing in prevention, broadly defined, involves at least three distinct problems. First, the nation's child welfare system is highly diverse. State laws define the behaviors that constitute

maltreatment, govern who must report maltreatment, and shape current investments in the service infrastructure.[9] Moreover, local child welfare programs, whether public county programs or those within the private sector, operate in their own unique context and represent varying degrees of financial support. The notion that a single set of investments in prevention programs will have direct and unambiguous benefits, even within a single state, reaches well past what the available data tell us.

Prevention programs offer a chance to minimize the effects of maltreatment on the developing child, but many, if not most, jurisdictions lack the infrastructure to do so within the traditional child welfare system.

Second, it is not entirely clear where along the continuum of an individual child welfare case prevention programs ought to start. This problem has at least two dimensions. Inside the relatively narrow world of child protection, it is a given that prevention services should aim to prevent maltreatment in the first instance. Policy discussions inside the child welfare system, however, have engaged problems as diverse as preventing the use of foster care and preventing the problems faced by youth aging out of foster care. Prevention, it seems, depends on one's position along the need-service trajectory. It is important to be clear about where along the continuum preventive services are targeted.

The third problem is that maltreatment affects children's developmental trajectories in profound ways. Victims of child abuse—that is, cases when allegations of maltreatment are substantiated—may or may not receive child welfare services following the investigation. Either way, the available data suggest that children touched by the child welfare system face substantial cognitive, social, and behavioral deficits.[10] Prevention programs offer a chance to minimize the effects of maltreatment on the developing child, but many, if not most, jurisdictions lack the infrastructure to do so within the traditional child welfare system. Creating preventive service capacity that minimizes developmental effects will stretch the system well beyond its current policy, practice, and financial boundaries.

What then do the data say about maltreatment and how can the data be used to promote strategic allocation of preventive service programs? In the first instance, the data must be aligned with experts' views of the causes of maltreatment. As a general matter, scholars recognize that "no single risk factor or set of risk factors [has] emerged as providing a necessary or sufficient cause of maltreatment."[11] In response, they have developed transactional theories that weigh the interplay between the individual (parent and child), the family, and the environmental context in which people grow and develop.[12] Second, it is helpful to understand recent trends in maltreatment and patterns of state variation. As noted, states differ significantly both in the number of maltreatment reports in general and in how the number of reports changes over time. The pattern of these variations yields useful insights about what an increase in preventive service investments might accomplish, given where the investments are made.

With regard to where to invest and on whose behalf, I present two views of the available data. The first view, based on the fact that maltreatment rates are highest during certain periods of children's lives, considers developmental influences on the risk profile. In part, the link between age and maltreatment reflects the institutional context of children's lives (for example, reports of physical abuse increase when children enter school). More important, however, the data reveal bidirectional influences rooted in what a child needs and what a parent can give as children pass through childhood. Inasmuch as these influences are present in a variety of contexts and in a variety of populations, the findings represent the kind of durable patterns one can use to plan and implement preventive service programs.

The second view considers social context and speaks directly to the contribution of poverty in explaining why some places—states, counties, or neighborhoods—have higher rates of maltreatment. Embedded in this discussion is the issue of race and ethnicity and the fact that children of color are much more likely than white children to be reported to child welfare agencies. The issue of social context also highlights an important policy and practice choice. On the one hand, prevention interventions must target specific risks given a theory of why parents maltreat. On the other hand, investments should go to communities where maltreatment is most common, relatively speaking. The choices are not mutually exclusive: interventions in high-risk neighborhoods have to draw on a theory that explicitly addresses the causes of maltreatment within both the family and the community context.

In the final section of the article, I turn the focus to maltreatment recurrence—that is, to allegations of maltreatment that follow a prior allegation. In this context I highlight

National Child Abuse and Neglect Data System (NCANDS)

The U.S. Department of Health and Human Services established the National Child Abuse and Neglect Data System (NCANDS) as a voluntary national reporting system for states in response to the Child Abuse Prevention and Treatment Act of 1974 (Public Law 93-247) and subsequent amendments. NCANDS represents an effort to develop and improve state and local child welfare services information systems, to implement a national child abuse and neglect data system, and to develop a data source able to respond to a wide range of policy and program analysis needs. Health and Human Services uses data from NCANDS to assess state child welfare programs as part of its review of these programs.

The NCANDS data encompass all reports of suspected child abuse and neglect that result in an investigation (about one-third of reports are screened out before the investigation stage). Reports are included if an investigation or alternative response is conducted following a maltreatment allegation. The results of the investigation or alternative response fall into six categories: substantiated, indicated, unsubstantiated, alternative-response-victim, alternative-response-non-victim, and closed without a finding.

The NCANDS data files contain report data (report date, report identification number, report source, disposition, disposition date, and so on); data describing the child who is the subject of the report (age, sex, race, Hispanic ethnicity, living arrangements, county of residence, military dependent status, and maltreatment history); data describing child-level risk factors (that is, presence of substance abuse, mental or physical disability, emotional disturbance, behavior problem, or other medical problem); data on the type of maltreatment; data on the caretaker; and data on services provided.

substance abuse, because children whose substantiated maltreatment is related to substance abuse are much more likely to experience recurrence than are children investigated for other reasons. Detailing the influence of substance abuse here offers an opportunity to see how it fits within the broader discussion.

Maltreatment Data

For the purpose of developing a basic epidemiology of maltreatment, there are three primary sources of national data: the National Child Abuse and Neglect Data System (NCANDS), the National Survey of Child and Adolescent Well-Being (NSCAW), and the third National Incidence Study (NIS-3).[13] Each source approaches the issue of maltreatment with a slightly different objective, and each collects data using a different method. NCANDS, described in greater detail in the accompanying box (opposite), is based on administrative data that states collect to manage their child abuse and neglect service systems. The data are tied to official reports of maltreatment, the investigation of those reports, and their disposition. Although NCANDS is comprehensive with respect to a wide range of victim, perpetrator, and service data, it is nevertheless limited in the following ways. First, NCANDS does not capture much in the way of clinical data about the family and the well-being of children, thus limiting the type of research that can be carried out with it. In addition, because NCANDS relies on official reports, state variation in reporting laws (for example, states use different definitions of abuse and neglect), evidentiary standards used by child protective services agencies to verify a report of maltreatment, and the number of investigators that a state deploys are thought to influence the process that leads to a disposition of the report.[14]

Certain gaps in NCANDS, such as the lack of clinical measures of child and family well-being, have been filled to a very large extent by NSCAW, which is also described in greater detail in the accompanying box (next page). NSCAW permits researchers to develop a much more comprehensive understanding of children investigated for maltreatment, from both a service and a developmental perspective. But because, like the NCANDS data, the NSCAW sample includes only children reported to public child welfare agencies, it is likely that neither source fully documents the extent of maltreatment in the United States.

The National Incidence Studies, initially mandated by Congress in 1974 and conducted periodically under the auspices of the Administration for Children and Families, are designed to provide a better estimate of the true incidence of maltreatment at a national level. The incidence studies rely on community sentinels as the reporting mechanism rather than the official data collected by state (or local) child welfare agencies. These sentinels report child maltreatment to the study team. They may also report the child to the authorities (for example, state child protective services), and child protective investigators may investigate the children thus reported. In the end, sentinel reports are compared with official reports to generate an unduplicated count of children abused during a specific time period. The third National Incidence Study, NIS-3, published in 1996, reported incidence rates that are higher than those reported with NCANDS.[15] In general, findings from NIS-3 suggest that only 28 percent of the children meeting the harm standard were investigated by the child protective agencies. The under-reporting in NCANDS, judging from NIS-3, depends on the type of abuse and the report source.[16] That said, I do not review the NIS findings

The National Survey of Child and Adolescent Well-Being (NSCAW)

In 1996, Congress directed the secretary of the Department of Health and Human Services to conduct a national study of children who are at risk of abuse or neglect or who are in the child welfare system. NSCAW is the first source of nationally representative long-term data developed from firsthand reports of children, families (or other caregivers), and service providers. Moreover, NSCAW is the first national study that examines child and family well-being in detail. The children in NSCAW represent all children from ninety-two primary sampling units whose families were investigated (or assessed) for child abuse and neglect between October 1999 and the end of 2000. NSCAW follows children and their caregivers regardless of how their service histories evolve. Although the study design collects data relevant to the substantiation of child abuse cases, cases that were not substantiated following the investigation are also included in the sample.

The NSCAW instruments were designed to measure a broad range of constructs. Whenever possible, standardized instruments with national norms, or instruments or questions that had been used in previous studies with large and diverse national samples of children and families, were chosen. Instruments were assembled into interviews for each of the survey informants, resulting in six separate interviews: current caregiver, former caregiver, child, teacher, child welfare worker, and agency personnel.

Many measures were single-response items (for example, the race or age of the child); others were derived after consolidating a number of single items intended to capture key case characteristics; and some were standardized measures. Most of the standardized measures were used to capture child functioning as rated by Child Behavior Checklist, Social Skills Rating System, Battelle Developmental Inventory, Bayley Infant Neurodevelopmental Screener, the Kaufman Brief Intelligence Test, the Mini-Battery of Achievement, and the Preschool Language Scale-3. NSCAW is also unique in providing information from self-reports by children.

here because the last published NIS data were collected in 1993. Maltreatment rates have dropped substantially since then, and it is simply not possible to say how findings from fifteen years ago are relevant today. As of this writing, the NIS-4 data have been collected, but the findings have not yet been released.

In addition to the three primary sources of national data, various types of self-report data address the incidence of maltreatment. The Gallup Organization, under the guidance of Murray A. Straus and colleagues, conducted perhaps the most widely cited self-report study.[17] Typically self-report studies ask victims about their experiences (recollections in the case of retrospective studies). By contrast, the Gallup survey used the Parent-Child Conflict Tactics Scale, developed by Straus in the late 1970s, to ask parents about their behavior. The last Gallup survey (completed in 1995) that involved a national probability sample uncovered very high rates of maltreatment. Rates of physical abuse as reported by parents were about eleven times greater than the rate found in NCANDS and about five times greater than the rate reported with NIS.[18] The Gallup survey also detected considerably more neglect.[19]

Research using smaller samples of self-report data has also been reported. Studies of this sort typically focus on improving estimates of the incidence of maltreatment (or understanding the difference between self-report and official report data), improving what is known about the underlying causes, or

improving researchers' understanding of how maltreatment influences child development over the long term. For example, Andrea Theodore and several colleagues sought to explain differences in officially reported abuse in North and South Carolina.[20] Using the Parent-Child Conflict Tactics Scale, they found substantially higher rates of physical abuse than were officially reported. They also found that the differences between North and South Carolina using official data were larger than differences using self-report data.

Smaller, focused studies are used to clarify and otherwise sharpen researchers' basic understanding of maltreatment: how often it happens, why it happens, and what its long-term effects are.

Beth Molnar and several colleagues used the Conflict Tactics Scale to differentiate individual, family, and community risk factors and their influence on parent-child physical aggression.[21] The findings, discussed in somewhat greater detail below, showed slightly higher rates of parent-child physical aggression than reported in other studies, including the Gallup study. The study also found that individual risk factors such as socioeconomic status, employment, and caregiver age were linked to physical aggression. Family and community protective factors, such as social support and a large social network, respectively, were associated with lower rates of physical aggression toward children.

Anne Shaffer, Lisa Huston, and Byron Egeland, in their longitudinal study of caregivers and their children, used a mix of prospective data (for example, collected from caregivers and other sources) and retrospective data (for example, self-reports of adolescents) to understand how the incidence of maltreatment was related to emotional and behavioral problems in late adolescence.[22] They found that the incidence of maltreatment depends on how the data are captured. They also found a link between psychiatric disorders and how maltreatment was identified. For example, among subjects with both prospectively and retrospectively identified maltreatment, the share with any diagnosis reached nearly 75 percent. Among those children with only retrospectively identified maltreatment, the proportion with any clinical diagnosis was just under 64 percent.

Collectively, these studies illustrate how smaller, focused studies are used to clarify and otherwise sharpen researchers' basic understanding of maltreatment: how often it happens, why it happens, and what its long-term effects are. The studies also reveal some of the fundamental problems in trying to provide reliable information for the purpose of designing preventive programs. Although maltreatment has broad implications for society as a whole, the dynamics of local communities would appear to influence parenting behavior. Studies based on national probability samples are less likely to reveal these local dynamics. By the same token, the data from smaller, focused studies are less useful when it comes to painting a national picture. Smaller studies are also expensive and are not conducted often enough to feed the continuous need for information felt by those charged with monitoring public programs. Administrative data such as NCANDS have the advantage of being routinely available.

Administrative data can also be used to study maltreatment at small spatial scales.[23] But, as noted, administrative sources likely underreport maltreatment, an important source of measurement error that has implications for how one uses what one learns.

In the end, the data one chooses to collect (and use) have to be matched to the question at hand. From the perspective of how one plans for and designs preventive programs, each type of data has a role. Administrative data and the data from national probability samples provide the information needed to allocate resources in relatively crude but important ways, especially if the data from smaller studies reinforce the essential findings. For example, and as discussed below, administrative data show persistently higher rates of maltreatment for young children (often under the age of one) than for older children, together with rising rates of maltreatment, particularly physical and sexual abuse, among adolescents. For the most part these same patterns are found in the small-sample studies. Administrative data also show that mothers are the most likely perpetrators and that poverty matters. Again, these findings are supported, by and large, in most if not all smaller-scale studies. What the administrative data do not provide is the detail needed to understand the mechanisms that underpin the most persistent patterns—knowledge that is essential to designing sound interventions.

Causes of Maltreatment

The field of child maltreatment has three primary approaches to child abuse and neglect and the underlying causes. The first is what Jay Belsky and Joan Vondra call the parent's contribution.[24] At the most fundamental level, researchers who focus on the parent's contribution explore the ways in which adults who maltreat children differ from those who do not. The underlying propensity to abuse may be a function of psychodynamic processes or social learning.[25] Recent research also suggests that whether a parent is neglectful may have a genetic component.[26] The point here is that the reasons why certain parents maltreat children have to be considered in designing preventive programs.

A second approach to understanding maltreatment focuses on what might be called the child's contribution.[27] Sometimes thought of as a bi-directional influence, the idea is that characteristics of children shape parental behavior. For example, rates of reported maltreatment for low-birth-weight babies are higher than rates for normal-weight babies, perhaps because low-birth-weight babies require more attention from their caretakers and thus may add to the strain a parent experiences.[28] Janet Mann reported that infants who are less likely to survive are more likely to be neglected, if the parent has limited resources.[29] In a similar vein, Daphne Bugental and Keith Happaney found that at-medical-risk infants are more likely to be treated harshly by their mothers, especially by mothers who feel a low level of control.[30]

The third approach focuses on the contribution of social context. This perspective places children and families within a series of nested contexts that extend out from the family and encompass the neighborhood and the larger society.[31] This approach suggests that the attributes of the community—contextual effects—influence child well-being and parent behavior in ways that are distinct from, but interactive with, parent and child contributions.[32] Poverty (for example, concentrated urban poverty) is one neighborhood attribute that has received a great deal of attention from researchers examining child maltreatment.[33]

State Variation

One of the main challenges policy makers face when trying to expand preventive services programs is the wide variation in state maltreatment rates. Murray Straus and David Moore explain that state rates vary not only because of real differences in the incidence of maltreatment but also because of differences in policies, programs, and resource allocation.[34] Untangling these state variations has practical implications for maltreatment prevention to the extent that changes in state variation can be tied to how states invest in programs aimed at reducing maltreatment.

To get at the question of state variation, the most useful, readily available source of data is NCANDS. Each year, the U.S. Department of Health and Human Services publishes a report based on NCANDS that summarizes maltreatment data for the previous year; the most recent such report is *Child Maltreatment 2006.* The report covers a wide range of topics regarding victims, perpetrators, reporting sources, and maltreatment types. Many of the data are reported for individual states. Other than exploring change over time in the reported incidence of maltreatment, however, researchers have done relatively little work to understand state variation in reported maltreatment.[35]

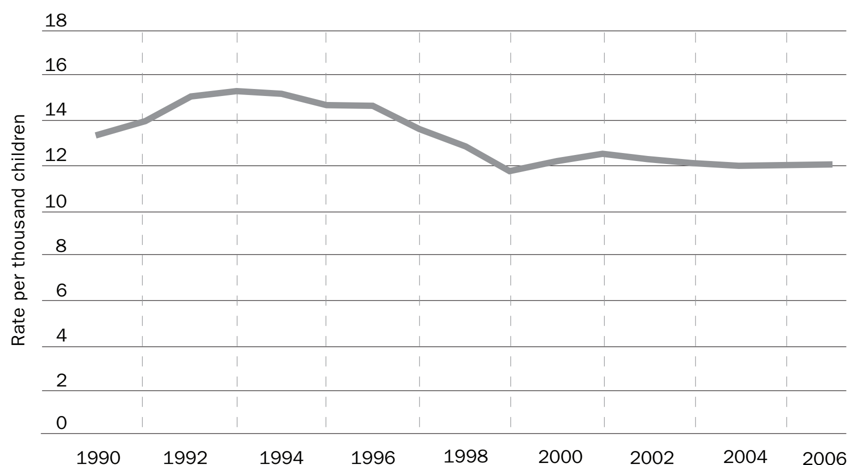
For 2006, state reporting rates—the number of children reported to and investigated by public child welfare agencies because of suspected maltreatment—range from 7.7 per thousand children up to 59.7 per thousand. Although not significant in a strict sense, the correlation between the number of children living in a state and the reporting rate is negative (-.06), indicating that reporting rates per thousand children tend to be somewhat lower in large states even though two-thirds of all reports come from larger states (that is, states with more than 1.45 million children). The wide variation in reporting rates also, as noted, highlights state policy differences. For example, Pennsylvania has the lowest reporting rate in part because it does not recognize educational neglect.

The substantiation rate is the number of child victims expressed as a fraction of the number of children identified in maltreatment investigations. In the 2006 maltreatment report, state substantiation rates ranged from 93 percent to 12 percent. The former figure means that nearly every child reported was determined to be a victim; the latter, that barely one in ten children reported was a victim of maltreatment. Whereas one-third of all reports came from smaller states (that is, those with fewer than 1.45 million children), just 28 percent of all victims in 2006 came from smaller states. The under-representation of children from smaller states reflects a lower substantiation rate overall. The weighted average substantiation rate in small states (38 percent) is about 23 percent lower than that in large states (50 percent).

Victimization rate is the term used to describe the number of child maltreatment victims per thousand children. As with other maltreatment indicators, victimization rates vary widely from one state to another, from 1.5 per thousand up to 33.5 per thousand. Victimization rates tend to be higher in large states, in part because the substantiation rates are higher in large states.

State poverty rates are one reason that some states may have higher victimization rates than others, although the dynamics of poverty and maltreatment are complicated when measured at the state level. More than half the families in the NSCAW sample had incomes below the federal poverty line

Figure 1. Number of Maltreatment Victims per Thousand Children in the United States, 1990–2006



Source: NCANDS.

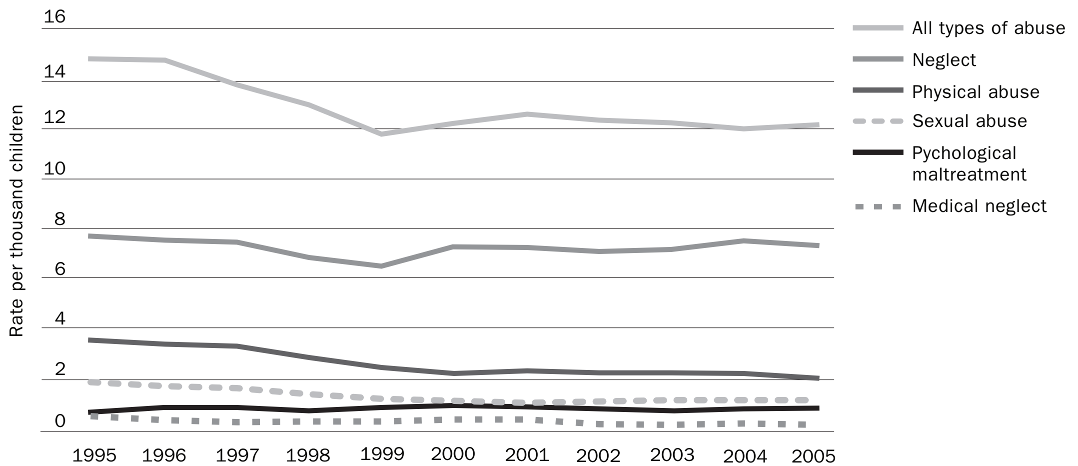
adjusted for family size.[36] Research also generally shows that income and maltreatment are related.[37] At the aggregate level of states, however, poverty rates do not provide a particularly robust explanation for the wide variation in state victimization rates. Calculations based on the 2006 NCANDS data suggest that the average maltreatment rate in the ten states with the highest poverty rates is about 44 percent higher than that in the states with the lowest poverty rates. Nevertheless, state poverty rates account for just 3 percent of the variation in maltreatment rates. In a 2002 study Chris Paxson and Jane Waldfogel found that income, work status, and family structure are all related to state victimization rates, so it is not entirely reasonable to expect that poverty alone would explain state variation in maltreatment.[38]

Trends in Child Maltreatment

The availability of state data on maltreatment reports and investigations enables researchers to follow trends in reported maltreatment. Indeed, it is now possible to construct an accurate estimate of the reported number of American children maltreated per thousand children going as far back as 1990, although estimates from the early 1990s are somewhat less reliable than more recent estimates because state participation in NCANDS was more limited then than it is today. As figure 1 shows, the overall rate of reported maltreatment (of all types) in 2006 was 12.3 per thousand children, a rate consistent with that reported in 2002.[39] The peak in maltreatment rates as reported by state child welfare agencies—15.3 reports per thousand children—occurred in 1993 and was about 14 percent higher than the rate reported for 1990. Over the next six years, maltreatment rates dropped nearly 30 percent, reaching 11.9 per thousand in 1999. After 1999, rates drifted slightly upwards, averaging about 12.2 reports per thousand from 2000 through 2006.

Trends with respect to specific maltreatment types follow the general pattern, with some important differences (see figure 2). Rates of physical abuse, the second most common type of maltreatment, dropped from 3.6

Figure 2. Number of Maltreatment Victims per Thousand Children in the United States, by Maltreatment Type, 1995–2005



Source: NCANDS.

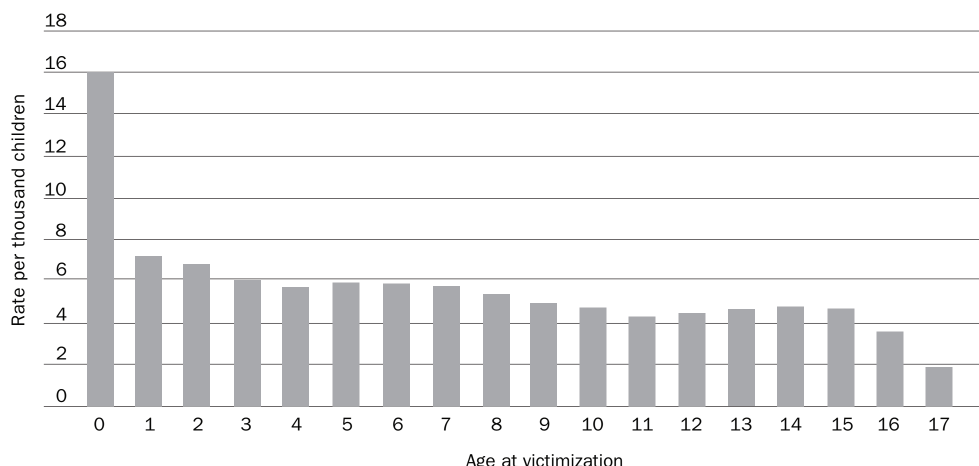
per thousand in 1995 to 2.1 per thousand in 2005. Neglect, the most common maltreatment type, declined just 4 percent over the same period and increased somewhat after 1999. Sexual abuse also declined, with most of the drop coming between 1995 and 2000. After 2000 rates of sexual abuse remained unchanged.

David Finkelhor and Lisa Jones were initially skeptical about the decline in maltreatment rates from the early 1990s through the first part of the current decade.[40] Noting the continuing view of analysts that official reports are unreliable when it comes to estimating the true incidence of maltreatment, they doubted that changes in funding levels, staff reductions, and shifting standards could account for the observed change in maltreatment rates.[41]

They concluded, instead, that the declines are likely real, particularly the drop in sexual abuse.[42] They noted that data from a variety of other sources including juvenile victimization and self-report data on sexual assaults all moved in the same direction over the same period. In addition, from 1993 through 1999, child poverty rates fell substantially, from just under 23 percent in 1993 to slightly below 17 percent in 1999, a period that coincides with the most dramatic decline in maltreatment rates.[43] In short, a variety of data suggest that general social conditions were improving and that falling maltreatment rates are more or less indicative of the times.

As for why maltreatment declined, Finkelhor and Jones are somewhat more circumspect.[44] A number of co-occurring social trends—lower poverty rates, dramatically fewer births to teenagers (births to teens per thousand teenagers) from 1990 through 2005, and a drop in drug use (for example, crack cocaine)—all point to reductions in maltreatment, although the precise connection to maltreatment rates is not necessarily clear-cut. Marianne Bitler and Madeline Zavodny present evidence that maltreatment may have dropped because fewer unwanted children

Figure 3. Rate of Initial Victimization, by Age, 2000



Source: Fred Wulczyn and others, *Beyond Common Sense: Child Welfare, Child Well-Being, and the Evidence for Policy Reform* (New Brunswick, N.J.: Aldine Transaction, 2005). Copyright 2005 by Chapin Hall Center for Children.

were born and unemployment rates were lower.[45] Finkelhor and Jones also raise the possibility that psychopharmacological treatment of depression among women could be having a positive impact, but that issue has not been sufficiently well studied.

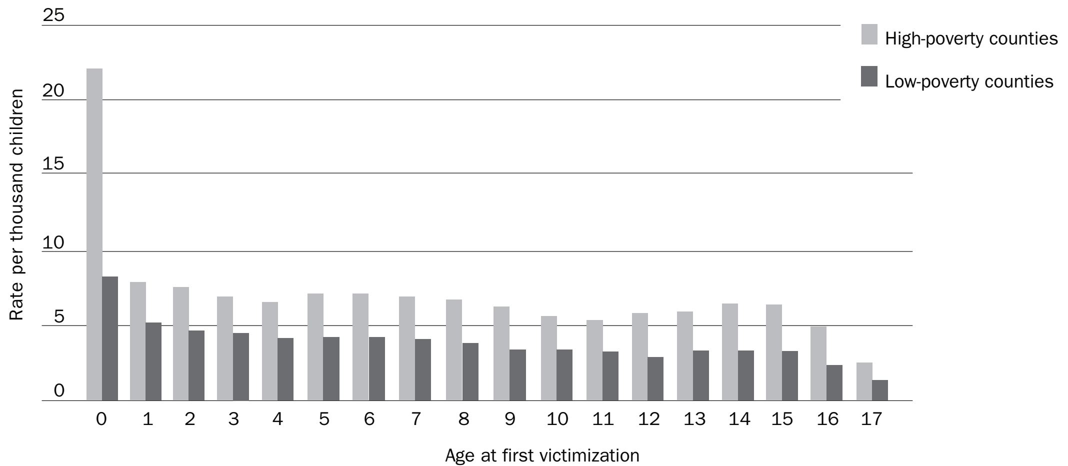
Maltreatment and Age

Although the general rate of maltreatment is an important social indicator, theories of child development suggest that the incidence of maltreatment may vary significantly across the life course of children. To the extent that these variations appear in the data, they reflect the interplay between the development of children and parents' care-giving capacity.[46] If, on average, developmental influences shift the risk-protective equilibrium, then one can expect to find these influences in a range of populations and contexts.[47]

In a 2005 study, several colleagues and I explored developmental themes in the incidence of maltreatment using data for the year 2000 from NCANDS.[48] Using inception cohorts (cohorts of children whose first substantiated investigation by the child welfare system took place in the same year) from four states representing 296 counties, 11,450,000 children under the age of nineteen, and 64,000 victims, our analysis began with a simple description of maltreatment rates by age at inception for single-year age groups.

The basic relationship between age and the risk of substantiated maltreatment (without regard for the type of maltreatment) is shown in figure 3. In general, the rate of substantiated maltreatment is highest for children under the age of one at the time of the first-ever substantiated investigation. The rate reported for infants in 2000 was sixteen per thousand, more than twice the rate for one-year-olds, the group with the next-highest rate of maltreatment. Rates of maltreatment decline with age, although the data show small, age-specific exceptions. Substantiated maltreatment rates level off around the time children enter school (approximately six per

Figure 4. Rate of Victimization, by Age and County Poverty Rate, 2000 (Initial Victims)



Source: NCANDS.

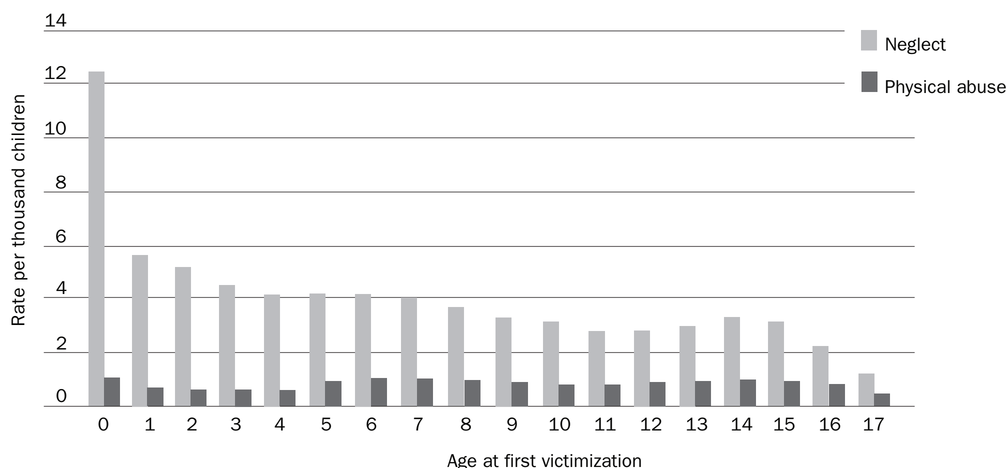
thousand), decline from age eight through eleven (approximately four per thousand by age eleven), and then rise again from ages twelve through fourteen.

We then grouped the same data by county poverty levels. Low-poverty counties, those in the top income quintile, had child poverty rates (in 1999) between 2.3 percent and 12.2 percent. High-poverty counties, those in the bottom quintile, had poverty rates between 17.6 percent and 43.6 percent. As figure 4 illustrates, the risk of maltreatment is elevated for infants in high- and low-poverty counties alike. In high-poverty counties, the risk for infants is 2.7 times as great as that for one-year-olds, the group with the next-highest maltreatment rate; in low-poverty countries, the risk for infants is 1.6 times as great. For children of all other ages, maltreatment rates are considerably lower than they are for infants, regardless of county poverty level, although maltreatment rates overall are consistently higher in high-poverty counties, as one would expect.

As the figure shows, other age-based patterns appear in both high- and low-poverty counties. For example, maltreatment rates of middle adolescents (fourteen- and fifteen-year-olds) in high-poverty counties are about 15 percent higher than those reported for eleven- and twelve-year-olds. In low-poverty counties, where age-based variation is less noticeable, the increase in substantiated maltreatment for middle adolescents, while not as pronounced as it is in high-poverty counties, is still present.

When the children are grouped by race and ethnicity, the data continue to reveal the same underlying pattern of risk. The risk of maltreatment among black infants, however, is substantially higher than that among children of other races and ethnicities. Specifically, among black infants, the risk of maltreatment in 2000 was about fifty per thousand children, a figure that is equivalent to 5 percent of black infants. The comparable figure for white infants is just under ten per thousand, or 1 percent.[49]

Figure 5. Rate of Neglect, by Age and Maltreatment Type, 2000 (Initial Victims)



Source: NCANDS.

More recent (2006) NCANDS data show few if any changes in the relationship between maltreatment and age.[50] The rate of maltreatment by age shows that infants, with an overall maltreatment rate of twenty-four per thousand, still face the greatest risk. They are 1.8 times more likely to be maltreated than are one- to three-year-olds, the group with the next highest maltreatment rate. State-specific infant maltreatment rates range from a low of 1.6 per thousand to a high of sixty per thousand. Infant victimization rates exceed twenty per thousand in thirty states. The rate of maltreatment is highest for infants in all but two states. In short, few trends in maltreatment are as stable and clear-cut as the link between age and maltreatment risk.

The risks charted in figures 3 and 4 refer to maltreatment in general. Figure 5 displays data on specific types of maltreatment. As noted, neglect is the type most commonly reported; among infants, the rate for neglect in 2000 was nearly twelve times greater than the rate for physical abuse. Among older children, the difference is smaller but still substantial. For example, among one- to three-year-olds, neglect was seven to eight times more common than physical abuse; among thirteen- to fifteen-year-olds, neglect was three times more common.

The data in figure 5 also illustrate that the age disparities are not as sharp for physical abuse as they are for neglect. That is, for six-year-olds and fourteen- to fifteen-year-olds, the rate of physical abuse (1.02 and 1.04 respectively) is roughly the same as the rate reported for infants (1.06).

Race, Poverty, and Maltreatment

Just as age and maltreatment show a persistent relationship, so, too, do race and maltreatment. Overall the rate of maltreatment among black children in 2006 (19.8 per thousand) was nearly twice the rate for white children (10.7 per thousand), which is equivalent to a disparity rate of 1.85 (19.8 divided by 10.7). At the state level, maltreatment

rates in 2006 were higher for blacks than for whites in all but two states (Hawaii and West Virginia). In the remaining states, the unadjusted disparity rate in black child maltreatment rates relative to white child maltreatment rates ranges from 1.06, which is negligible, to 6.13. Among all states, twelve have disparity rates greater than 3.0; twelve have disparity rates between 1.1 and 2.0.

These large race-based differences in maltreatment are now drawing attention, giving the issue of racial disparities within the child welfare system greater traction as a national policy concern. Much of the research to date has been descriptive, however, and analysts still have much work to do to explain why disparity rates differ so much from one jurisdiction to another. The mainstream argument has two threads.[51] On the one hand, because blacks (as well as other racial and ethnic minority groups) and whites are treated differently (that is, because of racial bias), minorities are more likely to be reported for maltreatment, and reports of their maltreatment are more likely to be substantiated, which then leads to higher rates of foster care placement. On the other hand, because poverty rates are so much higher among racial and ethnic minorities, the associated burdens of poverty place greater strain on parents, which in turn increases the likelihood of maltreatment.

Child welfare as a field has for the most part focused on bias as the reason why blacks are overrepresented among children who have been reported for maltreatment. The primary source of empirical support for this position comes from the third National Incidence Study (NIS-3), which, as noted, was completed in the early 1990s. The authors of the main NIS study "found no race differences in maltreatment incidence."[52] They went on to conclude that racial and ethnic disparities in the child welfare system are a by-product of differing treatment at the various stages of the process rather than inherent differences in the rate of maltreatment.[53] More recent work with the NIS-3 data suggests that when the whites and minorities being compared are similar in such characteristics as income and neighborhood stability, maltreatment rates for whites are higher than those for minorities in some cases. For example, maltreatment among white children whose families have incomes below $15,000 is considerably more common than it is for black children at the same family income level.[54]

Although the NIS study team sees bias in the way cases are processed as being more important than such risk factors as poverty in explaining why black children are overrepresented in the child welfare system, it is not clear that the NIS data can be used to explore the issue at the level of detail required to draw such firm conclusions. First, although the NIS produces useful national estimates of maltreatment, it does not contain information on neighborhood-level (contextual) factors. For this reason, the NIS data cannot be used to understand how neighborhood-level poverty—which may be associated with race—influences maltreatment.[55] Second, the NIS data do not contain individual-level information on how maltreatment cases were handled (that is, the actual process that was followed in each instance). Without direct observation of the process, inferences about the extent to which the processing of cases influences what happens can only be reached indirectly.

With respect to the role of poverty as a risk factor for maltreatment, several research studies have examined race and poverty in more localized areas. The first is by Claudia

Coulton, Jill Korbin, and several colleagues in Cleveland.[56] Drawing on both aggregate and individual data, the Cleveland studies examined the link between different forms of social organization and child maltreatment in census tracts distinguished by their racial composition. Although overall rates of maltreatment were much higher in the black tracts (42.8 per thousand) than in the white tracts (13.1 per thousand), average maltreatment rates in predominantly white tracts did not differ from maltreatment rates in predominantly black tracts as long as the white and black tracts studied were comparable in such characteristics of neighborhood social organization as impoverishment, child care burden, and residential instability. They also found that the relationship between the rate of maltreatment and social organization was quite different in white and black tracts. That is, the relationship between race and social organization as it pertained to maltreatment rates depended on the racial composition of the geographic area and was thus an effect of social context, with the predominantly white tracts showing a much stronger, positive relationship between social organization and maltreatment.

A second source of evidence that addresses social context in relation to child maltreatment comes from the Project on Human Development in Chicago Neighborhoods (PHDCN). Designed to provide new evidence regarding racial and ethnic disparities in violent crime, PHDCN uses a multi-level sampling strategy to capture individual behavior in a variety of social contexts.[57] Respondents were asked a variety of questions about their involvement in violent acts including parent-child physical aggression.[58]

Using data from PHDCN, Robert Sampson, Jeffrey Morenoff, and Stephen Raudenbush set out to test whether individual differences, as opposed to contextual differences, accounted for "observed racial/ethnic gaps in violence."[59] Their findings show that although verbal and reading ability and impulsivity (measures of individual differences) predicted violence at the individual level, those same differences did not account for the racial and ethnic gap. Instead, they found that differing exposure to key risk and protective factors caused by neighborhood segregation explained the violence gap. In particular, blacks are much more likely to live in neighborhoods characterized by concentrated disadvantage than are either whites or Hispanics.[60]

Sampson's work with his colleagues focuses not on parent-child physical aggression, but on youth violence, which is different from official reports of maltreatment. Beth Molnar and several colleagues filled that gap by taking advantage of the multi-level framework built into the PHDCN data to study self-reported physical aggression directed toward children, including such acts as hitting, biting, slapping, and burning.[61] In general, acts of minor and severe parent-child physical aggression were more common among black families than either white or Hispanic families but the effects were "fully mediated by family social-economic status in the multivariate model"—in other words, the racial and ethnic differences were not statistically significant when the black, white, and Hispanic families being compared had a similar social context.

Brett Drake, Sang Moo Lee, and Melissa Jonson-Reid have also examined racial disparity with social context, particularly community economic context, in mind.[62] They too isolated contextually similar but racially distinct census tracts. Overall, they found that

black children were more than twice as likely to be reported for maltreatment. But when they considered the racial composition of the tracts along with race-specific poverty rates (that is, contextually similar, racially distinct tracts), they found that reporting rates were higher for whites than for blacks in some contexts. The apparent anomalies arise because black children are much more likely to live in poor, economically segregated communities, thus increasing their exposure to contextual risks. When, as happens but rarely, white children are found living in similar economic circumstances, rates of maltreatment are comparable to those for black children.

Traces of these issues are observable even in the state-level NCANDS data. In West Virginia, the state with the highest white child poverty rates in the country (as estimated for 2006), the white child maltreatment rate is slightly higher than the rate for black children. Overall, the disparity in maltreatment rates at the state level is negatively correlated with overall poverty rates. For blacks, maltreatment rates are negatively correlated with poverty rates—that is, where poverty rates for blacks are higher, maltreatment rates tend to be lower. For whites, by contrast, poverty and maltreatment rates are positively correlated—that is, where poverty rates for whites are higher, maltreatment tends to be higher.

In sum, the data suggest that the effect of context on maltreatment is not yet well understood. At the aggregate level, maltreatment rates for blacks are indeed higher. But the evidence suggests that the relationship between black child poverty and black maltreatment rates may be different from the relationship between white child poverty and white child maltreatment rates. It is fair to conclude that investments in communities are an important strategy in preventing maltreatment. What is not clear is how, beyond the level of social organization, communities differ with respect to existing services infrastructure and how the existing infrastructure influences observed patterns of (reported) maltreatment.

Substance Abuse

Interest in the role of substance abuse (including alcohol and illicit drugs) in the child welfare system gained traction during the late 1980s and early 1990s when the widespread use of crack cocaine elevated the number of children in foster care from well under 300,000 to well over 500,000.[63] Today, a new drug epidemic is perhaps the most worrisome social calamity on the minds of child welfare administrators, who know how quickly drug use spreads within vulnerable populations.

Available data give ample reason for concern about substance abuse and its effect on the child welfare system. First, as measured by the number of new users, substance use increased between 1995 and 2003. According to national data collected by the Substance Abuse and Mental Health Services Administration (SAMHSA), across all drug categories (for example, cocaine, crack, methamphetamine, marijuana, and heroin), the average number of new users each year between 1995 and 2003 was greater than the number of new users each year between 1985 and 1994. In particular, the average number of new female crack users increased by 17 percent from 1995 through 2003 (although the number did decline between 2000 and 2003) and the average number of new female methamphetamine users increased by 25 percent. Heroin use, although it is the smallest user category, increased by 75 percent among men and women.[64] Among pregnant women,

use of cocaine has declined whereas the use of methamphetamine has increased. That said, alcohol and tobacco are still the drugs used most frequently during pregnancy, by a wide margin.[65]

Substance-abusing parents are more likely to struggle with co-occurring problems such as domestic violence, single parenthood, poor education, depression, and the need for cash assistance, all of which influence the propensity to maltreat in one way or another.[66] When parents abuse substances, they pay less attention to their children and may not seek medical care for them when needed.[67] Parents are less likely to be warm and responsive to their children, which affects attachment.[68] Substance-abusing parents are also more likely to use harsh parenting styles and leave children unsupervised. Over their lifetime, children of substance-abusing parents experience more separation from their parents.[69]

One effect of such parenting on children is problematic behavior. Studies have shown that neglect, coupled with such physical challenges as below-normal weight gain (that is, failure to thrive), is associated with delayed cognitive development in younger children and with behavior problems and poor school functioning in older children. Maltreatment may also be associated with deficits in cognitive, emotional, and behavioral development. For example, substance-abusing mothers in a methadone program reported high rates of school retention, truancy, suspension, and involvement with the law among their children.[70] Results from NSCAW indicate that cognitive, social, and behavioral problems are pervasive.[71] For example, better than 40 percent of the children assessed with the Child Behavior Checklist scored in the borderline to clinical range, regardless of whether they were served in-home or in foster care.

Findings from NSCAW also support the general view that caretaker substance abuse is a significant problem. At baseline, 8 percent of the caregivers were actively using alcohol and 9 percent were actively using drugs. Both figures are low, but within the range reported by others.[72] Substance abuse by caregivers was associated with a greater likelihood of service use, including entry into out-of-home care.[73]

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Longitudinal administrative data make it possible to see how substance abuse affects a child's entire trajectory through the child welfare system from inception (the time of the first investigation). Tracing that trajectory for an inception cohort of children removes some of the selection bias that affects research that samples children at later points in their service history. Many studies examine children who are reported for maltreatment in a given year, noting whether maltreatment has been reported previously. But controlling for past victimization does not take into account the fact that children returning to the child welfare system are not randomly drawn from the original inception cohort. It

is important to compare children in an inception cohort because whether a child has a subsequent victimization (as opposed to a prior victimization) may be related to the first maltreatment allegation and to what follows as a result. It turns out that substance abuse may be related to child welfare involvement in one of two quite different ways. The first is that substance abuse may influence whether a parent neglects his or her children; that is, substance abuse alters the propensity to abuse. The second is that substance abuse may alter the child welfare decision-making process. Specifically, when substance abuse is part of an allegation history, decisions tilt in favor of greater involvement with the child welfare system. This latter issue is the focus of this section.

Several years ago a colleague and I used inception cohorts to explore the experience of children whose maltreatment investigation includes an allegation of caretaker substance abuse.[74] Our purpose in following the cohorts was to ascertain how an allegation of substance abuse affects further involvement in the system. Does it affect the likelihood of substantiation? Are substantiated substance abuse allegations more likely to be followed by out-of-home placement? Are children placed in foster care because of substance abuse–related maltreatment more or less likely to be reunified with their families than children who enter foster care for other reasons?

We found that more than any other allegation type, substance abuse influences what happens following the initial allegation. With respect to reports that led to an investigation, just 60 percent of the investigations in 2001 were connected to children with a first-ever investigation (inception cases), a figure that is in line with the data from some states reported in NCANDS.[75] Significantly, children with a substance abuse allegation were twice as likely to experience another child welfare event (for example, another report or investigation or placement into foster care) than were children investigated for other reasons. The likelihood of subsequent involvement with the system is reflected in the fact that 79 percent of maltreatment allegations involving substance abuse were substantiated, compared with only 18 percent of all other allegations combined.

Following substantiation, children with a substance abuse allegation were much more likely than those with other forms of allegations to go into foster care. Of all children in substantiated substance abuse cases, 61 percent were placed in foster care, compared with just 17 percent of children in all substantiated cases of any other type. Indeed, our research has shown that a substantiated substance abuse allegation doubles a child's odds of being placed, net of the child's age, race, and geographic area of residence. When the child also has an older sibling known to the child welfare system, that too affects the odds of placement, a finding similar to that of Brenda Smith and Mark Testa, who suggest that substance abuse may be a marker for other dynamics within the family.[76]

Once in foster care, the data suggest, infants who were the subject of a substantiated allegation of substance abuse–related maltreatment were much more likely to be adopted (44 percent) than reunified (28 percent). For infants placed following some other substantiated allegation of maltreatment, the discharge patterns were reversed, with reunification reaching 47 percent and adoptions approaching 25 percent. In both populations, about 20 percent of the infants were still in care at the time the analysis concluded.

A replication study in a second jurisdiction produced similar findings. From inception, children who were the subject of a substance abuse–related investigation in 2002 followed a distinct trajectory starting with substantiation. Substance abuse allegations were 48 percent more likely to be substantiated (46 percent to 31 percent). Following substantiation, children involved with a substance abuse allegation were more likely to have further contact with the child welfare system. In all, 66 percent of the cohort had no further contact with the system between 2002 and 2005. The comparable figure for children investigated as a result of a substance abuse allegation was just 46 percent. Among children with other substantiated allegations (that is, neglect or physical abuse), the likelihood of no future involvement was 56 percent. The primary reason for the differences is that the substance-affected children are twice as likely to be placed in foster care than are children involved with some other substantiated allegation.

Of all the children placed in foster care following the first contact, slightly more than 50 percent were reunified and 21 percent were adopted. If the first contact involved a substantiated substance abuse allegation, however, the likelihood of reunification dropped to 39 percent and the likelihood of adoption increased to 45 percent. In fact, of all the adoptions completed, 56 percent involved children with an allegation history that included substance abuse.

Recurrence of Maltreatment

After an initial maltreatment report, children may be reported to child protective services again. Such "recurrence" may involve both re-reporting and re-victimization, but most research to date has focused on re-reporting.[77] Using administrative data to trace recurrence involving re-victimization is complicated because multiple reports may precede the second substantiated allegation. The risk of re-victimization recurrence for children placed in foster care drops because foster care is a protective environment (even though maltreatment also occurs in foster homes). Recurrence following reunification from foster care is of particular importance because it provides a way to judge whether the decision to reunify was correct. Another issue is the interval between recurring reports (or victimization as the case may be). Over the life course, recurrence involving any given children can happen at any time. Most occurs within two years, but children are at risk for substantially longer (depending on their age at victimization).

Although recurrence rates are generally low, state recurrence rates vary considerably. As defined by the federal government for the purpose of monitoring state child welfare programs, recurrence involves the substantiation of an allegation within six months of the first substantiated allegation. State recurrence rates vary between 2 percent and 14 percent, though these data do not take into account whether children are placed in foster care.

The most recent study completed with NCANDS is perhaps the most comprehensive in that it reports both re-reporting and substantiated re-reporting, taking into account service history (in-home services versus foster care), child characteristics (for example, age, gender, race, disability status), and prior allegation history.[78]

The NCANDS findings are for the most part consistent with earlier research. Age at initial report is important for both re-reporting and re-victimization. Infants are more likely than

older children to return to child protective services. The cumulative re-report rate within two years was nearly 27 percent; the rate of substantiated re-reports was a bit higher than 10 percent. Children with a history of victimization had higher rates of re-reporting (22 percent) and substantiated re-reporting (nearly 10 percent) than did children whose initial report was not substantiated. Alcohol and substance abuse increased markedly the likelihood that a child would be the subject of a substantiated re-report, but not that the child would be re-reported.

Both post-investigation service use and post-placement service use were positively linked to re-reports and substantiated re-reports. About 25 percent of the children served in-home after the investigation were re-reported; 10 percent had substantiated re-reports. For children placed in foster care the comparable figures were 27 percent and 15 percent, respectively. The latter figure is close to the rate of reentry for children reunified from foster care.[79] The higher rate of re-reporting among children who receive services is somewhat of a conundrum. On balance, the explanation appears to be that child welfare workers refer more difficult cases to services. Rates of recurrence are thus higher because the same factors that predict use of services predict whether a subsequent report is recorded.

Summary

If child maltreatment were an isolated problem, one that affected only a certain population living in a particular area, the question of how to prevent it would in some respects be easier to answer. That, however, is clearly not the case. Maltreatment takes place in all communities and affects children of all ages. For the families involved, the underlying risk factors are poor mental health, substance abuse, and domestic violence, to say nothing of poverty, poor education, unemployment, and social isolation. In short, on any given day, it is hard to say who will walk through the door of a community service agency.

The complexities notwithstanding, available data on the incidence and distribution of maltreatment do point to persistent themes that might be used to target intervention programs. First, the data are clear with respect to developmental influences. Infants, in a variety of contexts and with respect to a variety of other indicators (for example, recurrence), are a particularly important population. Bringing a new baby into the home heightens stress and tends to shift the risk and protective factors within the family in a direction that increases the risk of maltreatment. Maltreatment during infancy also reduces to some extent the clinical heterogeneity within families. Parents of infants will tend to be younger and face similar challenges. As a consequence it may be easier to plan and execute well-thought-out strategies that target the specific ontogenic factors.

The data also make clear that different communities experience different rates of maltreatment. Why the rates differ from one community to the next is less clear. Communities do indeed differ in the kind of social support they can provide, a fact that may explain why communities with the same poverty rates can have vastly different maltreatment rates.[80] What scholars have yet to examine closely is the extent to which the social structure of communities contributes to community maltreatment rates. The studies in Cleveland suggest that the relationship between poverty and maltreatment depends to some extent on race. Similar findings have been reported with respect to the use of foster care.[81] Thus, the question is not whether

investments in communities are an important part of the prevention strategy. Rather, it is what types of investments are most likely to replace what is missing in a given community.

Endnotes

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14. With respect to evidentiary standards, most states use either a preponderance of evidence, reasonable evidence, or credible evidence, in a descending order of frequency, as the basis on which to confirm a report. However, at least one state invokes a beyond-a-reasonable-doubt standard. States also rely on probable cause or clear and convincing evidence standards. See U.S. Department of Health and Human Services, *Child Maltreatment 2006* (note 1).
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19. To be clear, under-reporting is a problem that affects data collection in general. For example, see John Eckenrode, Charles Izzo, and Elliott Smith, "Physical Abuse and Adolescent Outcomes," in *Child Protection: Using Research to Improve Policy and Practice,* edited by Ron Haskins, Fred Wulczyn, and Mary Bruce Webb (Washington: Brookings Institution Press, 2007), pp. 226–42. They used the NSCAW sample to compare youth, parent, and caseworker reports of maltreatment and found divergent perspectives. The results, which raise the possibility that no single source of information is without error, points to just how difficult it is capture an accurate count of maltreatment.
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54. Andrea J. Sedlak and Dana Schultz, "Racial Differences in Child Protective Services Investigation of Abused and Neglected Children," in *Race Matters in Child Welfare: The Overrepresentation of African American Children in the System,* edited by Dennette M. Derezotes, John Poertner, and Mark F. Testa (Washington: Child Welfare League of America, 2005), p. 97.

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Creating Community Responsibility for Child Protection: Possibilities and Challenges

Deborah Daro and Kenneth A. Dodge

Summary

Deborah Daro and Kenneth Dodge observe that efforts to prevent child abuse have historically focused on directly improving the skills of parents who are at risk for or engaged in maltreatment. But, as experts increasingly recognize that negative forces within a community can overwhelm even well-intentioned parents, attention is shifting toward creating environments that facilitate a parent's ability to do the right thing. The most sophisticated and widely used community prevention programs, say Daro and Dodge, emphasize the reciprocal interplay between individual-family behavior and broader neighborhood, community, and cultural contexts.

The authors examine five different community prevention efforts, summarizing for each both the theory of change and the empirical evidence concerning its efficacy. Each program aims to enhance community capacity by expanding formal and informal resources and establishing a normative cultural context capable of fostering collective responsibility for positive child development.

Over the past ten years, researchers have explored how neighborhoods influence child development and support parenting. Scholars are still searching for agreement on the most salient contextual factors and on how to manipulate these factors to increase the likelihood parents will seek out, find, and effectively use necessary and appropriate support.

The current evidence base for community child abuse prevention, observe Daro and Dodge, offers both encouragement and reason for caution. Although theory and empirical research suggest that intervention at the neighborhood level is likely to prevent child maltreatment, designing and implementing a high-quality, multifaceted community prevention initiative is expensive. Policy makers must consider the trade-offs in investing in strategies to alter community context and those that expand services for known high-risk individuals. The authors conclude that if the concept of community prevention is to move beyond the isolated examples examined in their article, additional conceptual and empirical work is needed to garner support from public institutions, community-based stakeholders, and local residents.

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Depending on their composition and quality, neighborhoods can either foster children's healthy development or place them at significant risk for physical, psychological, or developmental harm. The National Survey on Children's Health estimates that almost 75 percent of the nation's children live in neighborhoods that their parents describe as highly or moderately supportive, while the balance live in neighborhoods judged by their parents to have either moderately low (20 percent) or very low support (6 percent).[1] Although some of this variation can be attributed to self-selection (that is, economic conditions and available options may direct high-risk families into neighborhoods that are less supportive), empirical studies indicate that neighborhoods do have an effect on family and child behaviors and outcomes, including parenting behaviors.[2]

Child abuse prevention efforts have historically focused on developing and disseminating interventions that target individual parents.[3] Early work in the field placed primary emphasis on identifying parents at risk for or engaged in abusive or neglectful behaviors. Once identified, these parents would be provided with knowledge, skill-building opportunities, and assistance to overcome their personal limitations. Such strategies were considered the most direct and efficient path to preventing maltreatment. More recently, however, attention has shifted from directly improving the skills of parents to creating environments that facilitate a parent's ability to do the right thing. It is increasingly recognized that environmental forces can overwhelm even well-intended parents, that communities can support parents in their role, and that public expenditures might be most cost-beneficial if directed toward community strategies. Some of these strategies seek to expand public services and resources available in a community by instituting new services, streamlining service delivery processes, or fostering greater collaboration among local service providers. Other strategies focus on altering the social norms that govern personal interactions among neighbors, parent-child relationships, and personal and collective responsibility for child protection. In each case, the goal is to build communities with a rich array of formal and informal resources and a normative cultural context that is capable of fostering positive child and youth development.

We begin our inquiry into community-based efforts to prevent child maltreatment by examining the theoretical frameworks of the new approach. We then explore five different community prevention efforts and summarize the empirical evidence evaluating their efficacy. Although not an exhaustive sample, these five initiatives are representative of efforts under way in many states to reduce maltreatment risk or enhance child development. After examining the unique challenges posed by community-based strategies to address abuse and neglect, we conclude by discussing key lessons learned and considering the likely financial and political benefits of embracing community-wide change to achieve measurable reductions in child maltreatment.

Why Does Community Matter if You Are Trying to Prevent Child Abuse?

The most sophisticated and widely used models in current child maltreatment policy and program development emphasize the continuous interaction and reciprocal interplay among such diverse domains as environmental forces, caregiver and familial

characteristics, and child characteristics.[4] Uri Bronfenbrenner's ecological model frames individual-family behavior as being embedded in broader neighborhood, community, and cultural contexts. Although the most frequently cited risk and protective factors for maltreatment reflect parents' individual functioning and capacity, community factors can influence parent-child interactions in myriad ways. Community norms frame what parents may view as appropriate or essential ways to interact with their children and set the standards as to when and how parents should seek help from others.[5] Context can increase or reduce parental stress by influencing perceptions of personal safety—that is, by creating a sense of support or reconfirming feelings of isolation. Community resources can offer temporary respite from parental responsibility. Community professional services can improve parents' mental health and capacity to take on the role of parenting. Although many scholars agree on the need to cast a broad net in examining how the vulnerable infant becomes the responsible adult, few can agree on the most salient contextual factors and, most important for our purpose, how to manipulate these factors to increase the likelihood parents will seek out, find, and effectively use necessary and appropriate support.

A series of reports issued by the U.S. Advisory Board on Child Abuse and Neglect between 1990 and 1993 explicitly recognized the continuous interplay between individual and community environment in addressing the problem of child maltreatment.[6] Frank Barry explains this interplay using four basic assertions, based on theory and empirical findings.[7] First, child abuse and neglect result in part from stress and social isolation. Second, the quality of neighborhoods can either encourage or impede parenting and the social integration of the families who live in them. Third, both external and internal forces influence the quality of life in neighborhoods. And, fourth, any strategy for preventing child maltreatment should address both internal and external dimensions and focus simultaneously on strengthening at-risk families and improving at-risk neighborhoods.

Over the past ten years, a growing body of research has attempted to measure and describe the mechanisms by which neighborhoods influence child development and support parenting. In summarizing this research, the Working Group on Communities, Neighborhoods, Family Process, and Individual Development concluded that neighborhood matters both directly, in providing, for example, schools, parks, and other primary supports, and indirectly, in shaping parental attitudes and behaviors and in affecting a parent's self-esteem and motivational processes.[8]

Context also has long been viewed as important in explaining why neighborhoods that share a common socioeconomic profile can have different levels of maltreatment. In a study of contrasting neighborhoods in Omaha, Nebraska, James Garbarino and Deborah Sherman found that two communities with similar demographic characteristics but different rates of reported child maltreatment differed dramatically in terms of their human ecology.[9] Specifically, the community with higher rates of maltreatment reports was less socially integrated. It also experienced less positive neighboring and more stressful day-to-day interactions. Robert Sampson and his colleagues have found that these neighborhood assets, which they summarize as "collective efficacy," predict variation in neighborhood violence in Chicago.[10]

Building on his earlier work, Garbarino and Kathleen Kostelny found support for the hypothesis that neighborhood social capital affects maltreatment rates in a dynamic model.[11] Examining child abuse reports in four economically disadvantaged Chicago communities during 1980, 1983, and 1986, they found significant differences in the relative ratings of neighborhoods over time. To explain this pattern, the authors interviewed a sample of residents about their view of community morale and their perceptions of their neighborhood as a social environment and as a source of "neighboring." On all dimensions, residents of the community with the greatest increase in maltreatment rates expressed the most negative views of their community, knew little about existing community services or agencies, and demonstrated little evidence of a formal or informal social support network.

One particularly promising pathway for understanding the role community can play in shaping parental capacity and behaviors is the concept of social capital, defined by Robert Putnam as "features of organization such as network, norms, and social trust that facilitate coordination and cooperation for mutual benefit."[12] Jill Korbin and Claudia Coulton used census and administrative agency data for 177 urban census tracts in Cleveland to find that variation in rates of officially reported child maltreatment is related to structural determinants of community social organization: economic and family resources, residential instability, household and age structure, and geographic proximity of neighborhoods to concentrated poverty. Children who live in neighborhoods characterized by poverty, a high ratio of children to adults, high population turnover, and a high concentration of female-headed families are at highest risk for maltreatment.[13]

When the study team interviewed residents in both high- and low-risk communities, those living in areas with higher rates of reported maltreatment and other negative outcomes perceived their neighborhoods as settings in which they and their neighbors had little ability to intervene in or control the behavior of children. In justifying their lack of action, they were likely to express concerns that the youths being corrected would verbally or physically retaliate. In contrast, residents in low-maltreatment communities were more likely to monitor the behavior of local children because they believed it was their responsibility to "protect" children from violent or dangerous neighborhood conditions, such as traffic or broken glass.[14]

Valuing collective actions to accomplish a common good also has potency in reducing violence, particularly in communities whose profiles would suggest high levels of social disorganization. Robert Sampson and his colleagues, for example, found lower crime rates in neighborhoods whose residents shared the same values and were willing to intervene on behalf of the collective good. Their sample included personal interviews with 8,782 Chicago residents living in 343 distinct "neighborhood clusters" varying in race and socioeconomic status. The researchers used interviews to construct measures of "informal social control" (the degree to which residents thought that they could count on their neighbors to help in such ways as correcting adolescent behavior, advocating for necessary services, or intervening in fights) and of "social cohesion" (the degree to which respondents felt they could count on their neighbors to help each other or be trusted). Together, three dimensions of neighborhood stratification—concentrated disadvantage, immigration concentration, and residential stability—explained 70 percent of the

neighborhood variation in collective efficacy. Collective efficacy, in turn, mediated a substantial portion of the association between residential stability and disadvantage and multiple measures of violence.[15] In other words, although structural issues such as poverty are critical in establishing a community's social milieu, neighborhoods that are able to establish a sense of community and mutual reciprocity develop a unique and potentially powerful tool to reduce violence and support parents.

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Another community approach, based in the mental health services sector, is system of care. Less well supported by empirical findings but theoretically and clinically strong, system of care involves developing a sound infrastructure of coordinated individualized services. The concept emerged partly in response to Jane Knitzer's dramatic 1982 call for help for children, which grew out of stark findings that too many children were living in poverty and suffering mental disorders. System of care also evolved in response to a legal mandate to provide services to high-risk violent youth within their local communities rather than detaining them in far-away training schools.[16] System of care is based on a four-part foundation that includes a continuum of services ranging from outpatient therapies to in-home family preservation; coordination of services so that a family can move from one to another without disruption; service individualization whereby services are "wrapped around" the child and family rather than having families conform to service requirements;[17] and cultural competence in services so that professionals understand the community and culture of families.[18]

How Can Community Be Used to Prevent Child Abuse?

A large body of theory and empirical research suggests that intervention at the neighborhood level is likely to prevent child maltreatment within families. The two components of intervention that appear to be most promising are social capital development and community coordination of individualized services. Social disorganization theory suggests that child abuse can be reduced by building social capital within communities—by creating an environment of mutual reciprocity in which residents are collectively engaged in supporting each other and in protecting children. Research regarding the capacity and quality of service delivery systems in communities with high rates of maltreatment underscores the importance of strengthening a community's service infrastructure by expanding capacity, improving coordination, and streamlining service delivery.

Addressing social dilemmas through a combination of grassroots community action and coordinated professional individualized services is long-standing practice in both social work and public health.[19] At the turn of the twentieth century, settlement house workers engaged immigrant communities to address collective inequalities such as labor conditions and educational opportunities as well as personal challenges such as caring for

an infant and ensuring child safety.[20] Less known but equally important were African American club women's organizations that focused on building supportive communities for migrants from the South relocating to northern urban areas.[21] More recently, urban renewal and efforts to reduce the adverse impacts of concentrated poverty have embraced community change initiatives designed both to improve context and to empower residents to use collective action to achieve common goals.[22] Although these efforts have often had disappointing results,[23] the power of community and context to change within-family behaviors and to enhance the benefits of individualized interventions continues to advance in many areas, including obesity, violence prevention, child welfare, and youth development.[24]

Community strategies to prevent child abuse and promote child protection have focused on creating supportive residential communities whose residents share a belief in collective responsibility to protect children from harm and on expanding the range of services and instrumental supports directly available to parents.[25] Both elements—individual responsibility and a strong formal service infrastructure—are important. The challenge, however, is how to develop a community strategy that strikes the appropriate balance between individual responsibility and public investment.

In framing its recommendations for fostering community efforts to prevent child abuse, the U.S. Advisory Board noted that these two capacity-building strategies—a focus on community norms and a focus on coordinated, individualized service development—are not mutually exclusive and can evolve in mutually beneficial ways. For example, expanding services may begin by establishing community-based service centers, with multiple providers sharing a common facility (for example, neighborhood service hubs located in schools and community organizations such as New Jersey's Family Success Centers).[26] Not only do such centers offer residents a communal place to get services, they also draw together a diverse set of providers. As a result, families have access to a more comprehensive array of interventions that can simultaneously address multiple risk factors.[27] Building and sustaining a network of service providers in a system of care requires participants to engage in a set of shared activities that can include establishing a common service philosophy, developing a shared assessment tool, or forming interdisciplinary teams to assess families and outline effective service plans.[28] This type of joint casework and system planning creates a more coordinated and integrated service response and effectively engages both public and private agencies. As residents or program participants become engaged in the service planning process, they can empower themselves to assume ownership of the process and make personal investments in their community. Although this chain of events begins with the goal of enhancing services, it can also, with careful implementation and planning, enhance social investments and neighborliness.

Similarly, community change efforts may begin by focusing on social networks and building social capital and, in the process, expand service availability. For example, local residents and key stakeholders might be invited to participate in a community planning initiative that asks them to identify core concerns and to make a plan for resolving key issues. Implementing such plans often requires substantial residential investment. Such investment might involve supporting

the reallocation of existing public resources or the development of new service options for all or a subset of local residents. In other cases, it might involve forming cooperatives to care for each other through existing community organizations or establishing new organizational entities. In such cases, service expansion both provides a tangible resource for the community and draws residents together in collective actions to achieve a shared common good. These dual functions are particularly evident when services include a parent-participation component, as is common in many early education programs, such as Head Start, or use a range of community-based institutions or organizations to create a context in which families can gather and build connections.[29]

Where one starts in this process is less important than recognizing that efforts to build social capital and expand service availability can be mutually reinforcing and equally important. Focusing too heavily on community capacity-building and normative change can leave families without the context and types of institutional supports essential for addressing complex social and personal needs. Focusing too heavily on system reform and service development may sustain an unproductive reliance on formal services. More important, changing only service capacity misses an opportunity to create the sense of mutual reciprocity needed for sustainable change and continuous support.

How Are Community Child Abuse Prevention Efforts Structured, and How Effective Are They?

Community-based efforts to prevent child abuse incorporate a range of strategies that place differential emphasis on the value of these two approaches. For purposes of this discussion, we examine five different community efforts that seek to reduce the frequency of child abuse and neglect—Triple P-Positive Parenting Program, Strengthening Families, the Durham Family Initiative, Strong Communities, and the Community Partnerships for Protecting Children (CPPC). As summarized in table 1, all of the interventions employ various strategies to improve service capacity. In some instances, primary emphasis is placed on building service capacity by focusing on improving quality by reshaping how direct service providers interact with their clients (as is the case of Triple P and CPPC) or how agency managers supervise their staff, define and engage participant caseloads, or interact with each other (as reflected in the Durham Family Initiative's system of care work, Strengthening Families' work with child care providers, and CPPC's efforts with child welfare agencies). In addition to improving program quality, all of the initiatives have strategies to increase the odds families will have services available to them either by improving access to existing services or by generating new services. Finally, three of the five initiatives use specific strategies to alter the way in which local residents view the notion of seeking help from others to resolve personal and parenting issues. These initiatives seek to change a range of behaviors and attitudes such as mutual reciprocity among neighbors, parent-child interactions, and collective responsibility among residents for child protection and safety.

Capturing the effects of these complex community change initiatives is daunting. In addition to having broadly defined outcomes, the initiatives seek to change individuals either through programs targeted directly at individual families or through institutional changes that indirectly affect families who may have only limited contact with any of the

Table 1. Community Child Abuse Prevention: Common Strategies and Evidence Base for Five Major Initiatives

	Five major community child abuse prevention initiatives				
	Triple P-Positive Parenting Program	Strengthening Families	Durham Family Initiative	Strong Communities	Community Partnerships for Protecting Children
Intervention strategies					
Practice reform For example, training providers to deliver services in a different manner or alter the provider-participant relationship	**X**				**X**
Agency reform For example, altering institutional culture or altering how agencies and entities within a community relate to each other through partnership development		**X**	**X**		**X**
Expand service capacity or access, or both For example, introducing a new service or improving service access or reach in a comprehensive manner	Access	Access	Capacity/ Access	Capacity/ Access	Access
Alter normative standards For example, developing personal responsibility for child protection		X		**X**	X
Evaluation strategies					
Randomization of communities	X				
Randomizations of participants within program components	X		X		
Quasi-experimental designs (trend analysis, surveys) with comparison communities or participants			X	X	X
Theory-of-change analysis	X	X	X	X	X
Implementation research	X	X	X	X	X
Utilization-focused evaluation			X	X	

Note: Areas of primary emphasis for each initiative are indicated in bold.

initiative's core strategies. The key operating assumption in such efforts is that change initiated in one sector will have measurable spillover effects into other sectors and that the individuals provided with information or direct assistance will change in ways that begin to alter normative behavioral assumptions across the population. This gradual and evolutionary view of change is reflected in many public health initiatives that, over time, have produced dramatic improvement in such areas as smoking cessation, reduction in drunk driving, use of seat belts, and increased conservation efforts.

Assessing such efforts is complicated by this evolutionary change process as well as by the tendency of these initiatives to alter their initial operating assumptions and strategies in response to the progress or lack of progress made in the early stages of implementation. Thus, traditional evaluation methods that use random assignment to treatment and control conditions and assume a "fixed" intervention that adheres to a standardized protocol over time are of limited utility in determining an initiative's efficacy or in producing useful implementation lessons. On the other hand, focusing only on level of implementation and ignoring effects will prevent these initiatives

from reaching status as "evidence-based" in this era of accountability for outcomes. Furthermore, knowing the early effects of an initiative can be extremely useful in making informed mid-course corrections.

In light of these conceptual challenges, evaluations of community child abuse prevention strategies such as those we discuss in this article have used multiple methodologies to clarify the most promising pathways to achieving community change (theory-of-change analysis and implementation studies), and to more directly use these data in altering their selection of specific strategies and program emphasis (utilization-focused evaluations). As discussed below, all of the initiatives have a theoretical framework that guides their assumptions about parent-child relationships as well as about what communities can do to better support parents. They also have established methods for monitoring their implementation and using implementation data to refine their approach. Although such research does not address the very important question of impact, these evaluative functions are critical for understanding the most efficient way to approach this work.

Where appropriate, randomization procedures and various quasi-experimental strategies have been used to assess outcomes, although in most cases these procedures have been applied to specific elements or components of the initiative rather than capturing the initiative's population-level effects. In addition to the methodological limitations of this research base, few of these strategies have been operational long enough to provide an accurate profile of their potential accomplishments. Although incomplete, these data provide preliminary evidence as to the validity of a strategy's theory of change, implementation potential and challenges, and potential areas of impact.

Triple P

Theory of change and implementation. Triple P-Positive Parenting Program, originally developed in Australia to assist parents of children with developmental delays or behavioral problems, is increasingly viewed as a promising strategy to prevent child abuse. It is a behavioral family intervention designed to improve parenting skills and behaviors by changing how parents view and react to their children. Triple P consists of a series of integrated interventions designed to provide a common set of information and parenting practices to parents who face varying degrees of difficulty or challenges in caring for their children. Based on social learning theory, research on child and family behavior therapy, and developmental research on parenting in everyday contexts, each intervention seeks to reduce child behavior problems by teaching healthy parenting practices and how to recognize negative or destructive practices. Parents in every component are taught self-monitoring, self-determination of goals, self-evaluation of performance, and self-selection of change strategies.

These parenting practices are introduced to community residents through two primary avenues. Universal Triple P is a media-based and social marketing strategy designed to educate community residents about the principles of positive parents and to offer a set of simple techniques for addressing common child care issues (for example, safety, behavior management, discipline strategies, and securing basic health care). Information is disseminated through the use of radio spots, local newspaper articles, newsletters distributed through the schools, mass mailings to local residents, presentations at community

forums, and a widely publicized website. Access to this information is open to all residents willing and able to seek it out. For those parents interested in more "hands-on" assistance, Selected Triple P offers brief parenting advice and contact sessions that are available to parents through various primary care facilities such as well-child care, day care, and preschool settings and in other settings where parents may have routine contact with service providers and other professionals who regularly assist families. In addition to individual consultations, Selected Triple P also involves parenting seminars delivered within these primary care settings on such topics as the power of positive parenting; raising confident, competent children; and raising resilient children. The seminars are designed for the general parent population and provide parenting information as well as raise awareness of the overall initiative.

In addition to its social marketing and general education component, Triple P seeks to change parenting standards by ensuring that when formal services are accessed by families, all providers in the community operate within a shared understanding of key values and practice principles. Toward this end, it offers formal training in the Triple P model to direct service personnel working in a variety of clinical settings. Standard Triple P offers a series of broadly focused eight- to ten-week parenting skill training sessions delivered in the home, or through group-based sessions, or self-directed using project material. Families whose parenting difficulties are complicated by other problems, such as domestic violence or mental health concerns, or who have not been adequately served by the standard services are offered Enhanced Triple P, a more intensive behavioral family intervention.

Although service provision at each level is supported by a variety of structured unique protocols, all of the direct services are framed by a set of common practice principles. These include ensuring a safe and engaging environment for children, creating a positive learning environment, using assertive discipline, having realistic expectations, and taking care of oneself as a parent.

By building relationships with families, early care and education programs can recognize signs of stress and strengthen families' protective factors with timely, effective help.

Effectiveness. As discussed in the article in this volume by Richard Barth, repeated randomized trials of specific Triple P interventions have consistently demonstrated positive effects on parenting skills and child behavior.[30] Although these clinical findings are impressive, few of the studies have explicitly examined the effects of Triple P's multi-layered and universal service approach on population or community-wide outcomes. Recently, with funding from the Centers for Disease Control and Prevention, Ronald Prinz and his colleagues randomly assigned eighteen counties in South Carolina to either the comprehensive Triple P program or a services-as-usual control group.[31] Within the intervention counties, project staff launched an intensive social marketing campaign to raise awareness of the initiative and its related parenting strategies and support

services among the general population. Staff also identified and contacted state and county stakeholders who provided such support services for parents of young children as education, school readiness, child care, mental health, social services, and health, in a variety of settings. Direct service providers were offered the opportunity to participate in training on all of the Triple P interventions. During the project's first two years, 649 service providers received training in one or more of the interventions. The result was a mean of 38.8 trained providers per 50,000 population.

Effects were assessed by comparing trends between the intervention and comparison counties on three independently derived population indicators. These comparisons yielded statistically significant, large positive effects. Between the period just before implementation and twenty-four months later, intervention counties increased in substantiated child maltreatment rates by just 8 percent, compared with 35 percent for the control counties. Out-of-home placements decreased in intervention counties by 12 percent but increased by 44 percent in control counties. Hospital admissions for child injuries decreased by 18 percent in intervention counties but increased by 20 percent in control counties. This study is the first to randomize geographical areas to intervention and control conditions and show preventive effects on child maltreatment at a population level. Although these findings are impressive, it remains unclear how the social marketing, universal service offers, and training in the Triple P model to direct service providers might have produced these results. Additional analyses regarding potential variation across the intervention and comparison counties with respect to both implementation efforts and outcomes is needed to understand more fully the mechanisms through which Triple P might affect maltreatment rates.

Strengthening Families Initiative

Theory of change and implementation. The Strengthening Families Initiative (SFI)—not to be confused with a selective individual-family program to prevent child abuse and child problem behavior started by Karol Kumpfer, also called Strengthening Families[32]—is designed to reduce child abuse by enhancing the capacity of child care centers and early intervention programs to offer families the support they need to avoid contact with the child welfare system. Similar to the Triple P model, Strengthening Families also seeks to affect parent behavior by using an existing service delivery system. Specifically, SFI uses focused assessments, technical assistance, and collaborative ventures to enhance the capacity of child care centers to promote five core protective factors among their program participants—parental resilience, social connections, knowledge of parenting and child development, critical support in times of need, and social and emotional competence of children. By building relationships with families, early care and education programs can recognize signs of stress and strengthen families' protective factors with timely, effective help. Unlike previous training and educational efforts to engage child care workers in child abuse prevention, SFI is presented as "problem solving" rather than "problem identification." Families are encouraged to understand that if they have concerns, they can go to any staff member at these centers and receive help or direction. And if they are reported for suspected maltreatment, the family can count on the child care center to serve as their advocate with child welfare officials.

In 2001, with funding from the Doris Duke Charitable Foundation, the Center for the Study of Social Policy (CSSP) began studying the role that early care and education programs nationwide can play in strengthening families and preventing abuse and neglect. After developing the overall framework and related training materials, CSSP implemented the model in seven states on a pilot basis. In each state, officials enhanced their policies and practices through collaboration among their early childhood, child abuse prevention, and child protective services sectors. Several of the states integrated SFI's five protective factors and the strategies for achieving them into the state's child care quality rating and improvement systems.

Moving out of the pilot phase, SFI has broadened its focus beyond states' early care and education programs to include building links between these programs and child welfare departments and building the protective factors into the training and monitoring systems governing home-based child care providers. At present, twenty-three states are participating in the Strengthening Families National Network.

Effectiveness. SFI's primary pathway for change, enhancing protective factors within families with young children, has strong empirical support in both basic and applied research. No one can disagree that the initiative's key protective factors, if in place and robust, are likely to reduce the odds of parents' abusing or neglecting their children. Parents who have strong social connections, knowledge of child development, and a sense of personal efficacy are indeed among those who have the most rewarding relationships with their children, and these children are more likely to have strong self-perceptions and robust cognitive and social development. Equally compelling is evidence that enrollment in high-quality early education programs, particularly those that augment children's services with direct support to parents, have measurable immediate and long-term effects on child and family outcomes, including the prevention of child abuse.[33]

Despite the theoretical promise of this approach, it is unclear whether these types of child and family outcomes can be achieved through SFI's implementation plan. Six elements of the theory must still be investigated. The first is assumptions regarding the number of child care centers with the capacity and motivation to engage in the type of self-reflection and practice change required to adopt fully a focus on enhancing protective factors. The second is the belief that child care centers have contact with large numbers of families who need this type of assistance to avoid abuse. The third is the belief that the relationship of child care centers with families is sufficiently robust to meet the needs of the high-risk families they do encounter. The fourth is the view that social networks built around child care centers can shape normative standards regarding how to care for a child, as opposed, for example, to merely reflecting existing standards that may or may not be appropriate. The fifth is the assumption that child care centers have access to the array and quantity of material support and mental health services that families may need or request. And the sixth is the assumption that families have chosen a given child care center from an array of available options and therefore have a more personal relationship with their care provider than they do with other service providers. Although the program has anecdotal evidence to support all of these assumptions, the ability of the SFI to achieve normative change within local child care and early care networks and to provide

families with sufficient support to reduce maltreatment rates remains untested. There are no published reports of program efficacy using a rigorous design and no known trials under way.

Durham Family Initiative

Theory of change and implementation. The Durham Family Initiative (DFI) is a population-wide effort to expand the consistency and scope of universal assessments designed to identify high-risk families or those needing prevention services and then to link them with appropriate community-based resources.[34] It has two goals. One is to enhance community social and professional capital and improve community capacity to provide evidence-based resources to families. The other is to increase families' ability to access community resources. To reach these goals it focuses on universal assessment and referral. Established with funding from the Duke Endowment in 2002, the initiative posits that child abuse is best prevented by addressing the risk factors and barriers that affect the healthy development of parent-child relationships. Adopting an ecological perspective, DFI works to strengthen and expand the pool of available evidence-based direct services, to identify and secure meaningful public policy reforms, and to build local community capacity. Its activities fall into four main areas. First, it fosters local interagency cooperation regarding adoption of a coordinated and consistent preventive system of care. Second, it increases social capital within a number of Durham city neighborhoods through the targeted use of outreach workers and community engagement activities. Third, it develops and tests innovative direct service models to improve outcomes with high-risk families or those already involved in abuse or neglect, while also increasing supports for high-risk new parents through early identification and service referrals. Finally, it reforms county and state policies affecting the availability and quality of child welfare and child protection services.

One of DFI's most notable features has been its efforts to nurture local interagency cooperation by developing the comprehensive Durham System of Care (www.durhamsystemofcare.org), an integrated network of community services and resources to help families meet the needs of children with serious, complex behavioral, academic, social, and safety needs. It is based on the view that key public and private health and human service agencies must share a consensus on how best to identify, engage, and meet the needs of troubled children and their families. This consensus has developed gradually, beginning in 2002 with initial meetings among key agency directors and their middle management. Building on relationships established during these meetings, the effort has expanded to provide theory-to-practice training across a diverse set of local agencies and community professionals. Most recently, project staff members assisted the local system of care leadership team in writing a cross-agency manual, developing a quality improvement and evaluation plan, and expanding the system of care to include an adult focus. Project staff members also have used the lessons learned from their collaboration within Durham County to advocate and support statewide reforms.

The focus on collaboration and capacity building has been reflected in the project's work within its targeted service communities in the city of Durham. In the early stage of implementation, DFI supported a number of community partners or outreach workers in three of the project's six target neighborhoods. These outreach workers gathered

information about neighborhood residents and resources, built relationships among residents, and developed neighborhood "teams" to address specific issues of high interest or concern to local residents. The process generated such neighborhood projects as community day activities, resource centers, language classes, neighborhood watch programs, and emergency food and clothing distribution centers. More recently, efforts to strengthen the informal systems of support among local residents in these communities have been fostered through a leadership training program developed in partnership with the Durham Housing Authority and DFI efforts to recruit, train, and link grandmothers in the community to women struggling with the care of young children.

DFI's most ambitious effort is Durham Connects, a recent attempt to assess the needs of all newborns and their families in Durham County and then to link them with supports to address their needs. Piloting began in July 2007, when DFI began planning an aggressive campaign to provide an initial assessment and facilitate appropriate service linkages for the estimated 4,000 babies born each year in the county. Durham Connects will be grafted onto existing early-intervention services that now give approximately 85 percent of all infants access to a pediatric practice visit within forty-eight hours of their births. Its goal is to augment these services with a more comprehensive psychosocial assessment and to expand coverage to the families of newborns that are not now offered or do not accept these visits. The assessment will be conducted by a nurse, most likely during a home visit. In addition to completing the standard risk assessment protocol, the home visitor will ensure that the family is linked to a medical provider and that any immediate needs identified through the risk assessment are addressed through an appropriate service referral. By building on the existing network of well-baby care within Durham County, DFI staff members believe they can provide universal coverage to all newborns and effectively link families to needed services.

Strong Communities is unique in placing primary emphasis on changing residential attitudes and expectations regarding collective responsibility for child safety and mutual reciprocity.

Effectiveness. Among children from birth to age seventeen, the rate of substantiated child maltreatment in Durham County fell 49 percent between 2001–02, the year before the DFI began, and 2007. In contrast, the rate for the mean of five demographically matched comparison counties in North Carolina over the same period fell just 21 percent. Of particular interest is the recidivism rate, that is, the rate at which children who have been assessed for possible maltreatment by the Division of Social Services must be reassessed within six months. A high rate would indicate a failure of the professional system to respond adequately. Among children from birth to age seventeen, the reassessment rate in Durham dropped 27 percent between 2001–02 and 2007. In contrast, the rate for the mean of five demographically matched comparison counties over the same period dropped 15 percent.

Independent sources provide additional information. Anonymous sentinel surveys were completed with 1,741 family-serving professionals in Durham and one comparison county (Guilford) in 2004 and 2006. Professionals' estimates of the proportion of children who had been abused decreased 11 percent in Durham but increased 2 percent in Guilford over this period. Estimates of the proportion of children who had been neglected decreased 18 percent in Durham but only 3 percent in Guilford. Estimates of the proportion of children who had been spanked fell 11 percent in Durham but rose 4 percent in Guilford. For positive parenting behaviors, professional estimates of the proportion of children shown love, affection, or hugs by parents increased 5 percent in Durham but decreased 2 percent in Guilford.

Because it is plausible that the DFI has changed professionals' perceptions without changing children's outcomes, emergency department and in-patient hospital records from local hospitals were scrutinized for evidence regarding child maltreatment and well-being. The rate of possible maltreatment-related injury among all children from birth to age nine in Durham fell 17 percent between 2001–02 and 2005–06, whereas in Guilford it fell 10 percent.[35] Pediatric hospitalizations for any reason represent a reverse measure of child well-being. Between 2001–02 and 2005–06, the overall hospital visit rate for children from birth to age seventeen in Durham decreased 12 percent, whereas in Guilford County it increased 5 percent.

Repeated population-based surveys also found significant reductions in parental stress and improvements in parental efficacy over time among randomly selected parents of young children in the Durham city neighborhoods as compared with residents in the project's matched comparison areas. These data, however, did not reveal any significant changes in parental self-reports of positive or potentially abusive interactions with their children, changes in observed acts of potential abuse in other families in the community, or any changes in resident interactions, collective efficacy, or neighborhood satisfaction.[36] Trends were particularly unfavorable on these measures in the high-risk communities in which DFI provided outreach workers. It is not clear why anecdotal reports of favorable impact by outreach workers were not reflected in population surveys. It is possible that the workers' impact was limited to a small number of families and did not reach enough families to yield population change on the more direct measures of parent-child interactions.

Because the evaluation design is not a randomized trial, alternate explanations for the positive and less favorable findings are possible. Unknown corresponding changes in community economics, demographics, or politics, rather than DFI, could be responsible for changes in child maltreatment over time. To provide a more rigorous evaluation and to systematize the assessment and community resource connections, the next phase of the DFI will involve a randomized trial within Durham. Half of the newborns will be assigned randomly, by neighborhood, to receive the home-visiting program and network of community resources, while the other half will be provided with the intervention in subsequent years. This trial began in 2008 and will last several years.

Strong Communities

Theory of change and implementation. Among the community-based prevention initiatives we have discussed, Strong

Communities is unique in placing primary emphasis on changing residential attitudes and expectations regarding collective responsibility for child safety and mutual reciprocity. Begun by the Duke Endowment in 2002, the initiative is targeted at six communities in Greenville County, South Carolina. Its aim is to help the general public and local service providers within those communities understand how their individual and collective efforts can directly address the complex and often destructive web of interactions contributing to child maltreatment. The logic of the program is that once residents feel that their neighborhood is a place where families help each other and where it is expected that individuals will ask for and offer help, public demand will drive service expansion and system improvement.[37] The project unfolds in four distinct phases. The first phase is to raise awareness about the nature of the problem and identify opportunities for enhanced family support. The second is to mobilize the community to develop and implement plans to prevent child maltreatment. The third is to increase resources to enable families to get non-stigmatizing help whenever and wherever they need it. The final phase is to institutionalize the provision of those resources so that support is sustained over the long term.

Strong Communities places heavy emphasis on educating all elements of the community based on the program's core message—a sense of collective responsibility among all community members to keep children safe. Initially, the project assigned community outreach workers to address particular issues, such as workforce development, of concern to residents. After the first year, however, the focus of outreach workers changed from specific issues to specific neighborhoods, ranging in population from 5,000 to 50,000. Strong Communities' outreach workers follow a flexible implementation plan in which specific activities expand or contract based on staff assessment of their utility in advancing community engagement. Over the initiative's first five years, a broad array of strategies were initiated, terminated, and reinstated. These efforts included recruiting volunteers through pledge card drives, hosting various community wellness fairs and events centered on "back-to-school" planning, and educating families about the issue of Shaken Baby Syndrome, as well as "Blue Ribbon" Sabbath campaigns within local churches during Child Abuse Prevention Month (April) each year, media outreach, and public awareness campaigns. Because the initiative's primary goal is contextual (rather than output driven), its leadership team stresses the need for flexible implementation that allows staff to respond to emerging opportunities as they materialize. In many cases, such opportunities are not easily anticipated and may be recognized only after spending considerable time within a given community or working within a given sector. A flexible work plan allows staff to capitalize on a new program that might be adopted by a community agency or find a useful role for an individual or organization with a promising new idea that complements the project's vision.

Efforts to increase direct services to young children and their families also have varied over time. Although the initial plan was to expand home-based interventions for new parents, the current approach is more diverse and draws together a variety of community resources under a general strategy called "Strong Families." After identifying families with young children through a variety of intake points and enrolling them, the program provides the Connections for Strong

Families Newsletter and a "family friend" to help parents with children under six find appropriate family and child activities or to help those with children four or five years of age get ready for school. The program also provides Extra Care for Caring Families, which offers enhanced developmental screening and tips on child and baby care (providing the family's primary care physician is linked up with Strong Families). Finally it provides access to a local Family Activity Center, which offers a range of activities including playgroups, parents' night out, parent-child activities, financial education and counseling, and assistance from local professionals who volunteer to work with a family as their "family advocate."

Effectiveness. Project implementation data suggest Strong Communities has had notable success in attracting a wide range of stakeholders and volunteers.[38] For example, outreach efforts have engaged many community organizations, faith-based institutions, and local public agencies such as police and fire departments. By 2007, the project estimated that almost 200 churches, 77 community organizations, and 186 businesses had provided resources, leadership, and infrastructure support to one or more of Strong Communities' activities. Equally impressive, the project attracted almost 5,000 volunteers—3.5 percent of the service area's population. Collectively, the volunteers contributed an estimated 43,667 hours of service.

The success of these community engagement efforts is reflected in improved parent-child interactions as measured by repeated surveys of randomly selected parents of young children in both the intervention and matched comparison areas. The surveys found significant improvement over time in parent self-reports of positive interactions with their children and a corresponding reduction in parent reports of acts suggestive of neglect.[39] These surveys, however, revealed no significant change on indicators of collective efficacy, mutual reciprocity, or neighborhood satisfaction, areas of change one might have expected given the project's primary focus. Indeed, on several of these measures, performance in the intervention community was less positive than that in the comparison community. In addition, local administrative records revealed no significant declines in child abuse reports, substantiation rates, or hospitalizations related to injuries suggestive of maltreatment when compared with similar records in the comparison community.

The absence of measurable effects on indicators of resident perceptions of their community and interactions with their neighbors is unexpected given the project's implementation profile. Similarly, the improvements observed in self-reported parent-child interactions were not supported by comparable improvements in parental personal functioning or reflected in any changes in administrative data regarding child abuse reports or substantiations. It is plausible that continued implementation would lead to reduced official child maltreatment reports and child injuries over a longer period of time. Alternatively, it is possible that the intervention is too far removed from within-family maltreatment behavior to have its desired impact, particularly on families facing the greatest challenges.

Community Partnerships for Protecting Children

Theory of change and implementation. One of the most consistent and seemingly intractable problems in formulating a coherent child maltreatment policy has been the lack of coordination between the formal child

welfare response and community-based prevention efforts.[40] Community Partnerships for Protecting Children (CPPC) is a twelve-year child welfare initiative that addresses this problem by incorporating family support principles into the public child welfare system and elevating child safety concerns among those working in family support settings. Originally implemented and evaluated in four communities, the model now operates in fifty partnership sites across the country. As outlined in several publications on the CPPC method, four core elements constitute the initiative's theory of change.[41] The first is developing an Individualized Course of Action (ICA) for all families in which children are identified as being at substantial risk of child abuse and neglect. The second is creating a neighborhood network that includes both formal services and informal supports. The third is changing policies, practices, and culture within the public child protective services (CPS) agency to better connect child welfare workers with the neighborhoods and residents they serve, increase service effectiveness, and improve accountability. And the fourth is establishing a local decision-making body of agency representatives and community members to develop program priorities, review the effectiveness of their strategies, and mobilize citizens and other resources to enhance child safety. The aim is to make it less likely both that children will experience child abuse and neglect and that children who have been abused will experience subsequent maltreatment and serious injury.

CPPC embraces several reforms that are increasingly common within the child welfare system. As Jane Waldfogel discusses in her article in this volume, structural reforms include differential response systems, co-locating child welfare workers with other key health and income maintenance staff in community settings, geographic assignment of cases, and increased interagency collaboration and service partnerships.[42] Practice-level reforms also have been promoted within some agencies to make child welfare workers more responsive to the needs of families and children in these systems.[43]

In addition to these structural and practice reforms, CPPC embraces a specific commitment to building a sense of social responsibility for child well-being. The community partnership approach harnesses the creative talents of neighborhood leaders, human services providers, the faith community, and local organizations to work with the public child protection agency to enhance safety and well-being for all families. CPPC proponents argue that such a fundamental, conceptual shift across multiple domains, if sustained, can improve child safety and measurably reduce child maltreatment rates.

Effectiveness. Chapin Hall at the University of Chicago conducted a comprehensive evaluation of CPPC, beginning with a 1996 assessment of early implementation efforts and concluding with a 2000–04 assessment of program effects in the four communities in which CPPC was originally implemented.[44] The evaluation observed few positive effects on the initiative's four core outcomes—child safety, parental capacity and access to support, child welfare agency and network efficiency, and community responsibility for child protection—at either the individual or population level. Among the child welfare cases that received the most direct CPPC intervention (an Individualized Course of Action, or ICA), modest but significant improvements were observed among participants in their self-perception of progress and in standardized measures of depression and

parental stress. In addition, more than 90 percent of the families' lead workers considered the ICA process helpful in improving child safety. However, the individual improvements observed among ICA cases were not positively correlated with a reduction in the likelihood of subsequent maltreatment reports or placement. Further, the frequency of subsequent maltreatment reports and placement rates among ICA recipients was generally consistent with the outcomes of a comparable group of child welfare cases not exposed to an ICA. Similarly, trends in the number of child abuse reports, subsequent reports, and placement rates within the four target communities did not suggest consistent, community-wide reductions in child abuse.

Although nascent, the current evidence base for community child abuse prevention offers both encouragement and reason for caution.

Although ICA practice did demonstrate the ability to marshal additional service resources for families, survey data from both local agency managers and child welfare workers showed minimal evidence of increased collaboration and no evidence of improved community-wide service availability or service quality. The evaluation was not able to directly measure changes in resident behavior in responding to families at risk for maltreatment or acting to improve child protection. However, repeated interviews over time with a sample of CPS workers did not identify steady increases in the application of CPPC strategies to better integrate child welfare workers and community resources (for example, geographic assignment of cases, locating child welfare workers in community settings, and co-locating child welfare workers with other human service providers), nor did the partnership sites develop and sustain far-reaching recruitment efforts to educate and engage residents in providing informal support to families within the child welfare system.

The initiative did provide some evidence that widely adopted practice changes were able to alter organizational culture and improve worker satisfaction within child welfare agencies and to create greater opportunities for collaboration between child welfare and family support agencies. CPPC leadership and local agency representatives reported that placing child welfare workers in community settings helped reduce the negative perceptions residents had of the local child welfare agencies and enabled the workers to draw on neighborhood resources more effectively. In addition, ICA practice created a more collaborative decision-making process among families, child welfare workers, and other community service providers with respect to case planning. Although not universal, the evaluation also found some evidence that the CPPC partnerships contributed to a similar sense of shared decision making at the community level.

Are Community Child Abuse Prevention Strategies Worth the Investment?

Although nascent, the current evidence base for community child abuse prevention offers both encouragement and reason for caution. Implemented on the scale represented by these five models, prevention requires significant resources and long-term investment.

For example, the DFI and Strong Communities initiatives cost approximately $1 million a year each to serve, in the case of DFI, a single county and, in the case of Strong Communities, six neighborhoods within a county.[45] The initial development and evaluation of the CPPC concept in four pilot communities cost $41 million over a seven-year period, or $1.5 million a year for each service site.[46] Investments in Triple P and Strengthening Families have been more modest but not insignificant.[47] Generating the resolve among private philanthropy and public institutions to sustain these investments in community prevention will require stronger empirical evidence that the concept of universality and community change embedded in these models can achieve these objectives.

In the short run, the case for community prevention is promising on both theoretical and empirical grounds. Community prevention efforts are well grounded in a strong theory of change and, in some cases, have strong outcomes. At least some of the models we have reviewed have reduced reported rates of child abuse and injury to young children, altered parent-child interactions at the community level, and reduced parental stress and improved parental efficacy. When focused on community building, the models can mobilize volunteers and engage diverse sectors within the community such as first responders, the faith community, local businesses, and civic groups in preventing child abuse. This mobilization can exert synergistic impact on other desired community outcomes such as economic development and better health care.

But community prevention of maltreatment also raises some concern about its effectiveness. Not all families can, or wish to, invest in their community or interact with their neighbors. In some instances, this reluctance may reflect a lack of skills in understanding how to ask for or accept assistance. In other cases, it may reflect an informed choice to avoid situations perceived as negative. It is unclear how community initiatives can or should address the mixed effects of social supports—the positive outcomes of positive networks and negative effects of negative networks.

Building social capital is more than providing resources to families; it requires building within individuals a willingness to make an investment of their own.

Which neighborhoods are best suited for community prevention efforts is not clear, nor is the basis for matching a program's focus with a community's needs. Living in a community where the norm is already for residents to be highly engaged may make a program to increase collective efficacy superfluous. The critical challenge, of course, is creating engaged communities where they do not yet exist. In such cases, simply talking about the benefits of place-based social exchange may not be enough to alter behaviors. Indeed, the dissemination literature suggests that adopting new actions requires far more than knowledge transfer or even modest exposure and experimentation with an innovation.[48] The target audience has to "own the idea" and believe the reform can indeed produce tangible differences for them personally. To meet this challenge, community-based initiatives will need to move beyond simply creating opportunities for change and embrace strategies that begin

to alter deeply held values and perceptions. It is unclear whether these models have clearly defined strategies for engaging residents in this type of self-reflection and substantial change. Better understanding the appropriate pathways of change may require incubating these efforts in hospitable environments rather than testing them in the most distressed communities.

Building social capital is more than providing resources to families; it requires building within individuals a willingness to make an investment of their own. Those who enjoy rich social networks are in part reaping the investments they have made through their own contribution to the social exchange. Social capital as a community change agent works only if a significant proportion of residents or members of the target group contribute their own energy into making the community the type of environment they desire. At present, it is not clear how to catalyze this type of social capital investment or how to define it. For example, the degree of social interaction with one's neighbors and membership in various community organizations appear to have minimal correlations with how one interacts with one's own children.[49] To some degree, this independence may suggest that an individual's investment in his or her community, as measured by these types of associations and memberships, does not provide as rich a pool of support for or influence on one's parenting as might have been first thought. Using community to support parents and prevent child abuse is more than creating "a group hug." Such efforts need to create multiple pathways to provide parents with timely and tangible support.

Another caution is that the public health model of reducing adverse outcomes through normative change may not be directly applicable to the problem of child maltreatment. In contrast to "stop smoking," "don't drink and drive," and "use seat belts" campaigns, child abuse prevention lacks specific behavioral directions that the general public can embrace and feel empowered to impose on others in their community. Exceptions may exist for specific forms of maltreatment, such as Shaken Baby Syndrome, but most maltreatment is neglect that takes diverse forms.[50]

In the end, community effects explain only a small proportion of the variance in child maltreatment rates, raising the question about the value of investing in changing community context over offering direct assistance to parents. Designing and implementing a high-quality, multifaceted community prevention initiative is not inexpensive. As costs increase, policy makers need to consider the trade-offs in investing in diffuse strategies to alter community context versus expanding the availability of services for known high-risk individuals.

What Will It Take to Advance the Concept of Community Prevention?

Protecting children from abuse and neglect is a complex task and one that most certainly involves changing parental behaviors, creating safer and more supportive communities, and improving the quality and reliability of public institutions. Although several prevention programs targeted toward individual families have had positive effects on the families they serve, these effects often fade over time in part because local communities and public institutions fail to reinforce the parenting practices and choices these programs promote. If the concept of community child abuse prevention is to move beyond the isolated examples that we have noted in this

article, additional conceptual and empirical work is needed for the idea to garner sufficient investments from public institutions, community-based stakeholders, and local residents.

Specifically, researchers and those engaged in community child abuse prevention efforts need to be more effective in how they describe their intent and how they measure both the scope of the problem and their ability to address it. Community prevention initiatives, as with any intervention, need to be guided by strong theoretical models that link program strategies to specific outcomes and to be subjected to evaluation methods appropriate for their complexity and reach. When initiatives are multifaceted, it may be important to introduce elements in a sequential manner, allowing one to assess the added value generated by successive iterations of the plan or by each additional element.

When interventions are targeting broad-scale community change, some type of population-based assessment of baseline values and parent-child interactions is essential. Such surveys allow for a careful monitoring of normative changes in behaviors toward children and attitudes toward local service systems and community resources. In addition, they can contribute to a basic understanding of how community values and normative standards shape parental choices and the willingness on the part of residents to engage in acts of mutual reciprocity regarding child rearing responsibilities. Such methods provide a much-needed alternative to the use of child abuse reporting data as the sole method for determining change in a community's risk for maltreatment.

Finally, achieving appropriate investments in community child abuse prevention programs will require a research and policy agenda that recognizes the importance of linking learning and practice. It is not enough for scholars and program evaluators, on the one hand, to learn how maltreatment develops and what interventions are effective and for practitioners, on the other, to implement innovative interventions in their work with families. Instead, initiatives must be implemented and assessed in such a way as to maximize both the ability of researchers to determine the effort's efficacy and the ability of program managers and policy makers to draw on these data to shape their practice and policy decisions.

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Preventing Child Abuse and Neglect with Parent Training: Evidence and Opportunities

Richard P. Barth

Summary

Researchers have identified four common co-occurring parental risk factors—substance abuse, mental illness, domestic violence, and child conduct problems—that lead to child maltreatment. The extent to which maltreatment prevention programs must directly address these risk factors to improve responsiveness to parenting programs or can directly focus on improving parenting skills, says Richard Barth, remains uncertain.

Barth begins by describing how each of the four parental issues is related to child maltreatment. He then examines a variety of parent education interventions aimed at preventing child abuse. He cautions that many of the interventions have not been carefully evaluated and those that have been have shown little effect on child maltreatment or its risk factors.

Although some argue that parent education cannot succeed unless family problems are also addressed, much evidence suggests that first helping parents to be more effective with their children can address mental health needs and improve the chances of substance abuse recovery. Barth recommends increased public support for research trials to compare the effectiveness of programs focused on parenting education and those aiming to reduce related risk factors.

Child welfare services and evidence-based parent training, says Barth, are in a period of transformation. Evidence-based methods are rapidly emerging from a development phase that has primarily involved local and highly controlled studies into more national implementation and greater engagement with the child welfare system. The next step is effectiveness trials.

Citing the importance and success of multifaceted campaigns in public health policy, Barth discusses a multifaceted parenting campaign that has demonstrated substantial promise in several large trials. The goal of the Triple P-Positive Parenting Program is to help parents deal with the full gamut of children's health and behavioral issues. The campaign includes five levels of intervention, each featuring a different means of delivery and intensity of service. More broadly, Barth suggests that the evidence-based Triple P approach offers a general framework that could be used to guide the future evolution of parenting programs.

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Improved parenting is the most important goal of child abuse prevention. Parents maltreat their children for many reasons and combinations of reasons. In the past three decades, researchers have identified four common co-occurring issues—parental substance abuse, parental mental illness, domestic violence, and child conduct problems—that are related to parenting and that lead to child maltreatment. Understanding and responding to these issues is fundamental to designing effective parenting education programs that can help prevent abuse and neglect. One key decision facing those who design such programs is whether (and the extent to which) a parenting program should directly address these related problems or whether efforts to improve parenting should focus primarily or solely on improving parenting skills, with the expectation that the negative effects of these other problems on parenting may recede if parenting programs are effective.

A fifth risk factor for child abuse is family poverty. Every national incidence study of child abuse and neglect has shown that poor families are disproportionately involved with child welfare services. Parenting education, however, is not designed to reduce poverty, and that risk factor will not be further discussed below. See the article in this volume by Fred Wulczyn for a discussion of family poverty and child maltreatment.

What Parental Behaviors May Lead to Child Abuse and Neglect?

A description of the prevalence of the co-occurring risk factors among parents who abuse and neglect their children sets the stage for a discussion of parenting education elements that may mitigate the untoward effects of these co-occurring problems.

Substance Abuse

Substance abuse by a child's parent or guardian is commonly considered to be responsible for a substantial proportion of child maltreatment reported to the child welfare services.[1] Studies examining the prevalence of substance abuse among caregivers who have maltreated their children have found rates ranging from 19 percent[2] to 79 percent or higher.[3] One widely quoted estimate of the prevalence of substance abuse among caregivers involved in child welfare is 40 to 80 percent.[4] An epidemiological study published in the *American Journal of Public Health* in 1994 found 40 percent of parents who had physically abused their child and 56 percent who had neglected their child met lifetime criteria for an alcohol or drug disorder.[5]

Substance abuse has its greatest impact on neglect. In the 1994 study noted above, respondents with a drug or alcohol problem were 4.2 times as likely as those without such a problem to have neglected their children. In another study conducted during the 1990s, child welfare workers were asked to identify adults in their caseloads with either suspected or known alcohol or illicit drug abuse problems.[6] In 29 percent of the cases, a family member abused alcohol; in 18 percent, at least one adult abused illicit drugs. These findings approximate those of the more recent National Survey of Child and Adolescent Well-Being (NSCAW) that 20 percent of children in an investigation for abuse and neglect had a mother who, by either the child welfare worker's or mother's account, was involved with drugs or alcohol; that figure rises to 42 percent for children who are placed into foster care.[7] These studies have clearly established a positive relationship between a caregiver's substance abuse and child maltreatment among children in out-of-home care and among children in the

general population. Among children whose abuse was so serious that they entered foster care, the rate of substance abuse was about three times higher.[8] Thus, substance abuse by parents of victims of child abuse may not be as common in the general child welfare services-involved population as often believed, but substance abuse appears to be a significant contributor to maltreatment.

The mechanism by which substance abuse is responsible for child maltreatment is not as evident (outside of the direct relationship created by the mandated reporting of children who have been tested to have been born drug-exposed). Stephen Magura and Alexandre Laudet argue that in-utero exposure to cocaine and other drugs can lead to congenital deficits that may make a child more difficult to care for and, therefore, more prone to being maltreated.[9] Parenting skills can also suffer among substance-abusing parents, who may be insufficiently responsive to their infants.[10] Caregivers who abuse substances also may place a higher priority on their drug use than on caring for their children, which can lead them to neglect their children's needs for such things as food, clothing, hygiene, and medical care. Findings from the NSCAW indicate that substance abuse was much more highly associated with "neglect, failure to provide basic necessities" than with "neglect, failure to supervise" or any type of abuse.[11] Finally, violence may be more likely to erupt in homes where stimulant drugs and alcohol are used.[12] The interplay between substance abuse and child maltreatment within family dynamics and across children's developmental periods is gradually becoming clearer. Dana Smith and several colleagues showed that prenatal maternal alcohol and substance abuse and postnatal paternal alcohol and substance abuse are most highly associated with child maltreatment.[13] Mothers most often maltreat infants or very young children; fathers involved with alcohol and other substances are more likely to maltreat non-infants. These findings can help in developing parent education programs aimed at preventing child abuse.

Parental Mental Illness

Relatively little has been written about the effect of serious and persistent parental mental illness on child abuse, although many studies show that substantial proportions of mentally ill mothers are living away from their children.[14] Much of the discussion about the effect of maternal mental illness on child abuse focuses on the poverty and homelessness of mothers who are mentally ill, as well as on the behavior problems of their children—all issues that are correlated with involvement with child welfare services.[15] Jennifer Culhane and her colleagues followed a five-year birth cohort among women who had ever been homeless and found an elevated rate of involvement with child welfare services and a nearly seven-times-higher rate of having children placed into foster care.[16] More direct evidence on the relationship between maternal mental illness and child abuse in the general population, however, is strikingly scarce, especially given the 23 percent rate of self-reported major depression in the previous twelve months among mothers involved with child welfare services, as shown in NSCAW.[17]

The relationship between maternal depression and parenting has been better explored and offers guidance regarding the design of parent education programs to prevent child abuse and neglect. Penny Jameson and several colleagues show that depressed mothers have difficulty maintaining interactions with their children and that toddlers tend to match the negative behavior rates of

their depressed mothers (but not of their non-depressed mothers).[18] Along similar lines, Casey Hoffman, Keith Crnic, and Jason Baker have shown that maternal depression interferes with parenting and is linked with the development of emotional regulation and behavior problems in children—thus making subsequent parenting even more difficult.[19] Sang Kahng and several colleagues tested the relationship between changes in psychiatric symptoms and changes in parenting and concluded that as symptoms of mental illness lessened, a mother's parental stress decreased and her nurturance increased. Contextual factors—on the positive side, more education and social support; on the negative side, a history of substance abuse and increased daily stress—predict both symptoms and parenting.[20] Taking these contextual factors into account helps to weaken the relationship between psychiatric symptoms and poor parenting. Nicole Shay and John Knutson concur that maternal depression is a risk factor for child abuse and neglect, though they find that it is not so much depression as the irritability that accompanies depression that causes mothers to be physically abusive.[21]

Considerable evidence has also accumulated over many years that as parenting improves, symptoms of maternal depression may lift.[22] Long-term analyses of maternal depression and child problem behavior show that completing parent management training is effective, overall, in improving parenting and reducing conduct problems. Significantly, mothers who improve their parenting skills over a period of a year also show significant reductions in depression during that same interval. And the lifting of depression contributes significantly to improved parenting and child conduct over the next eighteen months.

Physically abusive parents rate the "externalizing" misbehavior (that is, delinquent or aggressive behavior) of their children far more negatively than do independent raters.

Domestic Violence

Many families involved with child welfare services must also cope with domestic violence. According to the NSCAW, the lifetime and past-year self-reported rates of intimate partner violence against mothers were 44.8 percent and 29.0 percent, respectively.[23] Caregiver major depression was also strongly associated with violence against women. In a pair of analyses based on NSCAW, Cecilia Casaneueva and colleagues showed that about one-third of parents with low parenting skills had experienced domestic violence.[24] Such violence was also associated with harsher parenting: children over the age of eighteen months were more likely to be spanked if their parents were facing domestic violence.[25] But parents who had once experienced domestic violence, but had been able to put it behind them, did not show elevated rates of impaired or violent parenting.[26] The parenting of women currently suffering interpersonal partner violence is significantly worse than that of women who have faced it in the past, suggesting that the context of the violence is creating the problems in parenting and child conduct problems and that its cessation may be a more important contributor to child outcomes than parent instruction.

Child Behavior Problems

Many studies have shown that children who are involved with child welfare services have high rates of behavioral problems. Indeed, during the 1970s, child welfare services were specifically targeted at two types of children—those without extraordinary behavior problems who needed protection from parental abuse and those with extraordinary behavior problems whose parents often needed the assistance of treatment or placement services.[27] Although the Adoption Assistance and Child Welfare Act of 1980 and subsequent child welfare legislation made federal funding for child welfare services contingent on parental incapacity or abuse, many children continue to enter care because of behavior problems. (They are often reclassified as abused or neglected or abandoned to meet the requirements of funding).[28] Whatever the reason for their involvement with child welfare services —whether difficult child behavior or some measure of parental incapacity—the share of children involved with these services who have behavior problems is substantial. NSCAW indicates that, at least according to parental reports using the Child Behavior Checklist, 42 percent of children between the ages of three and fourteen score high enough to warrant clinical treatment for their problem behaviors.[29] The high rates of behavior problems reported by parents of these children may, however, exaggerate the actual rates. Anna Lau and several colleagues show that physically abusive parents rate the "externalizing" misbehavior (that is, delinquent or aggressive behavior) of their children far more negatively than do independent raters—a difference that does not exist for non-abusive parents.[30] This pattern is consistent with a commonly noted sign of physical abuse—the description by the parent of the child as "bad." Indeed, according to a study by Michael Hurlburt and several colleagues, "The tendency to overreact to child misbehavior, and to overstate behavior problems, may represent a key dispositional risk factor that predicts child physical abuse."[31]

Barbara Burns and several colleagues found that only a small proportion of children with behavior problems receives treatment and, in all likelihood, a still smaller proportion receives evidence-based services.[32] Therefore, because parents believe that their children's behavior is poor and few practitioners are providing evidence-based methods to help them, the risk of abuse is elevated.

Have Parenting Programs to Prevent Child Abuse Addressed the Major Parental Risk Factors?

Many interventions target parents who have been found to be abusive. Fewer explicitly aim at preventing child maltreatment, although prevention is certainly a secondary objective of many early intervention efforts such as the Nurse-Family Partnership. Almost all parent education programs are directed at helping parents to develop more appropriate expectations of their children, to learn how to treat them with empathy and nurturance, and to use positive discipline instead of corporal punishment. Some more comprehensive efforts also address the risks posed by parental social and behavioral problems discussed above. The programs suggested, below, are offered because they tender innovative approaches. It should be noted, however, that Joanne Klevens and Daniel Whittaker conclude that many child abuse prevention programs that address a broad range of risk factors have not been carefully evaluated and that those that have been evaluated have generally been found to have little effect on child maltreatment or its risk factors.[33]

Substance Abuse

Substance abuse services for adults rarely include parenting skills. A few initiatives have been developed to help parents in out-patient methadone programs. A more common, and costly, strategy, used both in the United States and abroad, is to treat both women and their dependent children in residential treatment centers. I discuss below some substance abuse programs that show promise in teaching women how to be better mothers. Few, however, have had rigorous evaluations.

The Focus on Families (FOF) field experiment emphasized relapse prevention for mothers in methadone treatment. FOF included thirty-three sessions of parenting skills education, as well as home-based case management services lasting about nine months.[34] Compared with mothers in the control group, mothers receiving the program, especially those motivated enough to initiate and follow through with at least sixteen sessions, were able to learn effective parenting skills. The experiment included no explicit evaluation of child abuse prevention.

Because children who test positive for prenatal drug exposure must, by federal law, be referred to child welfare services, they are a group of special interest to those examining child abuse prevention. The Arkansas Center for Addictions Research, Education, and Services (CARES) provides comprehensive residential substance abuse prevention and treatment services to low-income pregnant women, mothers, and their children. The center provides various services for the mother and her dependent children, but the main service is parenting classes. Within these classes the mothers discuss child development, appropriate parental roles, and role reversal (which occurs because parents do not play their proper role during their addiction). They also learn what behaviors are appropriate to expect of their children and how to practice positive discipline.[35] Nicola Conners and her colleagues found that women who participated in CARES not only made gains in employment and mental health but also decreased risky behaviors and substance abuse.[36] The longer the women stayed in the program, the more they improved. Although parents came to have more realistic expectations of their child and to understand role reversal, however, they continued to see corporal punishment as a necessary parental tool. Analysts did not evaluate the effect of the program on subsequent child maltreatment.

Mothers who improve their parenting skills also show significant reductions in depression. And the lifting of depression contributes significantly to improved parenting and child conduct.

The Coalition on Addiction, Pregnancy, and Parenting (CAPP) provides services to substance-abusing women and their children in the Boston area. During the women's stay at the residential treatment center, they are required to participate in a parenting skills group, a child development group, and a mothers' support group. The parenting skills group, based on Stephan Bavolek's Nurturing Program for Parents of Children: Birth to Five Years Old, addresses inappropriate expectations of children, lack of empathy, corporal punishment, and role reversal, all

considered correlates of abuse and neglect. When participants rated their progress, almost all reported improved parenting skills but, again, the program included no formative evaluation of effects on child abuse.

Parental Mental Illness

The lack of data on the link between parental mental illness and child abuse is matched by the paucity of research on interventions that simultaneously address mental health problems and parenting concerns. Aside from work by David DeGarmo and his colleagues showing that parent education can reduce depression, I was able to find no recently published peer-review work on interventions that address parental mental illness with the aim of preventing child abuse.[37]

The Thresholds Mothers' Project (TMP), developed in 1976, was the nation's first program for mothers with psychiatric illnesses that also offered services to children, who could live with their mothers in supportive housing or independent apartments.[38] The program builds on a classic psychosocial rehabilitation base, which is a best practice for mentally ill adults according to the Substance Abuse and Mental Health Services Administration. Care managers help mothers meet their basic needs, stabilize living arrangements, and address psychiatric symptoms. They also help mothers enroll children in appropriate educational programs, including a therapeutic nursery and after-school care. A 2005 report by Patricia Hanrahan and several colleagues found that at intake, forty-three children were living with their mothers; after one year, 77 percent of children whose mothers remained in the program were still living with their mothers. All the children had been enrolled in school and had their well-child visits. The study lacked a comparison group to provide evidence of the program's effect on child abuse prevention during that year or thereafter.

Mental health problems often co-occur with substance abuse and exposure to traumatic events like domestic violence. Nancy VanDeMark and several colleagues report on the Children's Subset Study of the Women, Co-Occurring Disorders, and Violence Study, an intervention that addresses the needs of mothers with co-occurring problems of domestic violence, substance abuse, and mental illness.[39] The report was based on a quasi-experimental evaluation—one that compared the outcomes of participants who did and did not receive treatment, though participants were not assigned randomly to the treatment and no-treatment groups. The study found that mothers reported that their children, aged five to ten, showed considerable improvement in emotional and behavioral functioning. Given the influence that a mother's perception of her child's behavior may have on child maltreatment, the finding is significant and promising for preventing child abuse, although the evaluation made no direct test of a preventive effect.

Domestic Violence

Child-parent psychotherapy, which focuses on relationship enhancement, appears effective in reducing the behavioral problems and traumatic symptoms of children living with domestic violence. Such psychotherapy has also been shown to reduce the mother's post-traumatic stress disorder (PTSD) avoidance symptoms and to allow the mother to discuss with her child the violence that occurred.[40] The effect on future child abuse and neglect remains unexamined.

Child Conduct Problems

A growing number of evidence-based parent training programs help parents of children at

risk of behavior problems, with emerging behavior problems, or with significant conduct problems. These programs are not designed specifically for parents who have abused their children but rather to help parents deal with their children's problem behavior. Several have included families involved with child maltreatment or at high risk of maltreatment, but hardly any have included families who were the subject of child abuse and neglect reports.[41] The Incredible Years (IY) is considered to be one of the most effective interventions for reducing child conduct problems.[42] Jamila Reid, Carolyn Webster-Stratton, and Nazli Baydar examined IY, randomly assigning children to the IY program or to a control group that received usual Head Start services.[43] Children with significant conduct problems and children of mothers whose parenting was highly critical—arguably those dyads most at risk for child maltreatment—benefited most from IY.

Although on-the-point research is lacking about the child maltreatment risk for parents of children with aggressive behavior who themselves come from families with delinquent behavior, a strong association seems plausible. Laurie Brotman and her colleagues examined IY's effects on families with preschoolers predisposed to antisocial behaviors, as indicated by having a relative with a delinquent history, to determine whether the intervention helped reduce the child's aggression and helped teach the parents effective parenting.[44] IY reduced children's physical aggression and parents' harsh parenting and increased parents' responsive parenting and their stimulation of their child's learning. Parent ratings of child aggression were unchanged, however—a concern regarding its efficacy in preventing child abuse among this very high-risk group.

Parent-Child Interaction Therapy (PCIT) uses observation and direct audio feedback to the parent via headset to build parental competence in interacting with children whose behaviors are difficult and disruptive. It teaches parents to give their children positive attention and how to manage their problem behavior. Throughout the intervention the therapist instructs the parents and helps them to use new skills effectively in the clinic so they can transfer them to the home.[45] In the most compelling study of the effectiveness of PCIT in preventing physical abuse, Mark Chaffin and his colleagues showed that they could significantly improve parenting competence and lower the rates of repeated reports and re-investigations for child abuse and neglect in Oklahoma.[46] Success was greatest when therapists had strong ongoing coaching and supervision and when parents were not exposed to multiple interventions and were allowed, instead, to focus on learning how to use positive parenting and discipline methods.

Other Parenting Programs Aimed at Preventing Abuse and Neglect

Other parenting programs that are effective in reducing child abuse are cognitive behavioral therapy, parent-child interaction therapy, and child behavioral management programs.[47] Some, but not all, home visitation programs, which have historically been used to help disadvantaged mothers, show evidence of success in preventing child abuse. Because these programs require reporters to visit the home, however, child abuse is reported more often in home visitation programs than in control groups that do not receive in-home services.[48] Finally, multifaceted interventions that incorporate specific safety training (for example, related to sleep safety practices) and general parent training appear to be effective in reducing unintentional child

injury.[49] Although unintentional injury is not the same as child maltreatment, procedures that increase child safety are also likely to decrease neglect charges that stem from failure to supervise. Another approach that shows promise in both three- and nine-month versions is Family Connections, which works with families who have been referred to child welfare services but have not yet progressed into the formal system. It addresses caregiver issues (parents and custodial grandparents) and incorporates in-home parent training as well as coordinating care with other service providers.[50]

Are Multifaceted Campaigns That Include Parent Training Programs Effective?

For more than thirty years, public health policy has emphasized the importance of multifaceted campaigns using approaches that range from media efforts to group work to individual counseling to address complex health behavioral problems.[51] Beti Thompson and her colleagues conclude, in their wide-ranging review of community interventions, that these campaigns continue to be a compelling approach to changing health behaviors and that the modest but important effects they show at the population level can have large effects on disease.[52] Some interventions in the field of parent training—such as Family Connections and others described above—address co-occurring problems, and some new approaches also include multifaceted campaigns.

The most widely disseminated and tested of these campaigns is the Triple P-Positive Parenting Program, a multi-level evidence-based intervention designed to strengthen parenting. Designed in Australia by Matthew Sanders and several colleagues, it has since been used in many countries including the United States.[53] Triple P includes five levels of intervention, each building on the same language and concepts but featuring a different means of delivery and intensity of service. Universal Triple P, level 1, is an overall media campaign that informs parents about parenting issues and gets them involved in parenting programs like Triple P. Selected Triple P, level 2, targets one topic, such as toilet training or bedtime, about which parents may either receive direct or phone contact with a trainer or therapist or attend a seminar. Primary Care Triple P, level 3, is directed toward parents who are concerned about their children's development or behavior. Parents attend four brief programs, each about eighty minutes in length, to learn how to manage their children's behaviors. Some parents may have either phone or direct contact with a primary care practitioner if needed. Standard Triple P, level 4, is for parents of children with more severe behavioral problems, like conduct disorder or aggression, who want to learn effective parenting skills. These parents attend twelve sessions of about an hour each, with a choice of group or individual sessions. Parents also may have phone contact with a primary care practitioner. Finally Enhanced Triple P, level 5, is for parents who have children with behavioral problems and who have dysfunction within their family. These parents attend about eleven one-hour individual sessions that are specific to their needs. Practitioners may also conduct home visits to ensure that parents are using the skills they are being taught.[54]

The framework for Triple P, very much like that of other leading American parent training programs, is squarely based on social learning theory. Triple P is based on five principles that are imperative in teaching positive parenting: ensuring a safe and engaging environment, creating a positive

learning environment, using assertive discipline, having realistic expectations, and taking care of oneself as a parent.[55] The conceptual underpinning of Triple P is that the parent must be "self-regulatory," meaning that she believes that she can improve the behavior of her child through her own actions and is confident in making decisions and problem solving to do so.[56]

Triple P is now undergoing a major trial in South Carolina with a slightly different configuration. Though the principles are the same, some of the levels differ slightly. Selected Triple P, for example, is delivered as a "one-time seminar" to a group. All levels include a specific session for teen children. Group Triple P is similar to level 2 but it targets more specific behavioral and emotional problems and is given to a smaller group. Level 4, Standard Triple P, also includes Group Triple P, a Group Teen Triple P, and Standard Stepping-Stones Triple P. The latter level is for parents who have a developmentally disabled child. Both Group Triple P and Group Teen Triple P are administered to groups of parents. Standard Triple P and Standard Stepping-Stones Triple P are administered individually to parents in a home or clinic setting. Finally, level 5 includes Enhanced Triple P, which is directed to families with several problems, and Pathways Triple P, which is for parents who are at risk for child abuse. Both level 5 programs are administered individually, at home or in a clinic.[57]

The results of this first major U.S. Triple P trial are quite promising. After training more than 600 primary care practitioners in Triple P, and implementing the universal media strategies in half of eighteen counties randomly assigned to Triple P in South Carolina, Ronald Prinz found that administering Triple P to families in a population of 100,000 children under the age of eight resulted in 340 fewer cases of maltreatment, 240 fewer children being removed from their homes, and 60 fewer injuries from maltreatment requiring medical attention.[58] To estimate the potential for more widespread use of the Triple P System of Interventions, the U.S. trial queried 448 service providers who were trained for more than two and a half years in their use of Triple P methods.[59] As a group, the service providers reported becoming more effective in delivering parenting consultation based on the Triple P approach. Months of setup work by Triple P staff were typically required to gain access to the service providers and to determine the most appropriate level of training for the providers. As a result of the training process, service providers in the U.S. Triple P trial demonstrated significant improvement in confidence and competence in delivering this evidence-based parenting awareness and training program. After completing training, most service providers reported a high degree of confidence and skill in delivering parent consultations.[60]

What Makes High-Risk Families Stay Involved in Parent Training Programs?

Although many programs aim to help parents avoid maltreating their children, hardly any are mandatory. For these programs to be effective, parents must be actively involved and want to change. Many studies have tried to find ways to help parents be more motivated to change.

Engagement

Matthew Nock and Alan Kazdin administered a Participant Enhancement Intervention (PEI) to parents of oppositional, aggressive, antisocial children, giving each parent eight

sessions with a therapist employing PEI, which is designed to "increase parents' motivation to participate in treatment and to increase attendance and adherence to treatment."[61] On the first, fifth, and seventh sessions the parents devoted about fifteen minutes to discussing their motivation to change and any barriers that were present. The therapist and the parent then worked together to develop a plan that would allow the parent to overcome the barriers and make a positive change. In a randomized control trial, parents who received PEI had greater treatment motivation, attended significantly more treatment sessions, and adhered more closely to treatment, according to both parent and clinician report. Because parents attended most of their sessions, it can be stated that PEI was effective in increasing their motivation.

Triple P includes five levels of intervention, each building on the same language and concepts but featuring a different means of delivery and intensity of service.

Guided Self-Help and Parent Aide Models

Minnesota's Early Childhood Family Education program has provided Minnesotans with support for the transition to parenthood for a third of a century. Its core program element is discussions in local community centers or elementary schools, though written materials are also available. The parent education discussions, available in almost every school district in Minnesota, are attended by about 300,000 parents of children from birth to age four each year. If families are isolated, parent educators bring the program to them. Parents, who meet with each other and with the educators, often indicate that although they enter the program for their children, they stay in it for themselves.[62] During each session parents and children have "parent-child time," structured activities overseen by the parent educator. Though it is the largest and oldest group support parenting program in the country, it has not been rigorously evaluated.

Peer support groups also help parents who are involved in child welfare services, but whose abuse cases have not necessarily been substantiated.[63] After parents complete court-ordered parenting classes and other assigned programs, they have the option to enroll in an empowerment group consisting of professionals and peers who are or have been involved with child welfare services. Anecdotal evidence indicates that parents in these groups experience positive changes on a range of dimensions. Evidence is also becoming available about Parents Anonymous,© which has recently undergone a long-term single-group evaluation indicating significant reductions in the risks associated with child maltreatment.[64] Circle of Parents,© another well-known support group intervention, is beginning to develop an evidentiary base (although the research conducted so far would not yet lift this program into the group generally known as "promising practices").[65]

More than 100 home visitation programs provide services to parents at risk for abuse and neglect in twenty-eight states.[66] Operated under the oversight of the National Exchange Club Foundation, each site offers a free home visitation program for parents involved with child welfare services; the goal is to reduce the cycle of abuse. Parents are

referred to the program by child welfare services. Those who choose to participate are linked with a case manager and often a volunteer parent aide who conducts home visits. The aim of both is to build a relationship and become a positive mentor in the parent's life. During weekly visits the aide targets individual areas of concern as well as parenting skills and also shares information about how to get services, such as housing, health care, and social services, that the parent requires. The program has been shown to be effective in reducing the number of subsequent referrals to child welfare services.[67] Like most parent education programs aimed at preventing child abuse and neglect, it has not undergone rigorous evaluation.

The Design of Parent Training Programs

Each of the interventions discussed so far includes a manual that communicates how parent training should be delivered. As such, these interventions are certainly likely to be an advance over the existing ad hoc ways in which many child welfare agencies now develop parent training programs.

Common Elements of Effective Programs

John Piacentini observes that identifying and building on the effective common elements of parent training programs offers considerable advantages.[68] Among the common elements that he notes are potential use in multiple clinical and service applications, including the development of benchmarks for assessing quality of care; simplified therapy training efforts focused on key techniques as opposed to individual treatment manuals; and use in developing individualized modular or stepped-care interventions that fit the unique characteristics of the clients rather than the vision of the treatment designer.

A team of British researchers has recently completed a review of parenting education programs that isolates a number of effective components.[69] Early intervention, for example, results in better and more durable outcomes for children, though late intervention is better than none and may help parents deal with parenting under stress. Having a strong theory base and having a clearly articulated model of the predicted mechanism of change are also likely to make interventions effective, as is targeting: aiming interventions at specific populations or individuals deemed to be at risk for parenting difficulties. Including explicit strategies to recruit, engage, and retain parents is also a core element of promising parenting programs. Interventions should also have multiple components, such as a variety of referral routes for families and more than one method of delivery. Group work, where the issues involved are suitable to be addressed in a "public" format and where parents can benefit from the social aspect of working in groups of peers, are preferable to individual work, unless the problems are severe or entrenched or parents are not ready or able to work in a group. Individual work should, typically, include an element of home visiting as part of a multi-component service, providing one-to-one, tailored support. Programs that carefully structure and control the services delivered to maintain program integrity appear to be successful, as are interventions delivered by appropriately trained and skilled staff, backed up by good management and support. Interventions of longer duration, with follow-up and booster sessions, are recommended for problems of greater severity or for higher-risk groups. Behavioral interventions that focus on specific parenting skills and practical "take-home tips" for changing more complex parenting behaviors and affecting child behaviors are also considered effective. Finally, interventions

that work in parallel (though not necessarily at the same time) with parents, families, and children are considered best practice.

In the United States, Ann Garland and several colleagues reviewed all the evidence-based treatment programs for disruptive child behavior and identified the common elements, which they confirmed with an expert panel.[70] Garland and her team were able to distinguish treatment elements directed to children and those directed to parents and to separate therapeutic content from therapist techniques. Perhaps most significant, they added practice elements such as frequency and intensity of treatment. The five fundamental working alliance and treatment parameters common to effective interventions were: consensually set goals, a minimum of twelve sessions, meeting at least once weekly, building rapport and an effective bond with the therapist, and active participation by the child and parent.

Michael Hurlburt and colleagues derived a list of eight key components of three leading parent education programs—the Incredible Years, Parent-Child Interaction Therapy, and Parent Management Training—with a history of some success with child maltreatment populations.[71] What the three programs had in common was that each strengthened positive aspects of parent-child interaction, decreased the use of parent directives and commands, used specific behavioral approaches, included detailed materials to support parent skill building, included homework, monitored changes in parenting practices, required role-playing, and lasted at least twenty-five hours.

Video Feedback to Parents

Other intervention elements that may be important to program design have not been fully evaluated. Researchers, for example, recently subjected parent education programs that use video playback of parent-child interactions to a meta-analysis.[72] They found that these programs have a sizable positive effect on parent behavior and a modest but significant effect on children's behavior—no less for children referred to clinics for conduct problems than for children referred from other sources.

Parents and Children Together

Returning to the effect of parenting practices on maladapted child behavior and the reciprocal influence of children's behavior on parenting practices, a promising avenue for future research would involve testing concurrent interventions for parents and for children. For example, it might be valuable to pair an evidence-based parent training group with a concurrent child group focused on social skills, social information processing, and interpersonal problem-solving skills. Such child-focused groups alone have been shown to influence significantly both parenting behavior and child behavior in school settings.[73] Pairing the child group with the parent group could test to see whether they act synergistically when run concurrently. Making good use of children's time may also act as yet another incentive for parents to attend and benefit from parent training groups.

Parent Education on Focused Issues

Parent education need not be comprehensive to be helpful in preventing child abuse. A focused program to reduce abusive head trauma, for example, has shown that providing vivid information and requesting a commitment from parents to refrain from shaking babies can substantially reduce child maltreatment—even when no other effort is made to address substance abuse, poverty, or the use of positive parenting principles.[74]

Adaptations for Racial, Ethnic, and Cultural Groups

For the most part these evidence-supported interventions seem robust across cultures although researchers have conducted few definitive evaluations. Three reviews, bridging somewhat different topics and using different methods for comparing the efficacy across groups, have all concluded that minority children and families appear to benefit as much as or more than other groups from evidence-based interventions like those proposed here.[75] At the same time, because the success of a program depends importantly on participants' remaining engaged until they complete the program, as well as the fidelity with which the program is delivered, cultural adaptations that increase the likelihood of optimal delivery and receipt of these programs to practitioners, parents, and children would seem well warranted.[76]

New Directions for Parent Training and Child Welfare Services

Overall, child welfare services and evidence-based parent training are in a period of transformation. Evidence-based methods are rapidly emerging from a development phase that has primarily involved local and highly controlled studies, into more national implementation and greater engagement with child welfare services. At the same time, the field of child welfare services is showing new awareness of the importance of evidence-based methods. Journals are publishing special issues on the topic, the Administration for Children and Families (ACF) launched a major round of funding in 2004 to promote testing of evidence-based methods, several states (for example, Maryland, Washington, and California) are developing statewide initiatives, and this past year ACF created five regional resource centers on implementation to expedite the dissemination of best practices. Although these efforts are not focused on child abuse prevention per se, the infrastructure to create prevention programs, based on the campaign model, is emerging.

Providing effective and evidence-based parent services is the fulcrum of fairness in the American approach to child welfare services delivery.

The next major step is to implement effectiveness trials. The programs are mature enough and have enough experience with similar populations of high-risk families caring for children at home,[77] as well as foster families,[78] to justify immediate testing. Child welfare agencies have demonstrated that they can be the setting for randomized clinical trials. They can build on experience with the Social Security Act Title IV-E waivers, which allow dollars that ordinarily go to out-of-home care to go instead for cost-effective in-home services, and on experience with recent trials funded by ACF, the Centers for Disease Control and Prevention (CDC), and the National Institute of Mental Health. Such trials will help researchers better understand implementation constraints and will clarify which families are most likely to benefit from parent training programs.

Providing effective and evidence-based parent services is the fulcrum of fairness in the American approach to child welfare services delivery. Investing federal and state funds in trials to test interventions for

improving parent training and providing the necessary support to deliver those that succeed offers the opportunity for uncomplicated policymaking.

Should Parenting Programs Have a Multi-Problem Focus or a Parenting-Only Focus?

The evidence that parent education cannot succeed unless other family problems are also addressed is anecdotal and weak—at least as much evidence suggests that first helping parents to be more effective with their children can help address mental health needs and help improve the chances of substance abuse recovery. The work of David DeGarmo, Gerald Patterson, and Marion Forgatch shows convincingly that learning how to improve parenting reduces mental health problems.[79] Marjukka Pajulo and her colleagues have argued that strengthening mothers' positive connections to their children is likely to reduce their dependency on illicit substances as the rewards of successful parenting build neural pathways that compete with the desire for drugs.[80]

A CDC review of parent training programs found that parents who are given hands-on practice using new skills under the watchful eye of a professional acquire the skills more effectively. The review also found that teaching parents how to communicate their emotions effectively improves their parenting skills.[81] The CDC review also showed that having multiple components—for example, addressing parents' relationship with each other in the context of parent training—does not enhance a program's effectiveness but rather is likely to decrease it. This finding replicates Mark Chaffin's work with abusive parents in Oklahoma, which also found that addressing multiple problems at once was less effective than focusing solely on parenting.[82] Another study found that parent training in the form of Multi-Systemic Therapy (MST), which includes parent education plus work with significant community partners, was as effective as MST plus wrap-around services.[83] The study concluded that targeted, evidence-based treatment may be more effective than system-level intervention alone for improving clinical symptoms among youth with serious emotional disorders served in community-based settings. These findings show that such sources of family adversity as marital conflict and depression can be alleviated in two different ways: by directly treating partner social support and depression through direct interventions aimed at parenting problems and by improving parenting skills.

That insight suggests that rather than deciding who gets mental health interventions to reduce depression based on parents' entry characteristics, it may be more cost-effective to offer an initial standard parent training program. Practitioners can track how successfully parents progress through the program and continue to monitor other family risk variables, such as continuing marital conflict, depression, and stress, that may interfere with treatment success. Only when program managers see no improvement in child behavior or in measures of the parental or family distress that interferes with the parenting program should they add interventions targeting the specific risk factors of ongoing concern.

Toward a Framework for Delivery of Parent Training to Prevent Child Abuse

For some time, the idea of universal parent training programs to prevent abuse and neglect has generated interest but not much traction among social scientists. Perhaps the

direction was wrong and instead of conceptualizing the question as whether parent training should be universally delivered or even universally available, the proper question is whether there should be a universal approach to parent training. The promising Triple P work in South Carolina, based on decades of development, argues the need to strongly consider such a redirection of the limited parent training resources now available for preventing and responding to child behavior problems and child abuse. Today, access to high-quality parent training programs is limited, and few organizations have the capacity to develop such programs on their own.[84] The multi-level approach pioneered by Triple P offers the fundamental elements that are critical to implementing evidence-based materials with fidelity. The core program is carefully structured and controlled to maintain program integrity; it is staffed with sufficient trained personnel to provide supervision; it is equipped with media and marketing materials to spread the program; and it costs less than $50 per child (2008 dollars), making it reasonably affordable.[85] To be sure, the Triple P trial in South Carolina was not without problems. Certain providers or systems were unable to add effective parenting support to the menu of services they provided because of clashes with their own mission—sometimes, too, because of barriers to reimbursement for parenting services. Among providers interested in the training and able to deliver parenting support services, many had only limited time available for training because of other demands on agency personnel. Any significant progress in expanding parent training programs on the Triple P model will require a full policy, fiscal, and regulatory review to ensure feasibility.

A major Triple P trial among the families of children aged four to seven in Australia provides further evidence that it could have a broad impact on child abuse and neglect in the United States.[86] After phone data-collection interviews, Triple P (including seven levels, rather than the usual five, as needed by families) was administered to the entire population in various Australian communities. Analysis of the trial found that parents who had participated in Triple P (at any level) were more likely to use appropriate parenting methods than parents who received usual care. Triple P was also effective in reducing parental depression. Finally, using Triple P as a "population health intervention" resulted in significantly fewer children with behavioral and emotional problems and reduced parental stress associated with having school-age children.[87]

Could Triple P, or an American derivative, become the universal approach for all parents across the nation? No research has yet documented that, and good arguments can be made that parenting, and hence parent training, might vary by location and culture. Nonetheless, although it would be premature to endorse Triple P as the national choice, the general framework for Triple P should be used to guide the future evolution of parenting programs. The pyramid of programs would start at the base with an easy-to-access media program using basic concepts and specific vocabulary that describes parent-child interactions and parent interventions. The media program would be complemented by parent groups for families with low-intensity problems, moving to a parent consultation model, and then getting to specific in-home programs (tailored for the ages of the children) conducted in the homes.

Because child abuse prevention so often requires addressing the other family issues that influence parenting, the Triple P

approach would need to be complemented with work done in the homes of families, perhaps over a long period of time.[88] The in-home work may need variations that are adapted to address the common co-occurring family risk factors, although the evidence for this is not conclusive. Indeed, there is enough evidence that improved parenting may itself reduce some of the other strains and problems to warrant proceeding with broader testing of uniform parenting methods. Certainly, some children may also need clinical interventions to address the affective or cognitive disorders that keep them from responding to parents and the parent training interventions; the clinical interventions may be facilitated if they use language and concepts consistent with those used in the other levels of the parenting campaign.

Future Policy

Massive evidence now shows that child abuse is associated with higher rates of spending on health care.[89] The cost-effectiveness of investing in younger children is now broadly accepted.[90] The case for implementing parent training programs to help reduce the high social costs of child abuse and neglect is strong. One of the first policy changes needed is to increase support for research trials on parent training to pinpoint "what works." In addition to comparing the effectiveness of various parenting education programs, the research trials should contrast programs that focus on parenting education and those that aim to reduce related risk factors.

Child welfare services agencies should be allowed and encouraged, with incentives from all levels of government, to change their parent education practices as they modify their children's services policies. The domination of federal child welfare services funding by worker training, reimbursement of foster parents, case management for children in foster care, and adoption subsidies (all entitlements under Title IV-E of the Social Security Act) leaves few resources to develop or implement high-quality parent education. Discretionary funds allocated through the Child Abuse Prevention and Treatment Act and through Title IV-B of the Social Security Act should be more targeted on parenting education. Even without reconfiguring or increasing funding, accountability could be better focused on parent training. In its periodic reviews of state child welfare services programs, the U.S. Administration for Children and Families could explicitly address the quality of parent education. Child welfare services agencies could be required to provide data, during their federal reviews, about how many families enter parent training and how long they remain to help develop parent training that engages and educates parents in ways that they find helpful.[91]

Local agencies, in the meantime, will want to learn more about evidence-based parenting education programs and to develop ways to ensure fidelity in the delivery of such programs to their clients. At some point local child welfare services agencies must also make decisions about whether funds are best spent on higher-cost brand-name interventions like the Incredible Years and Parent-Child Interaction Therapy or on training in the common elements on which those programs are built.

Achieving further progress in parent education to prevent child abuse requires continuing efforts to develop effective interventions. The United Kingdom, for example, established a Parenting Fund that, now in its seventh year, has invested about $15 million in projects each year to develop, set up, and

deliver evidence-based interventions aimed at parent support and education in the voluntary and community sector. The efforts in the United Kingdom are part of a broader endeavor across developed nations, including the United States, to increase the evidence base and sharpen the focus of parenting programs and to develop specific public policies targeting improved parenting beyond the traditional mechanisms of child welfare services and income support programs.[92]

Without this kind of effort, there is little reason to hope for broad governmental support. Demonstration funding to disseminate promising practices is a precondition for developing these programs. Once successful programs are developed, federal support to expand parent training is more likely. Across the board, in order to better support parents, policy needs to embody an evidence-based model of parenting linked to good outcomes for children. Although parent education can help families suffering from various kinds of distress, a stressful family environment is clearly not the optimal one for learning. For many years, considerable evidence has shown that outside stressors hamper learning and implementing the lessons from parent training programs. Policies that reduce the everyday stresses in the lives of families will also be an important part of effective service delivery.

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The Role of Home-Visiting Programs in Preventing Child Abuse and Neglect

Kimberly S. Howard and Jeanne Brooks-Gunn

Summary

Kimberly Howard and Jeanne Brooks-Gunn examine home visiting, an increasingly popular method for delivering services for families, as a strategy for preventing child abuse and neglect. They focus on early interventions because infants are at greater risk for child abuse and neglect than are older children.

In their article, Howard and Brooks-Gunn take a close look at evaluations of nine home-visiting programs: the Nurse-Family Partnership, Hawaii Healthy Start, Healthy Families America, the Comprehensive Child Development Program, Early Head Start, the Infant Health and Development Program, the Early Start Program in New Zealand, a demonstration program in Queensland, Australia, and a program for depressed mothers of infants in the Netherlands. They examine outcomes related to parenting and child well-being, including abuse and neglect.

Howard and Brooks-Gunn conclude that, overall, researchers have found little evidence that home-visiting programs directly prevent child abuse and neglect. But home visits can impart positive benefits to families by way of influencing maternal parenting practices, the quality of the child's home environment, and children's development. And improved parenting skills, say the authors, would likely be associated with improved child well-being and corresponding decreases in maltreatment over time. Howard and Brooks-Gunn also report that the programs have their greatest benefits for low-income, first-time adolescent mothers.

Theorists and policy makers alike believe strongly that home visiting can be a beneficial and cost-effective strategy for providing services to families and children. If home-visiting programs are to have their maximum impact, service providers must follow carefully the guidelines mandated by the respective programs, use professional staff whose credentials are consistent with program goals, intervene prenatally with at-risk populations, and carry out the programs with fidelity to their theoretical models.

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Home visiting is an increasingly popular method for delivering services for families. Particularly for high-risk families with infants and young children, providing services within the context of the family's home appears to be a useful and effective strategy. In general, the goals are to provide parents with information, emotional support, access to other services, and direct instruction on parenting practices (although programs vary in how they achieve these goals and in the relative importance of the goals).[1] Many programs have been implemented, and quite a few have been evaluated rigorously, using random assignment to an intervention or a control group. Indeed, two earlier issues of *The Future of Children,* one in 1993 and the other in 1999, have focused on home-visiting programs for families with young children,[2] and several articles in other issues of the journal have also touched on the topic.[3] A number of good meta-analyses have been published in other journals as well, although some include only randomized experiments while others include both experimental and non-experimental evidence.[4]

The 1999 article in *The Future of Children* evaluated home visiting as a general intervention strategy, without specific regard to preventing child abuse and neglect. Of the six programs that were evaluated, four provided services to families with infants. The fifth program enrolled children beginning around age three, and the sixth enrolled children anytime from birth through age three and continued through age five.[5] In this article, we focus on early interventions because infants are at the greatest risk for child abuse and neglect.[6] In addition to the four programs examined in the 1999 issue—the Nurse-Family Partnership, Hawaii Healthy Start, Healthy Families America, and the Comprehensive Child Development Program —we also examine Early Head Start, the Infant Health and Development Program, the Early Start Program in New Zealand, a demonstration program in Queensland, Australia, and a program in the Netherlands for depressed mothers of infants. All have used randomized trials of home-visiting services aimed at improving parenting and preventing child abuse and neglect.[7]

What Is Home Visiting?

Home-visiting programs come in many shapes and sizes. Because home visiting is a method of service delivery and not necessarily a theoretical approach, individual programs can differ dramatically. They vary with respect to the age of the child, the risk status of the family, the range of services offered, the intensity of the home visits, and the content of the curriculum that is used in the program. Furthermore, programs vary in terms of who provides services (typically nurses vs. paraprofessionals), how effectively the program is implemented, and the range of outcomes observed. What all share is the belief that services delivered in the home will have some sort of positive impact on families and that altering parenting practices can have measurable and long-term benefits for children's development.

The results of several meta-analyses suggest that home-visiting programs do have positive effects for participants, though those effects are often modest. Some studies, such as those testing the efficacy of the Nurse-Family Partnership program across several sites, have shown positive outcomes in multiple domains for both mothers and children, with some of these effects continuing into the adolescent years. Other studies, however, such as the Hawaii Healthy Start Program and

similar Healthy Families America programs have had much more limited success. Still others, like Early Head Start, have shown modest effects at the end of the intervention, although follow-up data are not available. The wide variability in programs makes it difficult to draw solid conclusions about the conditions under which home visiting is most effective.

The specific roles that home visitors play also vary quite a bit—and often fall in several different domains. In some cases, the visitor is meant to be a source of social support; in other cases, home-visiting staff act as resource providers, linking families to social supports and providing them with referrals to other resources in the community, such as mental health or domestic violence services. Home visitors also often act as literacy teachers, parenting coaches, role models, and experts on topics related to parent and child health and well-being. Nurse home visitors, particularly, provide information to encourage healthy pregnancy, infant care, and family planning.

Given the different roles that home visitors play across programs and even within programs, analysts have examined many different types of possible program outcomes. Those outcomes fall broadly into two domains—one linked to parenting and one to child well-being. Within the parenting domain, outcomes include reported and substantiated child abuse and neglect; parenting behaviors such as harsh, unresponsive, and detached parenting; and parental mental health. The child well-being domain includes physical health and cognitive development. A few programs have also looked at emotional regulation and behavioral problems in childhood as well as delinquency and crime in adolescence and early adulthood.

The premise underlying most of these programs that purport to influence parenting is that altering parents' behavior will result in a change in children—specifically, that reducing negative aspects of parenting and increasing positive aspects will increase children's well-being. However, not all programs have examined outcomes in both domains, and even those that have generally lack analyses demonstrating that changes in child well-being were influenced by changes in parenting. Most studies linking parenting and child outcomes are not based on data from home-visiting experiments.[8]

Measuring Child Abuse and Neglect

Although home visiting is commonly thought of as a strategy to help prevent child abuse and neglect, few programs actually measure child maltreatment as an outcome and even fewer are able to document significant effects. This shortcoming is largely attributable to the difficulty of identifying substantiated cases of abuse and neglect as well as to questions about whether reported instances of abuse or neglect should be combined with substantiated cases. Furthermore, definitions of abuse and neglect vary by state, so that what is neglectful in one state may not be considered neglectful in another. The result is that national abuse and neglect data look dramatically different by state, further compounding the difficulty of accurately measuring a program's effectiveness in reducing child maltreatment.

Even if abuse and neglect definitions were uniform across the country, it is still likely that the true prevalence rate of abuse and neglect is much higher than what is reported or substantiated by child protective services (CPS) agencies.[9] In addition, researchers are still uncertain about the threshold at which

certain parenting behaviors begin to compromise a child's development. That is to say, behaviors that are not severe enough to be considered abusive or neglectful by legal definitions may nonetheless have detrimental effects on children's development.[10] In this way, improving parenting practices may be an important way to prevent child maltreatment.

Another complication in assessing rates of child maltreatment among families participating in clinical trials is that the frequent contact with home visitors makes it more likely that child abuse or neglect will be identified and reported among families in the intervention group, whereas it may go unnoticed among families in the control group. Indeed, the difference in surveillance between the treatment and control groups probably explains why so few home-visiting programs have measurable effects on rates of abuse and neglect. Because of these concerns, child abuse and neglect may not be the best outcome measure by which to assess the effectiveness of home visiting or similar types of programs. Instead, proxy measures such as child health and safety (for example, well-child and dental visits, number of injuries, and emergency room visits) may provide greater insight into the way that parenting practices directly bear on child well-being. In addition, programs that alter parenting behaviors such as responsivity, sensitivity, and harshness, as well as those that improve the quality of the home environment and maternal mental health, will likely also be associated with positive effects on children's well-being.

Furthermore, from a theoretical standpoint, there is reason to believe that parenting, maternal stress (including maternal depression and anxiety symptoms), poor social support, and family conflict may be linked to child abuse and neglect. Indeed, Jay Belsky incorporated all of these risk factors into his process model of parenting,[11] and data from multiple studies support links to child well-being.[12] In an experiment on the effectiveness of a program for low-birth-weight infants, Lawrence Berger and Jeanne Brooks-Gunn examined the relative effect of both socioeconomic status and parenting on child abuse and neglect (as measured by ratings of health providers who saw children in the treatment and control groups six times over the first three years of life, not by review of administrative data) and found that both factors contributed significantly and uniquely to the likelihood that a family was perceived to engage in some form of child maltreatment.[13] The link between parenting behaviors and child maltreatment suggests that interventions that promote positive parenting behaviors would also contribute to lower rates of child maltreatment among families served. That being the case, most intervention programs attempt to alter parenting, maternal stress, and maternal support. Some also try to reduce conflict in the home. The hypothesis is that so doing reduces child abuse and neglect, though difficulties in measuring the phenomenon preclude thorough testing.

We next review several major home-visiting programs, all of which have been evaluated using randomized controlled trials, and thus represent higher-quality evaluations than those using non-randomized trials. In addition, all programs recruited families either prenatally or around the time of the child's birth, which is important because risk for child abuse and neglect is greatest among infants.[14] We do not include programs beginning in preschool or later. Although our review is not meant to be exhaustive, it does represent the wide variation in types of home-visiting programs.

Review of Home-Visiting Programs

The best known home-visiting program is the Nurse-Family Partnership, developed by David Olds and colleagues in Elmira, New York.[15] Evaluations have been conducted in Elmira, Memphis, and Denver. Another popular home-visiting program is Hawaii Healthy Start,[16] on which other home-visiting programs have been modeled. Most notably, Healthy Families America was originally based on the Hawaii model and offers services to families in many states around the country. Results have been published based on the outcomes of Healthy Families evaluations conducted in San Diego,[17] Alaska,[18] and New York state.[19]

There is reason to believe that parenting, maternal stress (including maternal depression and anxiety symptoms), poor social support, and family conflict may be linked to child abuse and neglect.

We also review three programs in which home visiting is a key component, though not the only method of service delivery. Early Head Start[20] and the Infant Health and Development Program[21] had center-based components, and the Comprehensive Child Development Program included home visiting in addition to case management services.[22] Finally, we review three smaller-scale home-visiting programs from abroad that have used rigorous evaluation methods and provide important insights into home visiting. The three are Early Start in New Zealand,[23] a program for at-risk families in Queensland, Australia,[24] and one for depressed mothers in the Netherlands.[25] Table 1 shows the characteristics of the nine home-visiting programs included in this review.

Nurse-Family Partnership (NFP)

The NFP is the most well developed home-visiting program in the United States. Home visits are conducted by registered nurses who are specially trained to provide the visits to low-income, first-time mothers, beginning prenatally and continuing through the child's second birthday. The NFP curriculum focuses on encouraging healthful behaviors during pregnancy, teaching developmentally appropriate parenting skills, and improving the maternal life course by reducing subsequent births and increasing the interval between pregnancies. During the first month prenatal visits are weekly, then taper to biweekly until the child is born. After the birth, weekly visits resume for the first six weeks, and then biweekly visits continue until the child is approximately twenty months old. The final four visits leading up to the child's second birthday occur monthly.[26]

The program originally developed in Elmira served primarily white, rural adolescent mothers (400 mothers, divided into four different treatment groups) for whom data are available through the child's fifteenth birthday.[27] It was replicated in Memphis with an urban sample of 1,139 predominantly African American adolescent mothers and their children who have been followed through age nine[28] and in Denver with an ethnically diverse sample of 735 low-income mothers and their children who have been followed through age four.[29] Beginning in 1996, NFP programs began expanding to

Table 1. Selected Home-Visiting Programs and Their Characteristics

Program	*Goals*	*Frequency and duration of home visits*	*Population served*	*Background of home visitors*
Nurse-Family Partnership	Improved pregnancy outcomes Parenting skills Maternal life course	Prenatally through 24 months	Low-income, first-time mothers	Public health nurses
Hawaii Healthy Start	Early identification of risks Improved parenting skills Prevent child abuse and neglect	Birth to 3 to 5 years	Families identified as at-risk using a screening tool	Paraprofessionals
Healthy Families America	Early identification of risks Parenting skills Prevent child abuse and neglect	Prenatal or birth to 5 years (or enrollment in Pre-K)	Families identified as at-risk using a screening tool	Paraprofessionals
Comprehensive Child Development Program	Enhance children's development Support parents Assist families with economic self-sufficiency	Biweekly hour-long visits beginning in first year of life until school entry	Low-income families with children	Paraprofessionals
Infant Health and Development Program	Enhance the development of premature, low-birth-weight babies	Weekly until 12 months, then biweekly until 36 months	Low-birth-weight infants and their families	College graduates with home visiting experience; master's-level supervisor
Early Head Start	Enhance children's development Support/strengthen families	Prenatal or birth to 3 years	Low-income families with children	Trained paraprofessionals
Early Start	Improve child health Reduce child abuse Improve parenting skills Support parental health and well-being	Weekly for first month, then varied based on family risk; average duration: 24 months	Families identified as at-risk using a screening tool	"Family support workers" with nursing or social work degrees plus 5 additional weeks of training
Queensland Study	Reduce risk of child abuse/neglect	Monthly visits for first 18 months of child's life	At-risk mothers	Nurses
Netherlands Study	Improve maternal sensitivity	8 to 10 home visits over 3 to 4 months	Depressed mothers receiving outpatient therapy	Master's-level psychologists with graduate training in prevention or health education

other states using a mix of private, local, and federal funds. Today the Nurse-Family Partnership operates well over one hundred sites in twenty-six states across the country. Four states (Colorado, Louisiana, Oklahoma, and Pennsylvania) have statewide initiatives, with families being served in every county. As of 2006, it was estimated that the NFP serves more than 20,000 families each year. The NFP plans to scale up services around the country to reach as many as 100,000 families by 2017.[30]

Hawaii Healthy Start Program (HSP)

Around the same time that the NFP program was getting under way in Elmira, the Hawaii Healthy Start program began in 1975 in a single site on the island of Oahu with the goal of preventing child abuse through early identification of family risks and the provision of home-based supports by trained paraprofessionals. After gaining support from state funding organizations, it expanded to the other Hawaiian islands during the mid-1980s.[31] Since 2004, it has operated ten sites within Hawaii. Families of newborns are screened for their risk of child abuse and neglect and offered services if they meet eligibility criteria. The home-visiting program is long term and takes place over the first three to five years of the child's life. In-home parent training is provided by paraprofess-

ionals who have received at least five weeks of intensive training in topics such as parenting skills, child development, recognizing the signs of child abuse or neglect, problem solving, and domestic violence. In addition to teaching parents specific skills, home visitors also connect families with additional resources that are available in their communities.[32] Hawaii's Healthy Start Program continues to be a statewide program that provides early identification and home-visiting services to families.

The major evaluation of HSP took place on Oahu, the home of the majority of the state's residents as well as of six HSP sites. In addition to measuring baseline characteristics of families in the treatment and control groups and conducting follow-up assessments at one, two, and three years, evaluators collected data on the implementation of the program. In particular, evaluators assessed the process of home visiting by measuring the dose of service given to each family, such other elements of implementation as staff recruitment and training, and how well home visiting was integrated with other services in the community. In addition, home visitors' notes were evaluated to assess the degree to which they recognized and responded to the needs of individual families.[33]

Healthy Families America (HFA)

Based in large part on the model developed for the Hawaii Healthy Start project, Healthy Families America began as a similar program with similar goals in the continental United States in 1993. With support from Prevent Child Abuse America and the Ronald McDonald Foundation, HFA also provides home-based support for disadvantaged mothers beginning prenatally or just after the child's birth and continuing for three to five years. Healthy Families America uses trained paraprofessionals to provide in-home support for disadvantaged mothers to promote parenting skills, support optimal child development, and improve maternal self-sufficiency. Preventing child abuse and neglect is a specific goal of the program. HFA programs have been implemented in twenty-two states and the District of Columbia, and most have included some sort of evaluation component. Of these, only three have conducted rigorous randomized controlled trials: San Diego, Alaska, and New York.[34]

The Healthy Families San Diego (HFSD) evaluation was conducted from 1999 to 2000 and included 489 families who were randomly assigned either to receive home visiting from Healthy Families staff or to serve as controls. The evaluation consisted of a baseline assessment before enrollment in the program, as well as in-home interviews at twelve, twenty-four, and thirty-six months. Brief phone interviews every four months ensured more frequent contact with program families.[35] In Alaska, the evaluation of Healthy Families took place on a statewide basis from 2000 to 2003. The total sample consisted of 316 families who were eligible for enrollment in one of the state's six program sites. Families were assessed before randomization and again when the child was twenty-four months old. Every eight months, the research staff made contact with the families to maintain current records.[36]

Most recently, the state of New York has undertaken an evaluation of its Healthy Families program. The assessment took place in three of the most developed sites in the state representing diverse communities and included more than 1,000 participants. A unique feature of the HFNY program was its emphasis on recruiting mothers prenatally instead of after the birth of the child.

Prenatal recruitment among first-time mothers ensures that the program offers primary prevention. That is, the program is able to prevent child abuse before it ever happens. Recruiting mothers who have already given birth or those with other children may mean that some families have already engaged in child maltreatment; for these families, the program provides what is called *secondary prevention*.[37]

Comprehensive Child Development Program (CCDP)

During the early 1990s the CCDP was the most prominent early intervention in the country. As a federally funded program aimed to enhance the development of children in low-income families while providing support to parents, it provided services to 4,410 families and children in twenty-two states across the country. Although home visiting was the primary method of service delivery, the CCDP was not conceptualized as a home-visiting program because it provided comprehensive case management services to families while linking them to community resources in addition to delivering home-based parenting skills training. Families received hour-long home visits at least twice a month beginning in the child's first year of life and continuing until school entry. The evaluation of CCDP consisted of annual assessments on the child's second through fifth birthdays and smaller assessments at eighteen and thirty months.[38]

Infant Health and Development Program (IHDP)

The Infant Health and Development Program began in 1985 as a follow-up to the Abecedarian Project that was specifically geared to premature infants with low or very low birth weight. The program recruited 985 families in hospitals and assigned them randomly to the intervention group or controls. In both groups babies received developmental checkups from a physician, but the intervention group received additional services for the first three years of the child's life. Home visits took place weekly during the first year and then biweekly during the second and third years. In the second and third years, children in the treatment group also received high-quality full-day child care, and parents were invited to participate in bimonthly parent group meetings. Although most outcomes were reviewed at program completion to observe the effects of a high-intensity comprehensive treatment program for low-birth-weight infants,[39] certain outcomes were examined after the first year and provide a test of the home-visiting component on its own.[40]

Early Head Start (EHS)

Early Head Start, a federally funded two-generation program that includes parent education and quality early care and education for children, began in 1995 as a precursor to today's national Head Start program for families with children from birth to age three. The national evaluation of EHS was planned from its inception and included randomized controlled trials of different aspects of the program. Although home visiting was a major component of the service delivery model, EHS also used center-based child care or a mix of home- and center-based services (seven of the seventeen sites provided home visiting only).[41] Because EHS sites used either home visits, center-based child care, or a combination of both, an empirical test of the effectiveness of home visiting was built into the evaluation. Families were recruited during pregnancy or within the first year of the child's life and were eligible based on low family income. The evaluation included 3,001 families at seventeen sites

nationwide and consisted of baseline assessments as well as follow-up assessments when children were fourteen, twenty-four, and thirty-six months old.[42]

Early Start

Early Start is a home-based family support program that offers services to 443 families in Christchurch, New Zealand. It is part of a larger network of home-visiting services that are provided in thirty-two sites around the country. Early Start follows the Healthy Families America model of providing home-based supportive services to vulnerable families on the basis of risk screening. Families become eligible for services after being determined to be at an elevated risk for adverse outcomes including child maltreatment. The goals of the program are to assess the strengths and needs of the families served, to develop positive relationships, to improve family problem solving, and to provide support, mentoring, and assistance in helping families connect to their own resource networks. The goals are attained through sustained contact that occurs from shortly after the child is born through the preschool years.[43]

The frequency of home visits depends on a family's level of risk. Those who are considered to be at highest risk are visited up to two and a half hours every three months for up to two years. Home visits are conducted by family support workers who have degrees in either nursing or social work and have received five weeks of additional training specific to the goals and procedures surrounding the Early Start Program. The program has been evaluated with a randomized trial, and outcomes have been examined at six, twelve, twenty-four, and thirty-six months after program entry.[44]

Because these nine programs differed widely in their targets, method of service delivery, intensity, and content, it is not surprising that their outcomes also often differed substantially as well.

Queensland Study

The Queensland, Australia, home-visiting program has been evaluated by K. L. Armstrong and colleagues and by J. A. Fraser and colleagues.[45] Its goals were to build trusting relationships among family members, improve parenting self-esteem and parenting efficacy, provide information about child health and development, and link families to other resources in the community. The program was offered to 181 mothers who were considered at risk for poor parenting. Participants were recruited in the hospital after the birth of a child. Those who were randomly assigned to the treatment group received weekly nurse visits for six weeks, biweekly visits for the next three months, and then monthly visits until the child was six months old. Outcomes were assessed at six weeks, at twenty-five weeks, and again at twelve months.[46]

Netherlands Study

Karin van Doesum and colleagues evaluated a home-visiting program in the Netherlands that was aimed at preventing relationship problems between depressed mothers and their infants. All seventy-one mothers in the treatment and control groups were receiving treatment for their depressive symptoms. In addition, the treatment group received eight

to ten home visits lasting sixty to ninety minutes over a period of three to four months. Mothers were visited in their homes by one of fourteen master's-level psychologists or social psychiatrists who had also received additional graduate or postgraduate training in prevention or health education. The evaluation consisted of a baseline assessment and two follow-up assessments—one within two weeks of program completion and another six months later.[47]

Because these nine programs differed widely in their targets, method of service delivery, intensity, and content, it is not surprising that their outcomes also often differed substantially as well. The result is a body of research that is somewhat conflicted regarding essentially every outcome under study. Next we turn to a discussion of the outcomes of home-visiting programs, with a focus on those outcomes that are most relevant to preventing child abuse and neglect.

Relatively few home-visiting studies have collected adequate measures of child abuse and neglect. As a result, additional child and parent measures are necessary to understand fully the effect of home-visiting programs on family and child well-being.

Outcomes of Home-Visiting Programs

Although the focus of this volume of *The Future of Children* is preventing child abuse and neglect, we will review the outcomes of several home-visiting programs in multiple domains. In addition to child abuse and neglect, we will also discuss outcomes related to child health and safety, parenting, maternal mental health, and children's cognitive development. Unfortunately, few studies have documented effects on reducing or preventing child abuse and neglect. However, given the association between certain aspects of parenting and child outcomes (as we discussed earlier), measures of parenting and maternal and family functioning may shed important insights on child well-being.

Child Abuse and Neglect

As noted, assessing the prevalence of child abuse and neglect involves a number of difficulties, such as varying definitions, low reporting rates, and the difficulties of substantiating cases. As a result, research is generally weak in this area. Some programs, however, such as the NFP, HSP, HFA, and Early Start, have specifically examined abuse and neglect as outcomes of the program, and some have shown positive effects in this domain. Perhaps the most widely cited finding from a home-visiting program was based on the Elmira evaluation of the NFP, which documented a 48 percent decline in rates of child abuse and neglect at the time of the fifteen-year follow-up among low-income families who had received the intervention.[48] Other studies that have attempted to examine Child Protective Services reports of abuse and neglect as an outcome measure have also found low prevalence rates in both groups, resulting in low power to detect statistically significant differences. Neither HSP nor any of the randomized HFA evaluations have identified significant reductions in substantiated cases of child abuse or neglect as a result of their programs, though the Alaska evaluation did note a significant reduction in

CPS referrals (from 73 to 42 per thousand over a two-year period).[49] Typically, rates of child abuse and neglect were low across both groups. For example, Healthy Families New York identified that 6 percent of the controls and 8 percent of the treatment group had substantiated reports of abuse or neglect at one year. At two years, the rates were around 5 percent for both groups. Neither the one- or two-year data yielded any significant differences between families in the treatment and control groups.[50] Early Start also examined CPS referrals and substantiated cases and found no differences for either measure between treatment and control families—21 percent of control families had contact with CPS agencies, compared with 20 percent of program families.[51]

Another strategy for gauging the rates of child abuse and neglect—asking parents directly about their own behaviors toward their children—yields more promising results. The evaluation of HFNY found many significant links between program involvement and reductions of abusive or neglectful behaviors, though few were observed at both one and two years. At one year, but not at two years, mothers in the program group engaged less frequently in acts of psychological aggression.[52] In contrast, neglectful behaviors[53] did not differ at one year, but did at two years. Effects were more consistent on physical abuse, however, with mothers in the treatment group reporting fewer instances of very serious physical abuse at one year and fewer instances of serious abuse at two years.[54] In Alaska, the HFA program was associated with less psychological aggression, but it had no effects for neglect or severe abusive behaviors.[55] Similarly, in the San Diego evaluation of HFA, home-visited mothers reported less use of psychological aggression at twenty-four and thirty-six months.[56] Early Start also reported small effects in terms of lowering rates of severe physical abuse.[57]

In contrast, Hawaii Healthy Start showed no overall effects in terms of parent-reported abusive or neglectful behaviors, even though the program was initially designed to prevent child abuse and neglect. Overall, the treatment and control groups differed little with respect to child abuse and neglect. Only two differences emerged: HSP mothers were less likely to use corporal or verbal punishment or engage in neglectful behaviors. In both cases, the effects were isolated within a single site (not the same site for both effects). Overall, the authors concluded that the program did little to prevent child abuse.[58] They also noted that the home visitors rarely expressed concerns about child maltreatment, even among families for whom other measures suggested significant problems.

Relatively few home-visiting studies have collected adequate measures of child abuse and neglect. As noted, those that attempt to assess effects in this domain often yield inconclusive results. The problem, however, may simply be that the low overall prevalence of documented cases of abuse and neglect makes it almost impossible for most clinical trials to detect significant changes in this domain. Furthermore, mothers who are in programs may be more likely to be detected and receive services for suspected abuse or neglect. As a result, additional child and parent measures are necessary to understand fully the effect of home-visiting programs on family and child well-being.

Harsh Parenting Behaviors

Harsh parenting behaviors are those on the milder end of the continuum of abusive behaviors. In contrast to indices of abuse and neglect, harsh parenting is evidenced by

things like spanking, slapping, or pinching the child.[59] The Healthy Families New York evaluation examined a number of harsh parenting behaviors in addition to their measures of abuse and neglect. They found evidence that families in the intervention group exhibited fewer harsh parenting behaviors than families in the control group and that this effect was particularly strong among first-time mothers who had enrolled in the program during pregnancy (62 percent of controls vs. 41 percent of the treatment group). Among the prevention subgroup (first-time mothers recruited prenatally), minor physical aggression was reported in 70 percent of control families and 51 percent of program families.[60] In Healthy Families Alaska, fewer incidents of mild physical abuse were reported among families in the treatment group.[61]

The Nurse-Family Partnership has also shown positive effects in reducing harsh parenting behaviors among adolescent mothers. In the Elmira demonstration, intervention mothers were less likely to punish or physically restrain their children than mothers in the control group.[62] Among home-visited families who participated in Early Start, less punitive parenting was observed, though the effect was modest.[63] Several other programs have identified reductions in the frequency with which mothers spanked their children at thirty-six months, including Healthy Families San Diego,[64] Early Head Start,[65] and IHDP.[66] No effects on harsh parenting were found in the CCDP.[67]

Child Health and Safety

Aspects of children's health and safety such as the number of injuries and hospital admissions, as well as immunizations and doctor and dental visits, can provide important insight into a child's quality of care. Accordingly, a number of home-visiting evaluations have measured outcomes in this domain.

The NFP examined both injuries and hospital admission in the Elmira and Memphis evaluations. In Elmira, children of low-income, unmarried mothers in the treatment group had fewer emergency room visits than controls.[68] Similarly, in Memphis, fewer accidents and injuries required treatment. In the Memphis site, nurse-visited families also had lower child mortality. One child in the treatment group died, compared with ten in the control group.[69]

Several studies have examined the effects of home visiting on children's completion of immunizations, though few have identified program benefits in this area. Of those that examined immunizations (NFP-Memphis, HFA, HSP, EHS, Queensland, and Early Start), only EHS identified a significant program effect on immunizations, though the size of the effect was quite small and applied to the comparison of the entire treatment group to controls, not specifically to those families who had received home visits.[70] The one-year follow-up of the Queensland program also suggested a trend in favor of the intervention group's having higher levels of vaccinations than the control group.[71]

The Early Start program in New Zealand was one of the few evaluations to identify effects on the frequency of doctor and dental visits. Families in the program group had more general practitioner visits over thirty-six months, a higher proportion were up to date with well-child checks, and they were more likely to have had dentist visits.[72] The Queensland program and Hawaii Healthy Start both examined the number of well-child visits and found no differences across groups. Furthermore, neither HSP nor any of the

three HFA evaluations identified effects in terms of linking program families to a medical home.[73]

Quality of the Home Environment

More programs have observed positive effects in parenting domains than in child outcomes. With regard to the quality of the home environment,[74] several programs have identified positive effects. For example, the Queensland study documented higher-quality home environments for families in the intervention.[75] Likewise, positive effects were observed on measures of the home environment in Alaska.[76] Among multi-component programs, both Early Head Start[77] and the Infant Health and Development Program[78] reported higher-quality home environments in the intervention groups, though effect sizes tended to be small. In contrast, the CCDP did not significantly affect the home environment or any measured aspects of parenting.[79]

A conflicting picture emerged from the results of the Nurse-Family Partnership across the three evaluation sites. In Denver, mothers who received home visits had more sensitive mother-infant interactions and higher HOME scores than mothers who did not.[80] Home visiting, however, had no significant effects on different aspects of the home environment in Elmira or Memphis.[81] One possible explanation for this difference is that the majority of mothers at the Elmira and Memphis sites were adolescents, whereas the Denver mothers were more diverse in age, suggesting stronger effects for older mothers than for younger mothers with respect to the quality of the home environment.

Increased Parenting Responsivity and Sensitivity

As several studies have documented, home-visiting programs are often associated with parental gains in responsivity and sensitivity in their interactions with their children. In the Infant Health and Development program, mothers in the intervention group engaged in higher-quality interactions with their infants, though the effects were small.[82] In New Zealand, Early Start documented higher positive parenting attitudes, a greater prevalence of nonpunitive attitudes, and more favorable overall parenting scores for families in the treatment group.[83] In Queensland, mothers in the intervention group were rated as significantly higher in emotional and verbal responsivity.[84]

Evidence also shows that home-visiting programs can improve maternal parenting sensitivity. The Netherlands program, for example, achieved its primary goal—improving maternal sensitivity. At the end of the study, mothers who had received home visits were more sensitive in their interactions with their infants and more skilled in structuring activities with the child.[85] Other home-visiting programs with broader aims have also identified program effects on maternal sensitivity. Home-visited mothers in the Denver site of the NFP were rated as more sensitive during interactions with their children. The effect was small, but was identified in the whole program group, instead of only in a smaller subgroup.[86] In Memphis, more positive interactions were observed in the subgroup of women who possessed low psychological resources.[87] Likewise, home-visited mothers in Early Head Start were rated as more supportive during play with their children than controls, though the effect was small.[88] Maternal sensitivity was also examined in Hawaii Healthy Start, the Healthy Families evaluations in San Diego and Alaska, and the Comprehensive Child Development Program, though none identified significant effects.

Maternal Depression and Parenting Stress

Some programs have examined depressive symptoms and parenting stress as outcomes of the intervention. One evaluation conducted in Queensland, Australia, reported moderate reductions in depressive symptoms for mothers in the intervention group at the six-week follow-up.[89] A subsequent follow-up, however, suggested that these benefits were not long lasting, as the depression effects had diminished by one year.[90] Similarly, Healthy Families San Diego identified reductions in depression symptoms among program mothers during the first two years, but these effects, too, had diminished by year three.[91] In Healthy Families New York, mothers at one site (that was supervised by a clinical psychologist) had lower rates of depression at one year (23 percent treatment vs. 38 percent controls).[92] The Infant Health and Development program also demonstrated decreases in depressive symptoms after one year of home visiting, as well as at the conclusion of the program at three years.[93] Among Early Head Start families, maternal depressive symptoms remained stable for the program group during the study and immediately after it ended, but decreased just before their children entered kindergarten.[94] No program effects were found for maternal depression in the Nurse-Family Partnership, Hawaii Healthy Start, Healthy Families Alaska, or Early Start programs.

Some effects on parenting stress have also been identified. Most notably, home-visited families participating in Early Head Start reported experiencing significantly less stress in their parenting roles than did control families.[95] The same pattern occurred in Queensland: mothers who received home-visiting services reported less stress in the parenting role than did mothers in the control group.[96] Healthy Families programs in Alaska, San Diego, and Hawaii also examined parenting stress in their evaluations. In Alaska, 22 percent of families who received HFA services reported very high levels of parenting stress (above 90th percentile), as compared with 30 percent of mothers in the control group. In San Diego, a small effect was noted in favor of treatment families' having lower stress, but the relationship was only marginally significant. Hawaii Healthy Start did not yield any effects on parenting stress.[97]

Another interesting approach is to focus on mothers who are clinically depressed as targets for the intervention. In the Netherlands program, all mothers were receiving outpatient psychotherapy for their depression. Accordingly, mothers in both groups showed reductions in depressive symptoms over the course of the study. However, there were no additional benefits for mothers in the treatment group.[98]

Overall, this pattern of results suggests that home-visiting programs may not be designed to handle problems associated with high levels of stress or mental illness, which may be best treated in other settings. Although depressed mothers may gain parenting skills as a result of home intervention programs, they are unlikely to feel less parenting stress or fewer depressive symptoms per se. This important finding shows that the effectiveness of home-visiting programs is limited and that those that have well-defined goals in certain domains are most likely to evidence effects. At the same time, it is worth noting that some programs did identify small effects on stress and depressive symptoms and that others have specifically targeted reducing maternal depressive symptoms and have obtained stronger results.[99]

Table 2. The Effects of Home-Visiting Programs on Child Abuse, Health, Parenting, and Depression

Program	*Substantiated child abuse and neglect*	*Parent-report child abuse and neglect*	*Child health and safety*	*Home environment*	*Parenting responsivity and sensitivity*	*Parenting harshness*	*Depression and parenting stress*	*Child cognition*
NFP–Elmira	Yes		Yes	No	Yes	Yes	No	Mixed
NFP–Memphis			Yes	No	Mixed		No	Mixed
NFP–Denver				Yes	Yes		No	Mixed
Hawaii Healthy Start	No	No	No	No	No		Mixed	No
HFA–San Diego		Yes	No	No	No	Yes	Mixed	Mixed
HFA–Alaska	No	Yes	No	Yes	No	Mixed	Mixed	Yes
HFA–New York	No	Yes	No			Yes	Mixed	
Early Head Start			Yes	Yes	Yes	Yes	Yes	Yes
IHDP				Yes	Yes	Yes	Yes	Yes
CCDP			No	No	No	No	No	Mixed
Early Start	No	Yes	Yes		Yes	Yes	No	
Queensland Program			No	Yes	Yes		Mixed	
Netherlands Program					Yes		No	

Note: "Mixed" indicates that findings were isolated to specific sites or subgroups. Blank boxes indicate that the outcome was not examined for a particular program.

Children's Cognitive Development

Effects on children's cognitive development have been more difficult to identify in home-visiting programs, largely because the programs rarely provide services directly to children. Because effects on parenting are modest, it follows that effects on children would be even smaller. Even so, there is some evidence that changes in children's outcomes are mediated by changes in parenting attitudes and behaviors.[100]

In Hawaii Healthy Start and the CCDP, no cognitive benefits were observed for children. However, in Healthy Families Alaska, program children had higher Bayley scores at age two than controls, with 58 percent of intervention children and 48 percent of controls scoring in the normal range.[101] In the Nurse-Family Partnership evaluations, some effects were observed within each of the three evaluations, but most effects were concentrated within specific subgroups of families. In Denver, low-resource families who received home visiting showed modest benefits in children's language and cognitive development.[102] In Elmira, only the intervention children whose mothers smoked cigarettes before the experiment experienced cognitive benefits.[103] In Memphis, children of mothers with low psychological resources[104] in the intervention group had higher grades and achievement test scores at age nine than their counterparts in the control group.[105] Early Head Start also identified small, positive effects on children's cognitive abilities, though the change was for the program as a whole and not specific to home-visited families.[106] Similarly, IHDP identified large cognitive effects at twenty-four and thirty-

six months, but not at twelve months, so the effects cannot be attributed solely to home-visiting services.[107]

Summary of Outcomes

Table 2 summarizes the results of the home-visiting programs just described. In general, a review of the literature reveals a mixed picture regarding the efficacy of home-visiting programs. In each domain, some studies have documented effects whereas others have not. Furthermore, many effects are isolated within specific subgroups of families or within individual sites, so that findings cannot be generalized to the entire population served. In an attempt to reconcile these disparate and often contradictory findings, several researchers have undertaken meta-analyses to estimate effects across a number of programs. Often, these meta-analytic reviews include both experimental evaluations (randomized controlled trials) and quasi-experimental evaluations, whereas we feel that conclusions should be based primarily —if not entirely—on experimental evaluations. Even so, the results of meta-analyses can be instructive.

Monica Sweet and Mark Appelbaum published a meta-analysis that included sixty home-visiting programs (including both quasi and true experiments). They found evidence that home visiting is associated with benefits in parenting attitudes and behavior, as well as in children's cognitive development. However, for both child abuse and parent stress, the average effect sizes were not different from zero, suggesting a lack of evidence for effects in these areas.[108] Earlier meta-analytic reviews have also noted the lack of sizable effects in preventing child maltreatment—again citing the different intensity of surveillance of families in the treatment versus control groups as an explanation (though the authors did report that home visiting was associated with an approximately 25 percent reduction in the rate of childhood injuries).[109] Another review focusing on the quality of the home environment also found evidence for a significant overall effect of home-visiting programs.[110] More recently, Harriet MacMillan and colleagues published a review of interventions to prevent child maltreatment, and identified the Nurse-Family Partnership and Early Start programs as the most effective with regard to preventing maltreatment and childhood injuries. The authors note that many other programs lack strong evidence of such effects.[111]

Taken together, these findings suggest that home-visiting programs offer little evidence that they directly prevent child abuse and neglect. The evidence, however, is stronger with respect to parenting and the quality of the home environment. Study findings show that home visits can impart positive benefits to families by way of influencing maternal parenting practices, the quality of the child's home environment, and children's development. And because other studies have linked parenting quality with child maltreatment, improved parenting skills would likely be associated with improved child well-being and corresponding decreases in maltreatment, even if these effects remain difficult to document.

Cost-Benefit Analysis

Another tool for considering the effectiveness of intervention programs is cost-benefit analysis. Although few such analyses have been conducted with home-visiting programs, some interesting findings have nevertheless emerged. The Elmira site of the Nurse-Family Partnership has been evaluated on two separate occasions, originally by Lynn

Karoly and colleagues at RAND and again by Steve Aos at the Washington State Institute for Public Policy.[112] In both analyses, benefits tended to outweigh costs. Savings were primarily in four areas: increased tax revenues associated with maternal employment, lower use of public welfare assistance, reduced spending for health and other services, and decreased criminal justice system involvement. For the higher-risk group in Elmira, each dollar invested yielded $5.70 in savings. For the lower-risk group, the saving was $1.26 per dollar invested.[113] For the full sample, Aos calculated an overall benefit-cost ratio of $2.88. The Aos evaluation also assessed the costs and benefits as reported in a meta-analysis of home-visiting programs and found an average of $2.24 saved for each dollar invested in home-visiting programs. A cost-benefit analysis of Healthy Families America, however, showed a net loss of 4.8 cents for each dollar invested in the program, and Early Head Start showed a net loss of 7.7 cents per dollar invested. Cost benefits would, of course, increase if longer-term follow-ups continued to show benefits of these programs.

Program Dimensions Linked to Effectiveness

To make more sense of the often disparate findings, we move toward identifying the core features of effective programs. In a 2003 paper in the *American Psychologist,* Maury Nation and colleagues identified a set of characteristics that were associated with the most effective prevention programs in the areas of substance abuse, risky sexual behavior, delinquency and violence, and school failure.[114] John Borkowski, Leann Smith, and Carol Akai subsequently summarized the key themes of the Nation paper and identified a set of ten principles of effective prevention programs. In terms of treatment content, effective programs were theoretically based, comprehensive in their programming, used varied teaching methods, and fostered positive relationships. In terms of procedure, the dosage of the treatment was appropriate given the nature of the problem, the treatment was appropriately timed for prevention, and staff were well trained and culturally sensitive to the needs of participants. Finally, effective programs utilized rigorous evaluation methods and examined meaningful outcomes.[115] In the field of home visiting, many programs lack one or more of these critical elements, a shortcoming that can be useful for understanding why some programs failed to show positive effects.

Home Visitor Credentials

One of the more controversial questions within the home-visiting field involves whether the visitors should be nurses and social workers or, instead, trained paraprofessionals and volunteers. According to the Olds model of home visiting, the expertise of the nurse visitor is critical. Indeed, Hawaii Healthy Start and the Comprehensive Child Development Program used paraprofessional home visitors instead of nurses and failed to produce change in any domain that they studied. However, the Healthy Families New York program also used paraprofessional home visitors, only about one-third of whom had college degrees. Even so, the program had significant benefits in decreasing child abuse and neglect and harsh parenting behaviors.[116]

In Denver, Olds and colleagues addressed this question empirically by randomly assigning families to three groups: a nurse-visited group, a group visited by paraprofessionals, and a control group. They reported that the effects associated with paraprofessional visitors were approximately half those of nurse visitors—though in most domains,

the differences were not statistically significant. Nurses did seem to perform better in reducing maternal smoking and encouraging children's language development.[117]

Although the consensus in the research literature suggests a benefit for using professional staff as home visitors, debate continues about whether health professionals or social professionals are more effective in bringing about positive change for families. The answer to this question may depend in large part on the overall goals of the program. For example, in the Nurse-Family Partnership, one of the goals is to improve pregnancy outcomes and promote child health. In that case, the choice of public health nurses as home visitors is ideal. Indeed, one of the largest effects of the NFP is a delay in the timing of second births among teenagers, which in and of itself can have ripple effects on the child and on the mother's life course. In contrast, the program tested by van Doesum and colleagues was focused on improving parenting sensitivity and fostering attachment security in the mother-infant relationship. Accordingly, the home visitors were master's level psychologists with additional training in prevention or health education, and the results suggested that they were successful in promoting parenting sensitivity.

Targets of Intervention

It is difficult to say whether home visiting confers more benefits on disadvantaged families than on more advantaged families. The vast majority of programs offer services only for mothers deemed at risk either because of their youth, low educational attainment or socioeconomic status, or poor mental health. However, within these categories of risk, it is possible to examine which mothers benefit the most. In fact, the findings of programs targeting adolescent mothers tended to differ from those of programs that enrolled mothers from a wider variety of backgrounds. For example, the Elmira and Memphis demonstrations of the Nurse-Family Partnership enrolled primarily adolescent mothers, whereas the Denver program enrolled a more diverse group. The greatest effects were found among low-income, first-time adolescent mothers. Furthermore, within the Elmira and Memphis evaluations, those families at the highest risk (because of poverty or lack of psychological resources) tended to gain the greatest benefits from the program.

It is significant that home-visiting programs are particularly effective in preventing child abuse and neglect among first-time adolescent mothers, because these women provide the truest test of a primary prevention program.

The Healthy Families New York evaluation made specific efforts to replicate the type of participants served in the NFP, which has consistently demonstrated much more positive outcomes than Healthy Start. In addition to overall comparisons between families in the treatment and control groups, Kimberly Dumont and colleagues also identified a "prevention subgroup" of adolescents who were first-time mothers and who were enrolled in the program prenatally. They also identified a "psychologically vulnerable

group" who were rated as being both high in depressive symptoms and low in self-mastery. Consistent with findings in Elmira and Memphis, these groups benefited most from the intervention. Within the prevention subgroup, mothers in the intervention showed significantly less physical aggression and harsh parenting toward their children. The psychologically vulnerable mothers in the intervention displayed significantly less serious abuse and neglect than psychologically vulnerable control group mothers.[118]

It is significant that home-visiting programs are particularly effective in preventing child abuse and neglect among first-time adolescent mothers, because these women provide the truest test of a primary prevention program. In other words, a home-visiting program may be able to prevent first-time mothers, who have never engaged in poor parenting or child abuse and neglect, from ever doing so in the first place. In contrast, mothers who already have children or who were enrolled postnatally may already be acting on ingrained patterns of poor parenting that place their children at risk. In such cases, the goal of the program is not simply to prevent a behavior from occurring, but to intervene and change a pattern of behaviors to prevent recurrence. Previous research has suggested that it is much more difficult to prevent recurrence of child abuse than to prevent it from happening in the first place.[119]

Service Delivery

Analyses investigating whether the effectiveness of programs is more closely linked to the number of planned visits or to the number of visits that take place have shown that programs with more planned visits tend to be most effective. Not surprisingly, families who benefit the most are those who receive the highest dosage of the intervention. One very likely reason for limited effects found in home-visiting evaluations is the fairly high percentage of families in the treatment group who receive little (or in some cases, no) treatment. Selecting home visitors who are well trained and culturally sensitive to the families they serve will likely encourage mothers to accept more home-visiting services.

It is also important to ensure that the program staff are highly trained and familiar with the goals of the program and that the program is being administered with fidelity to its model. One reason cited for the effectiveness of the Abecedarian project was that program goals were clearly stated and well understood by those who were administering services as well as those who were designing and conducting program assessments. And one critical failing found in the assessment of the Hawaii Healthy Start program was that the home visitors rarely referred families to additional services in the community, even for serious problems such as suspected child abuse or domestic violence, even though linking families to community resources was a primary goal of the program.[120] That finding suggests that the program was not carried out as originally planned, resulting in an inadequate test of the HSP model of home visiting.

Finally, using a theoretically based curriculum is crucial to ensure that programs produce optimal results. Home-visiting programs have often been criticized for their high degree of flexibility and corresponding lack of specific curriculum, making it difficult to replicate programs or results. For many programs, including Early Head Start and Healthy Families America, home-visiting services center on meeting the needs of individual families, and therefore the content of visits varies dramatically from family to family. This

variation across (and even within) sites likely contributes to the inconsistent patterns of findings. Initially, the Nurse-Family Partnership (originally known as the Nurse Home Visiting program) had a curriculum with less formal structure, but as the program has been replicated in other cities and has begun extending to sites around the nation, program content has become more specific and replicable, likely contributing to its success.

Conclusions

Although findings are at best mixed with respect to the effectiveness of home-visiting programs in preventing child neglect, evidence is mounting that these programs can positively alter parenting practices and, to a lesser extent, children's cognitive development.[121] Given the many measurement problems associated with accurately tracking substantiated cases of abuse and neglect, what is needed is not more evaluations of CPS reports attempting to show reductions in child abuse and neglect, but rather the development of new measures by which researchers can make sensitive and accurate assessments of child maltreatment. Experts know that cases of abuse or neglect that are substantiated by a child protective agency represent only a small fraction of children who are maltreated.[122] That being the case, it would be far more useful to gain a better understanding of child maltreatment so that it can be prevented (and strategies to prevent it can be assessed) before it becomes necessary for the state to intervene.

Researchers have learned much about home-visiting programs since they were first reviewed in *The Future of Children* in 1993. At that time, programs such as the Nurse-Family Partnership were still fairly new, and analysts were evaluating most such programs using quasi-experimental designs. By 1999, evaluations were becoming more sophisticated, and new programs had been developed. The consensus at that time was that more research was needed to demonstrate clearly the benefits of these programs for families and children. After nearly another decade of research, many concerns remain, but the evidence base suggests much more strongly the important benefits of home-visiting programs for parents and children. Meanwhile home-visiting programs are rapidly being adopted as a way to provide services to at-risk families not only throughout the country, but around the world. Despite questions about the short- and long-term benefits of home visiting, theorists and policy makers alike believe strongly that it can be a beneficial and cost-effective strategy for providing services to families and children. Still, it is important to recognize the limits of home visiting and to encourage service providers to be vigilant in following the guidelines and protocols mandated by the respective programs. Developing more precise measures for assessing child maltreatment, using professional staff whose credentials are consistent with program goals, intervening prenatally with at-risk populations, and carrying out the programs with fidelity to their theoretical models will make it possible to evaluate home-visiting programs more adequately so that their promise can be fully realized.

Endnotes

1. Jeanne Brooks-Gunn, Lisa J. Berlin, and Allison Sidle Fuligni, "Early Childhood Intervention Programs: What about the Family?" in *Handbook on Early Childhood Intervention,* 2nd edition, edited by Shonkoff and Meisels (Cambridge University Press, 2000), pp. 549–88.

2. Home visiting was first addressed in 1993. See Deanna S. Gomby and others, "Home Visiting: Analysis and Recommendations," *Future of Children* 3 (1993): 6–22. It was addressed again in 1999. See Deanna S. Gomby, Patti L. Culross, and Richard E. Behrman, "Home Visiting: Recent Program Evaluations—Analysis and Recommendations," *Future of Children* 9 (1999): 4–26.

3. Jeanne Brooks-Gunn and Lisa B. Markman, "The Contribution of Parenting to Ethnic and Racial Gaps in School Readiness," *Future of Children* 15 (2005): 139–68; Hirokazu Yoshikawa, "Long-Term Effects of Early Childhood Programs on Social Outcomes and Delinquency," *Future of Children* 5 (1995): 51–75.

4. Denise Kendrick and others, "Does Home Visiting Improve Parenting and the Quality of the Home Environment?" *Archives of Disease in Childhood* 82 (2000): 443–51. See also Monica A. Sweet and Mark I. Appelbaum, "Is Home Visiting an Effective Strategy? A Meta-Analytic Review of Home Visiting Programs for Families with Young Children," *Child Development* 75 (2004): 1435–56.

5. The two omitted programs are Parents as Teachers (PAT) and Home Instruction for Parents of Preschool Youngsters (HIPPY). PAT was excluded because families could enroll anytime up to age three and most of the research evidence is based on quasi-experiments. HIPPY was excluded because it is geared toward families of older children (three to five years).

6. U.S. Department of Health and Human Services, "Child Fatalities by Age and Sex Using Population-Based Rate, 2003" (www.acf.hhs.gov/programs/cb/pubs/cm03/table4_3.htm [accessed February 1, 2009]).

7. A number of other notable early intervention programs are not reviewed here. For example, the Abecedarian Project and Project CARE were precursors of the Infant Health and Development Program, offering high-quality full-day child care to children from birth to five years. See Craig T. Ramey and Sharon Landesman Ramey, "Prevention of Intellectual Disabilities: Early Interventions to Improve Cognitive Development," *Preventive Medicine* 27 (1998): 224–32. Boston's Healthy Start is another early intervention program that is not home-based, but rather provides services through health clinics. See Alonzo Plough and Freya Olafson, "Implementing the Boston Healthy Start Initiative: A Case Study of Community Empowerment and Public Health," *Health Education and Behavior* 21, no. 2 (1994): 221–34. Other recent programs such as Sure Start in the United Kingdom are not included because they lack an experimental design. See Edward Melhuish and others, "Effects of Fully-Established Sure Start Local Programmes on 3-Year-Old Children and Their Families Living in England: A Quasi-Experimental Observational Study," *Lancet* 372 (2008): 1641–47.

8. Miriam R. Linver, Allison Sidle Fuligni, and Jeanne Brooks-Gunn, "How Do Parents Matter? Income, Interactions, and Interventions during Early Childhood," in A*fter the Bell: Family Background, Public Policy, and Educational Success,* edited by Conley and Albright (New York: Routledge, 2004), pp. 25–50. Mediated effects have also been examined using data from IHDP: Miriam R. Linver, Jeanne Brooks-Gunn, and Dafna E. Kohen, "Family Processes as Pathways from Income to Young Children's Development," *Developmental Psychology* 38 (2001): 719–34.

9. S. Tyler, K. Allison, and A. Winsler, "Child Neglect: Developmental Consequences, Intervention, and Policy Implications," *Child and Youth Care Forum* 35 (2006): 1–20.

10. K. L. Hildyard and K. L. Wolfe, "Child Neglect: Developmental Issues and Outcomes," *Child Abuse and Neglect* 26 (2002): 679–95. See also J. M. Hussey, M. J. Bakermans-Kranenberg, and M. H. van IJzendoorn, "The Importance of Parenting in the Development of Disorganized Attachment: Evidence from a Preventive Intervention Study in Adoptive Families," *Journal of Child Psychology and Psychiatry and Allied Disciplines* 46 (2005): 263–74.

11. Jay Belsky, "The Determinants of Parenting: A Process Model," *Child Development* 55 (1984): 83–96.

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53. Ibid. Neglectful behaviors included leaving the child alone and unsupervised and not providing adequate care (food, doctor visits, emotional support).

54. Ibid. Serious acts of physical abuse included punching, beating, choking, burning, or threatening with a weapon. Very serious physical abuse would be indicated by endorsing more than one of these items.

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59. Straus and others, “Identification of Child Maltreatment” (see note 52).

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72. Fergusson and others, “Randomized Trial of the Early Start Program of Home Visitation” (see note 44).

73. Harding and others, “Healthy Families America Effectiveness: A Comprehensive Review of Outcomes” (see note 34); Fraser and others, “Home Visiting Interventions for Vulnerable Families with Newborns: Follow-Up Results of a Randomized Controlled Trial” (see note 45).

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Prevention and Drug Treatment

Mark F. Testa and Brenda Smith

Summary

Evidence linking alcohol and other drug abuse with child maltreatment, particularly neglect, is strong. But does substance abuse cause maltreatment? According to Mark Testa and Brenda Smith, such co-occurring risk factors as parental depression, social isolation, homelessness, or domestic violence may be more directly responsible than substance abuse itself for maltreatment. Interventions to prevent substance abuse–related maltreatment, say the authors, must attend to the underlying direct causes of both.

Research on whether prevention programs reduce drug abuse or help parents control substance use and improve their parenting has had mixed results, at best. The evidence raises questions generally about the effectiveness of substance abuse services in preventing child maltreatment. Such services, for example, raise only marginally the rates at which parents are reunified with children who have been placed in foster care. The primary reason for the mixed findings, say Testa and Smith, is that almost all the parents face not only substance abuse problems but the co-occurring issues as well. To prevent recurring maltreatment and promote reunification, programs must ensure client progress in all problem areas.

At some point in the intervention process, say Testa and Smith, attention must turn to the child's permanency needs and well-being. The best evidence to date suggests that substance-abusing parents pose no greater risk to their children than do parents of other children taken into child protective custody. It may be sensible, say the authors, to set a six-month timetable for parents to engage in treatment and allow twelve to eighteen months for them to show sufficient progress in all identified problem areas. After that, permanency plans should be expedited to place the child with a relative caregiver or in an adoptive home.

Investing in parental recovery from substance abuse and dependence, the authors conclude, should not substitute for a comprehensive approach that addresses the multiple social and economic risks to child well-being beyond the harms associated with parental substance abuse.

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For much of the past century of U.S. public involvement in the protection and care of abused and neglected children, the problem of parental alcohol and other drug abuse (AODA) was hidden, at least from the public's eye. Even though insobriety, alcoholism, and drug addiction have long been recognized as serious family problems by front-line workers and duly noted in case records and service plans, it was only after these afflictions manifested themselves tangibly in physical battery, sexual abuse, lack of supervision, and child abandonment that officials would invoke their authority to intervene in the private affairs of the family. It was this tangible evidence of child maltreatment that was usually recorded and reported as the reason for investigations, court petitions, and child removals. The scale of the underlying AODA problem remained largely hidden in the shadows from public sight.

Several trends during the mid-1980s and 1990s helped to bring about greater public awareness of the AODA connection to child maltreatment and foster care. The first was the change in the gender profile of users from disproportionately males and fathers to increasingly females and mothers. Public officials may have been able to turn a blind eye when it was mostly fathers who returned home drunk or stoned; it was quite another matter when female caregivers increasingly numbered among the users.

Second, the spread of illicit drugs, particularly "crack" cocaine in inner-city neighborhoods, alarmed public officials, who predicted dire consequences for crime, welfare dependency, and public health.[1] Even though the detrimental effect of fetal alcohol syndrome had been well established, the uncertain effects of intrauterine exposure of infants to cocaine, heroin, and other hard drugs prompted hospital officials to increase the number of toxicology screenings at birth. In some states, a positive finding from such a test provided sufficient grounds for filing a child abuse report.

Finally, the shift from a "rights" to a "norms" perspective in federal and state income assistance and child welfare programs[2] helped to enlarge the scope of public interest beyond a narrow focus on child safety to a more diffuse concern with parental responsibility and child well-being in general. Although it is arguable whether parental substance abuse provides a legitimate basis in its own right for protective intervention and child removal, the greater acceptance of government's role in enforcing mainstream parental fitness standards[3] has enlarged the scope of public interest in AODA as a child welfare concern.

These changes in gender profile, hospital surveillance practices, and scope of public interest affect the ways in which researchers classify, make connections, and speculate about cause and effect in the prevention, treatment, and control of parental substance abuse. In this article we examine the magnitude of the AODA problem under different definitions of drug use and at various stages of child protective services (CPS) action, from maltreatment investigation and family case opening to child removal and placement into foster care. We first address the association between parental substance abuse and child maltreatment and the strength of any causal connection between the two. That is, we address the extent to which substance abuse, per se, elevates the risk for child maltreatment and how a link between the two may reflect other causal influences. We review empirical evidence on the extent to which prevention and intervention programs

successfully reduce drug abuse, on whether family services help addicted parents control substance use and improve their parenting, and on how well drug treatment programs reinforce sobriety so that foster children can safely be returned to parental custody. For two reasons, we focus our discussion on experiences in the state of Illinois. First, in 1989 Illinois became one of the first states in the nation to approve legislation making intrauterine exposure to illicit substances, by itself, evidence of child abuse and neglect. And, second, in 1999 the state secured permission from the federal government to mount a randomized controlled experiment of the efficacy of "recovery coach" services in promoting drug treatment and family reunification.

Reflecting on the research findings, we address the extent to which social policy should be broadly concerned with AODA as a child well-being matter beyond narrow safety and permanency concerns. We discuss whether the weight of the evidence refutes or supports the notion of maintaining children in parental custody or, if removed, returning them home while parents are still in the process of recovery from drug addiction. Finally, we consider how long children should wait while parents struggle to manage their drug dependency before caseworkers initiate termination-of-parental-rights (TPR) proceedings or put into action other permanency plans, such as kinship custody and legal guardianship.

Children's Exposure to Parental AODA

The prevalence of children's exposure to parental AODA refers to the proportion of abused and neglected children who are affected by parental alcohol and other drug use at a given time. Estimates vary depending on the definition of AODA used to classify cases, the segment of the child population examined, and the method of data collection used to count the cases. Prevalence estimates are best generated through carefully conducted studies using uniform definitions that rely on samples of cases drawn at random or using some other statistically valid method of selection to generate an estimate within some margin of error, for example, plus or minus a few percentage points.

Because "substance abuse" is defined differently and measured more precisely by drug professionals than by ordinary folks, an important element of the estimation process is the definition of substance abuse that is used for classifying and counting. AODA is variously measured in terms of current use, lifetime use, abuse, or dependence. Current or lifetime use of illicit substances or large amounts of alcohol (often defined as four or more drinks in one day) is best measured using uniform screening questions such as those in the Composite International Diagnostic Interview-Short Form (CIDI-SF).[4] In such diagnostic interviews, respondents are asked a series of questions such as, "In the past 12 months did you ever use… [insert name of substance]"?[5]

Substance abuse and dependence are distinct concepts and refer to detrimental or debilitating use. They can be systematically measured with criteria specified in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).[6] The manual lists seven potential dependency symptoms and suggests that dependence is indicated when at least three of the seven are present. The DSM-IV defines substance abuse in narrower terms, as a pattern of substance use that is "maladaptive"[7] without meeting the criteria for dependence. The manual specifies four

characteristic symptoms of substance abuse and specifies that at least one must be present to indicate a diagnosis of substance abuse.

The National Survey of Drug Use and Health (NSDUH; formerly known as the National Household Survey of Drug Abuse) conducts in-home surveys with probability samples of the population to estimate prevalence rates of alcohol and drug use within the past year. It uses DSM-based criteria to assess substance abuse and dependency. In 2002, the NSDUH found that among married women aged twenty-one to forty-nine living with children under the age of eighteen, 14.5 percent engaged in binge drinking and 4 percent used illicit drugs in the past month.[8] The 2003 NSDUH found that among women aged eighteen to forty-nine, 5.5 percent abused or were dependent on alcohol or any illicit drug.[9]

These prevalence estimates suggest that between 6 million[10] and 9 million[11] children live in households in which a caregiver abuses alcohol or drugs. These numbers far exceed the number of children who become involved in the child welfare system for any reason. Of the approximately 900,000 children with substantiated maltreatment allegations of any kind in 2005, about 300,000 (33 percent) were placed in foster care, leaving about 600,000 children with substantiated allegations at home with their parents.[12] Even if all of these substantiated cases with children in the home involved parental substance abuse, the number would conservatively reflect only about 10 percent of the estimated number of children living with a parent who abuses substances.

It is equally challenging to identify the prevalence of AODA among families already involved with the child welfare system.[13] Just as substance abuse can be measured differently in general population studies, so can exposure to parental AODA in the child welfare population be defined and counted in a variety of ways. In the child welfare research literature, measures of AODA range from the impressions of state administrators elicited in phone surveys, to references in case files, to caregivers' scores on standardized measures such as the CIDI-SF.[14] As described below, when substance abuse is measured with standardized and validated measures, the resulting prevalence estimates tend to be lower than those of phone surveys and case records.

Even if the same child welfare subpopulations are assessed using the same substance abuse measures, prevalence rate estimates may vary depending on the specific location and time period examined.

An added complication is that the child welfare population can also be defined in a variety of ways. The definitions range from the total number of children involved in CPS investigations to the fraction having a substantiated maltreatment report to the smaller number who are removed and placed into foster care. Prevalence rates vary not only across these different population groupings but also by geographical location and time period. Child welfare jurisdictions have different policies and norms regarding when substance abuse triggers child welfare

involvement, and those policies and norms change over time. Hence, even if the same child welfare subpopulations are assessed using the same substance abuse measures, prevalence rate estimates may vary depending on the specific location and time period examined.

In light of the range of possibilities, it is easy to see how specific choices of substance abuse definitions and child welfare subpopulations can affect prevalence estimates. The most reliable prevalence estimates come from studies that meet generally accepted criteria of sampling rigor and measurement precision. Studies with unspecified response rates, response rates of less than 50 percent, or those that use only impressions as an indicator of substance abuse tend to produce unreliable estimates. The best estimates derive from studies with well-defined indicators of substance abuse and clearly specified samples. The best studies will also differentiate between samples that focus on the smaller foster care subpopulation and those that focus on the larger population of abused and neglected children.

Evidence meeting the above criteria suggests that caseworkers and investigators report substance abuse in about 11 to 14 percent of investigated cases[15] and in 18 to 24 percent of cases with substantiated maltreatment.[16] Of the cases that are opened for in-home services following a maltreatment investigation, 24 percent screen positive for alcohol abuse or illicit drug use in the past year.[17] This figure is a nationwide average. In an urban sample with no specification about timing, 56 percent of such caregivers had a notation of illicit drug or alcohol abuse in their case files or self-reported as having engaged in drug or alcohol abuse.[18]

The prevalence of substance abuse runs higher for children taken into foster care, with estimates meeting the above criteria ranging from 50 to 79 percent among young children removed from parental custody.[19] Although few studies meeting the specified criteria have assessed the prevalence of DSM-defined substance abuse or dependency in child welfare populations, those that do suggest that 4 percent of families having contact with the child welfare system[20] and 16 percent of families having a child in foster care[21] meet DSM criteria for substance abuse or dependence. Comparing reports of prevalence of substance abuse or current use to more standardized measures of drug abuse and dependency suggests that approximately one-fourth of users of alcohol and other drugs who come to the attention of CPS authorities present serious enough problems to warrant a DSM designation.

Two key generalizations may be drawn from the research about the prevalence of children's exposure to parental AODA. First, when detection methods and measures of substance abuse are more precise, prevalence estimates tend to be lower. Prevalence rates generated from impressions (from administrators, state liaisons, or caseworkers) or from wide-ranging references in case files (such as reports of past substance abuse or a past referral to substance abuse treatment) are substantially higher than are estimates generated through individual parent assessments or professional diagnosis. A clearer picture of links between substance abuse and child maltreatment will require greater attention to definitions of substance abuse and the timing and method of assessment. Second, the prevalence of parental substance abuse is lower among children who are subjects of a CPS investigation than among those who are indicated for maltreatment and

substantially lower than among those placed into foster care. These distinctions are important because, as noted, only about one-third of substantiated maltreatment allegations result in out-of-home care.[22] Prevalence estimates derived from a foster care subpopulation should not be generalized to the larger child welfare populations of abused and neglected children.

Does Parental AODA Place Children at Increased Risk of Maltreatment?

Selective prevention, as distinct from universal prevention,[23] refers to interventions that target groups that exhibit above-average risks, such as children exposed to parental AODA. Several studies document a link between parental AODA and child maltreatment, particularly neglect.[24] However, establishing a causal relationship between parental substance abuse and child maltreatment is difficult. Most investigations of the link between substance abuse and child maltreatment start with a sample of parents involved with either child welfare or substance abuse services. For example, a sample of parents who have been found to abuse substances might be assessed for child maltreatment reports and the report rate may be compared with that of the general population or a matched comparison group without substance abuse problems. Sometimes such studies factor in other potential influences on child maltreatment, such as parental mental health or education. Such studies often find higher child maltreatment rates among parents in a substance abuse group than in the comparison group or, conversely, higher substance abuse rates among parents in a child welfare services group than in a comparison group.

Using similar methods, researchers have identified an association between parental substance abuse and child maltreatment as measured by scores on a child abuse potential index,[25] parental self-reports,[26] CPS reports,[27] and incidents of maltreatment noted in medical records.[28] In a rigorous study that is among the few prospective studies to assess the risk of child maltreatment among parents who abuse substances, Mark Chaffin and several colleagues[29] followed for one year parents from a community sample. The researchers compared parents identified as having a substance use disorder and parents without a substance use disorder in self-reports of child maltreatment. Parents with a substance use disorder were three times more likely than those without one to report the onset of child abuse or neglect within the one-year follow-up period. About 3 percent of parents with a substance abuse problem reported child abuse or neglect within the year compared with 1 percent of parents without a substance abuse problem. The researchers found that the influence of substance abuse on maltreatment was maintained even when the parents being compared were similar with respect to such characteristics as parental depression, obsessive-compulsive disorder, household size, age, race, marital status, and socioeconomic status.

The Chaffin study is rigorous and convincing. It offers the best type of evidence for demonstrating a link between substance abuse and child maltreatment. And similar patterns are found in repeated studies that control for other co-existing risk factors. Such studies, however, cannot rule out the possibility that other co-factors associated with substance abuse, such as parental depression, social isolation, or domestic violence, are more directly responsible for higher maltreatment rates. Targeting interventions on a "spurious" association between drug use and

maltreatment without attending to the underlying direct causes of both will be ineffectual. For example, researchers studying the effects of crack cocaine use during pregnancy found that the deleterious consequences originally attributed to substance abuse were actually related to the environments and associated hazards in drug users' lives.[30]

In the Illinois experiment on "recovery coach" services in promoting drug treatment and family reunification, among parents who were identified as having a substance abuse problem and having a child placed out of the home, substance abuse was the sole problem for only 8 percent. The vast majority of the parents experienced co-existing problems with mental health, housing, or domestic violence.[31] The best studies attempt to control for these other risk factors, but even multiple-regression and matched-sample studies are challenged to control adequately for the myriad of social, environmental, and other variables that can "confound" the association between parental substance abuse and threats to child safety. Differences attributed to substance use can also arise from other unobserved factors that affect the detection or identification of substance use, maltreatment reporting (including self-reports), and the likelihood of child welfare involvement.

The role of substance abuse in increasing risks for child maltreatment will become clearer as researchers succeed in identifying exactly what it is that explains the link between parental substance abuse and child maltreatment. Researchers have proposed a range of potential explanations. For example, substance abuse may strain social support relationships, leading to social isolation and heightening the risks that family, friends, and neighbors will refrain from lending a hand or stepping in when child-rearing problems arise.[32] Substance abuse may promote impulsivity or reduce parental capacity to control anger under stressful situations.[33] Substance abuse may also distract parents from meeting children's needs or impair their ability to supervise them.[34] The links between parental substance abuse and child maltreatment surely warrant further study because different causal mechanisms call for different ways to conceptualize the problem and determine how to intervene. As one example, different substances may have different consequences for parenting and child safety. The ways in which a sedative, such as alcohol, impairs parenting or threatens child safety could be quite different from the ways in which a stimulant, such as methamphetamine, impairs parenting and threatens child safety. Perhaps child safety will be promoted most effectively by specifically targeted interventions for different types of substance abuse. Likewise, different mechanisms may explain different pathways to child neglect and physical abuse, or mechanisms may differ in different social or economic contexts.

Is It Possible to Target AODA Families for Treatment?

Indicated prevention[35] involves screening abuse and neglect cases for signs of parental substance abuse to promote sobriety and prevent the recurrence of maltreatment. To date, usual caseworker practices have not proved effective in identifying AODA problems among families in the child welfare system or in preventing subsequent maltreatment allegations once families are investigated for child maltreatment. An analysis using data collected on families reported for child maltreatment as part of the National Survey of Child and Adolescent Well-Being (NSCAW) found that among at-home caregivers who screened positive for past-year alcohol abuse or illicit drug use, only 18

percent were identified by caseworkers as having a substance abuse problem. Among at-home caregivers meeting criteria for alcohol or drug dependency, caseworkers identified a substance abuse problem for only 39 percent.[36] Such findings are consistent with other research indicating that child welfare caseworkers are ill-equipped to identify substance abuse problems.[37]

When substance abuse is indicated, evidence also casts doubt that CPS is effective in linking parents to substance abuse services and treatment. A study focusing on parents with substance abuse problems involved with child welfare services found that about half received substance abuse treatment; 23 percent were offered treatment but did not receive it; and 23 percent were not offered treatment.[38]

Shares of parents completing treatment are similarly low. An Oregon-based study found that both before and after implementation of the Adoption and Safe Families Act of 1997, about one-third of mothers involved with the child welfare system who entered substance abuse treatment completed their first treatment episode; about half completed any treatment episode within a three-year observation window.[39] A more recent study found that among parents with substance abuse problems and children in foster care, only 22 percent completed treatment.[40]

To upgrade identification of substance abuse problems and improve treatment access for parents in the child welfare system, service organizations in both child welfare and substance abuse treatment have increasingly adopted programs or policies that encourage or mandate inter-agency collaboration. For example, child welfare caseworkers are sometimes required to involve substance abuse treatment providers in service planning, or substance abuse treatment counselors may be required to enlist child welfare caseworkers in client engagement. Nevertheless, interagency collaboration in child welfare and substance abuse treatment has proven difficult to achieve.[41] Organizational policies promoting collaboration have not always been sufficient to establish widespread changes in staff collaborative practices.[42]

As states and localities work to promote collaboration among child welfare and substance abuse services, evidence suggests that adopting organizational policies or rules regarding collaboration may result in uneven implementation among front-line staff.

One such collaborative approach is a "cooperative interagency relationship" implemented in Montgomery County, Maryland, during the late 1990s. The collaboration between county child welfare and substance abuse services involved information sharing, cross-training and internal supports, new service standards to assure quality, and new protocols and standards for assessment, referral, and follow-up. A key aspect of the effort was the co-location of a substance abuse specialist at the county's central child welfare office. The substance abuse liaison consulted with child welfare staff on substance abuse cases, helped intervene with substance abuse cases,

and facilitated substance abuse referrals for child welfare clients. After three years, evaluation measures indicated that child welfare workers had increased their consultation with and involvement of substance abuse specialists in their cases.[43]

Another intervention emphasizing interagency collaboration is the Engaging Moms Program, which promotes treatment entry and engagement among low-income mothers who used crack cocaine.[44] In one evaluation, mothers of infants were randomly assigned to Engaging Moms or to regular services. The evaluation found that mothers in Engaging Moms were more likely than those receiving regular services both to enter treatment (88 percent, as against 46 percent) and to stay in treatment for at least four weeks (67 percent, as against 38 percent). After 90 days, however, rates for the two groups had become more similar (39 percent of the Engaging Moms group were still in treatment, compared with 35 percent of the regular services group). Whether the Engaging Moms Program, which was run by university researchers, could be transferred to community practice settings is uncertain, but the evaluation illustrates the program's promise for promoting treatment entry and short-term retention while underscoring the challenges associated with long-term treatment retention among mothers of young children.

As states and localities work to promote collaboration among child welfare and substance abuse services, evidence suggests that adopting organizational policies or rules regarding collaboration may result in uneven implementation among front-line staff.[45] Given individual influences on the implementation of organizational dictates, states and localities adopting pro-collaboration policies and programs should communicate their goals effectively and convince front-line staff of their value.

How Effective Is Substance Abuse Treatment in Preventing Maltreatment Recurrence?

Concerted efforts to link clients with treatment sometimes fall short of the goal of preventing subsequent maltreatment, either because of problems with program attendance or because of the nature of the services provided. Barbara Rittner and Cheryl Davenport Dozier[46] studied a sample of children with maltreatment allegations who either remained at home under court supervision or were placed with relatives. In about half the cases, a caregiver was mandated by the courts to attend substance abuse treatment. After rating the caregivers for treatment compliance and tracking the cases for eighteen months, the researchers found no correlation between caregivers' treatment compliance and subsequent child maltreatment. In the researchers' view, the findings raise questions about whether mandated treatment can prevent subsequent maltreatment and whether the treatment is of sufficient quality to help parents. Reflecting on the study findings, the researchers speculate that child welfare caseworkers may rely too heavily on indications of caregiver treatment compliance and give too little attention to family functioning and other indicators of child safety.

In an investigation with related findings,[47] researchers studied an urban sample of children following an initial CPS report of maltreatment. All the children in the sample were living in families that received public assistance. Those in families that also received Medicaid-funded substance abuse or mental health services before the first CPS report were about 50 percent more likely to

have a subsequent maltreatment report within seven years than were children in families that had not received the services. The study findings suggest an increased risk of maltreatment among families with substance abuse or mental health problems even when compared with other families involved with child welfare services. The findings also raise questions about the effectiveness of substance abuse and mental health services in preventing child maltreatment.

An evaluation of a treatment service program for women who used drugs during pregnancy lends support to the argument that treatment compliance, per se, may not be enough to promote child safety.[48] The evaluation found that program attendance was not related to subsequent maltreatment reports—mothers who attended more sessions were about as likely to have subsequent maltreatment reports as mothers who attended fewer sessions—but completion of treatment goals reduced chances of a subsequent report. That is, mothers who attained treatment goals were less likely than those who simply attended treatment sessions to have a subsequent maltreatment report. The authors argue that full and "genuine" engagement in treatment may be associated with child safety.

Uncertainties about whether substance abuse treatment services can prevent subsequent maltreatment are also reinforced by a series of studies using data from the National Study of Child and Adolescent Well-Being (NSCAW) involving children reported to CPS who remained at home.[49] Aware that the apparent benefits of treatment can often reflect the characteristics of the clients who access, enter, and attend treatment rather than the net effects of the services received, researchers matched caregivers according to characteristics that indicated a need for substance abuse treatment using propensity score methods. Among in-home caregivers matched on need for treatment, those who received treatment services were more likely than those who did not to incur a subsequent maltreatment report within the next eighteen months. In addition, children of the in-home caregivers who received treatment had lower well-being scores than children of caregivers who did not receive treatment. Questions raised by such perplexing findings are further discussed below.

Do Substance Abuse Interventions Promote Family Reunification?

Failure to engage parents in drug recovery services or to prevent the recurrence of maltreatment will usually precipitate the children's removal from parental custody and placement into foster care. In these circumstances, attention turns to encouraging or compelling parents to attain sobriety or total abstinence so that the children can safely be restored to their care. The shock of child removal is thought to provide a sufficient incentive for parents to engage in treatment[50] to avoid permanent separation from their children through continued state custody or termination of parental rights.

A statewide long-term study of substance-abusing mothers in Oregon[51] found that the more quickly mothers entered treatment and the more time they spent in treatment, the fewer days their children spent in foster care. Also, children of mothers who completed at least one treatment episode were more likely to be reunified with their parents than were children whose mothers did not complete treatment.

In an effort to boost reunification rates among children taken from substance-involved parents, the Illinois Department of Children

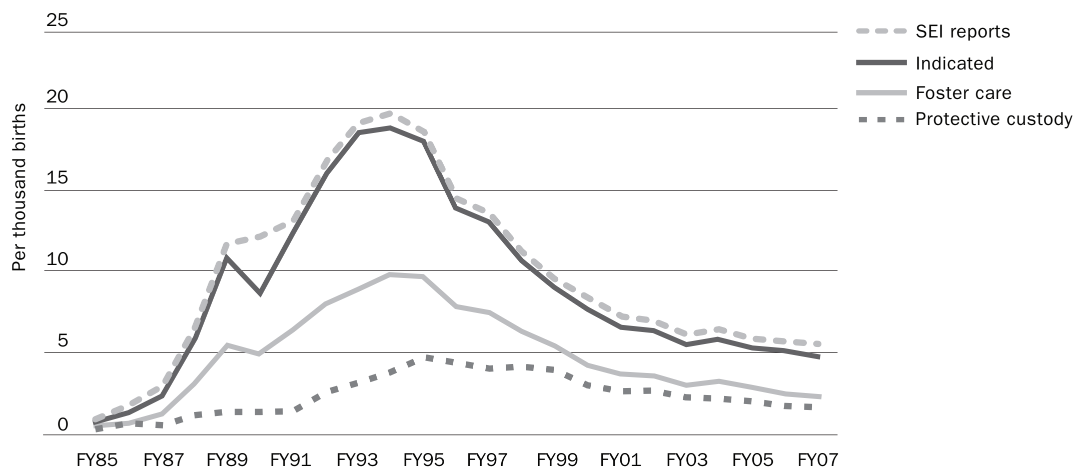
and Family Services secured federal permission to fund a randomized controlled trial of a state-funded enhanced services program that previous quasi-experimental findings suggested showed promise. The Illinois demonstration was initially implemented in Cook County (which includes the city of Chicago) in April 2000. The demonstration randomly assigned Illinois Performance-Based Contracting agencies to treatment and comparison conditions. Parents were referred on a rotational basis to these agencies and subsequently screened for drug abuse problems. Eligible parents assigned to the comparison condition received the standard substance abuse services. Those assigned to the treatment condition received the standard services plus a package of enhanced services coordinated by a "recovery coach." The recovery coach worked with the parents, child welfare caseworker, and AODA treatment agency to remove barriers to drug treatment, engage the parents in services, provide outreach to re-engage the parent if necessary, and provide ongoing support to the parent and family throughout the permanency planning process.

The final results from the independent evaluation[52] showed that assignment of a recovery coach only marginally increased parental participation in drug treatment (84 percent versus 77 percent, not significant) but that 43 percent of the treatment group managed to complete at least one level of treatment compared with 23 percent of caregivers in the comparison group. The higher rate of completion in the treatment group helped to boost the difference in reunification rates between the treatment and comparison groups by a small but statistically significant difference of 3.9 percentage points (15.5 percent versus 11.6 percent). Although this difference was compelling enough for federal officials to grant Illinois a five-year extension to expand the demonstration to downstate regions, the failure of the sizable difference in treatment completion rates to carry over to a larger difference in reunification rates prompted a closer look at some possible explanations for the shortfall.

An investigation by Jeanne Marsh and several colleagues[53] found that although completing at least one level of treatment helped to boost reunification rates, only 18 percent of participants in the Illinois demonstration completed all levels of treatment. Furthermore, besides substance abuse, participants faced other serious problems, such as domestic violence, housing, and mental illness. Only 8 percent of participants had no other problem besides substance abuse; 30 percent had at least one other problem; 35 percent had two other problems; and 27 percent had three or more. Parents whose only problem was substance abuse achieved a 21 percent reunification rate, while parents with one or more other problems achieved only an 11 percent rate. Reunification rates were highest among the 5 percent of participants who completed mental health treatment (41 percent) and next highest among the 10 percent of participants who solved their housing problems (12 percent). Of the 18 percent of participants who completed all levels of drug treatment, only 25 percent regained custody of their children. The authors concluded that a service integration model designed to increase access to substance abuse treatment will not successfully promote reunification unless outreach and retention services can ensure client progress in the three co-occurring problem areas as well as in completing substance abuse treatment.

In another area, preventing subsequent substance-exposed infant (SEI) reports,

Figure 1. Birth Cohorts of Substance-Exposed Infant (SEI) Reports, Indicated Reports, Protective Custody Taken, and Foster Care Placements per Thousand Births in Illinois, Fiscal Years 1985–2007



assignment of a recovery coach was linked with a reduced likelihood of recurrence. At baseline, 69 percent of parents randomly assigned to the treatment group had previously delivered an infant reported for intrauterine substance exposure compared with 70 percent in the comparison group. After at least eighteen months of follow-up, 21 percent of parents assigned to the comparison group experienced a subsequent SEI report compared with 15 percent in the treatment group.[54] Prior SEI reports were most strongly associated with the hazards of subsequent SEI reports. Parents with prior SEI reports were seven times more likely than those without reports to experience the birth of a child reported for intrauterine substance exposure. Parents randomly assigned to the comparison group were 1.4 times more likely than those assigned to the recovery coach treatment to have a subsequent SEI report. Despite the lowered risk in the treatment group, the fact that 15 percent of mothers assigned a recovery coach experienced a subsequent SEI report further compounds the permanency planning dilemma—whether to continue investing in the uncertain outcomes of drug recovery and family reunification or to cut the process short by terminating parental rights and proceeding with adoption or other planned permanency arrangements such as legal guardianship and long-term placement with extended kin.

Substance-Exposed Infants: The Case of Illinois

As noted, two decades ago Illinois became one of the first states to make the presence of illegal drugs in newborns prima facie evidence of abuse and neglect. It enacted legislation that expanded the definition of abused or neglected minor to include newborns whose blood, urine, or meconium contained any amount of a controlled substance or its metabolites. The mandate helped to fuel a rise in the number of SEI reports that peaked at 20 per thousand births in fiscal year 1994 (see figure 1). More than 90 percent of reported SEI cases were subsequently indicated for maltreatment because a positive toxicology report meets the credible evidence standard that abuse or neglect has occurred. The proportion of substance-exposed infants who were taken immediately into protective

custody (PC) lagged behind the steep rise in reports and hit its highest point in 1999 with 41 percent of reports triggering the state's removal of the infant at birth. Currently the proportion of protective custodies hovers around 33 percent of SEI reports. The risk of removal, however, does not end with the child's birth. Substance-exposed infants run a high risk of being placed in foster care throughout their early childhood.

Figure 1 also charts the foster care rates as of March 30, 2008, among successive cohorts of children born substance-exposed from fiscal years 1985 to 2007. The rate of foster care was highest among the cohort of children born in fiscal year 1994. Of the 2 percent of infants reported as substance-exposed during that year, the proportion that was later taken into foster care for any reason reached 50 percent as of March 2008. Among all birth cohorts, the removal proportion hit a high of 56 percent among children born substance-exposed during fiscal year 1999. Since that time, the proportion has stabilized at around 50 percent for recent birth cohorts.

There was some debate in Illinois over whether the drop in SEI rates after fiscal year 1994 mirrored a decline in maternal drug abuse or instead simply reflected changes in hospital surveillance practices. In Illinois, children are not universally screened at birth for substance exposure. Each hospital differs in its protocols as to what risk factors—for example, no prenatal care, past drug use, low birth weight—warrant ordering a drug test. As a result, concerns arose that publicly funded, inner-city hospitals were using protocols that resulted in more drug testing than the protocols used by privately insured, suburban hospitals, thus bringing African American infants disproportionately to the attention of CPS. For example, approximately 59 percent of Illinois infants born in 1995 were non-Hispanic whites and 20 percent were African Americans. In that same year, approximately 12 percent of SEI reports involved non-Hispanic white infants while 83 percent involved African American infants. These figures translate into a disproportionality ratio of twenty SEI reports on black infants for every one report on a white infant. The disproportionality ratio was the same when black infants were compared with Hispanic infants.

By 2002, the disproportionality ratio in Illinois had fallen to seven SEI reports on black infants for every one report on a non-Hispanic white infant. The entire decline in racial disproportionality was explainable by the 64 percent drop in black SEI rates from 65.9 per thousand births in 1995 to 23.9 per thousand births in 2002. During the same period, Hispanic SEI rates also fell by 61 percent, from 3.2 per thousand births in 1995 to 1.2 per thousand births in 2002. In contrast, SEI rates rose slightly among non-Hispanic white infants, from 3.2 to 3.5 per thousand births. While it cannot be discounted that the large SEI decline among African Americans reflected an actual drop-off in the prevalence of parental drug abuse from its epidemic levels in the early 1990s, the concomitant decline among Hispanics but not among majority whites suggests that changes in drug surveillance practices, particularly in the inner city, may have also figured in the SEI decline.

During the years when SEI reports were climbing in Illinois, child welfare advocates and drug professionals were calling for the expansion of drug treatment programs for women and children. After the fall-off in report rates, attention turned to treatment retention and the completion of services. The

shift in focus from program availability to service completion reflected both the aforementioned decline in SEI levels as well as new insights gained from the tighter collaboration between drug and child welfare professionals in the state.

In 1997, the independent evaluators of a joint initiative between the Illinois Department of Children and Family Services and the Illinois Department of Alcohol and Substance Abuse were forced to drop the intended "no treatment" comparison group from their quasi-experimental study because they unexpectedly discovered that nearly three-quarters of their intended control group had in reality received some kind of substance abuse treatment.[55] In their peer-reviewed article,[56] the authors instead focused on the differences between women who received regular treatment services and those who received enhanced treatment services that provided special outreach and case management services as well as transportation and child care services to lower the barriers that prevent mothers from succeeding in treatment. The results of the evaluation linked participation in the enhanced services program with lower self-reported drug use but, surprisingly, linked better access to transportation and child services with higher use. The authors concluded that clearly something else besides access to services made the enhanced service program more effective.[57]

Also in 1997, early results from the Illinois Performance-Based Contracting Initiative showed providers were far less successful in achieving permanence for children by reunification than they were by adoption or guardianship.[58] Analysis of permanency outcomes showed that reunification rates were particularly low among children born substance-exposed. Of the 1,859 substance-exposed infants in fiscal year 1994 who were ever removed, less than one-fifth (18 percent) were reunified with birth parents, whereas two-thirds were adopted (65 percent) and one-tenth were taken into subsidized guardianship. Also of concern were the racial disparities in family preservation and reunification patterns. Of all SEI reports in fiscal year 1994, only 55 percent of black infants were retained in or ever returned to parental custody compared with 71 percent of non-Hispanic white infants and 73 percent of Hispanic infants.

Might Other Interventions Better Address the Risk of Child Maltreatment?

In the spring of 2008, the *Chicago Tribune* ran a story about a recent graduate of Morehouse College under the headline: "Proof Positive of Flawed Data." It told the story of a Rhodes Scholarship finalist who was born substance-exposed at the start of the SEI epidemic in Chicago in 1986, "among a wave of inner-city babies exposed to crack in their mother's womb, children written off by much of society as a lost generation doomed to failure."[59] The article asserted that the drug panic was fueled by flawed data that warned of neurologically damaged and socially handicapped children that would soon flood the nation's schools and, later on, its prisons.

More recent opinion has backed away from such dire predictions. Much of the earlier work failed to consider the myriad of adverse social, environmental, and other factors that confound the association between parental substance use and impaired childhood growth and development. Barry Lester was among the first researchers to note that early studies of substance-exposed infants over-

estimated the effects of cocaine exposure by attributing to cocaine adverse effects that were probably related to other influences such as multiple-drug use, poverty, or cigarette smoking.[60] The challenges associated with identifying specific effects of prenatal cocaine exposure, along with the wide-ranging findings of research on the topic, led a group of leading researchers, including Lester, to argue publicly that no particular set of symptoms supports the popular notion of a "crack baby" syndrome.[61] They asked the media to stop using the stigmatizing term.[62]

Recently, however, Lester has noted that some well-designed studies that control for a range of influences are identifying some apparent effects of prenatal cocaine exposure that may even increase over time.[63] The studies suggest that prenatal cocaine exposure may have neurological effects that become visible only when "higher level demands are placed on the child's cognitive abilities."[64] Lester argues that just as it was initially a mistake to overstate the effects of prenatal cocaine exposure, it would also be a mistake to overlook potential effects that are still largely unknown and warrant further research.

A recent study in Atlanta, Georgia, helps to isolate the effects of prenatal cocaine exposure from the effects of the caregiving environment.[65] The researchers compared cocaine-exposed infants who remained with their mothers and cocaine-exposed infants placed with alternative caregivers. At two years old, despite having more risk factors at birth, the toddlers with non-parental caregivers had more positive cognitive-language and social-emotional outcomes than did the toddlers living with their parents. Outcomes for the cocaine-exposed toddlers with non-parental caregivers were even slightly more positive than for other toddlers in the study who had not been exposed to cocaine and remained with their mothers. The results underscore the importance of a nurturing caregiving environment for children's well-being and illustrate that efforts to identify and isolate effects of prenatal cocaine exposure must account for the caregiving context.

In the absence of a definitive link between intrauterine substance exposure and developmental harm, it is difficult to justify categorizing such exposure as a form of child abuse and neglect in its own right. At the same time, it would be imprudent to back off entirely from drug screening at birth. Although some of the higher association of intrauterine substance exposure with subsequent maltreatment is clearly self-referential—that is, drug addicts are more likely to be indicated for future child maltreatment than non-addicts simply because ingestion of illicit substances during pregnancy is itself a reportable allegation—an indicated SEI report is still a useful marker of future risk.[66] SEI reports are correlated with mental illness, domestic violence, poverty, homelessness, and other disadvantages that may be more directly associated with child maltreatment. The major inadequacy with existing hospital surveillance practices is that screening is done selectively in such a way that puts African American infants at disproportionate risk of CPS detection and involvement.

Universal screening of all births for substance exposure may be one way to address the inequities in the current process, but targeting illicit substances for special attention may serve only to reify the belief that drug treatment, recovery, and abstinence mark out the best route for ensuring child safety and justifying family reunification. Attending to

this one visible manifestation of an underlying complex of family and personal problems can give the false impression that complying with treatment regimes and demonstrating prolonged abstinence are sufficient for deciding when to move forward with reunification plans. But the best evidence to date suggests that successful completion of drug treatment is no better a predictor of future maltreatment risk than non-completion.[67] Caseworkers and judges seem to have learned this lesson from their own experience because only one-quarter of participants who successfully completed drug treatment in the Illinois AODA demonstration were eventually reunified with their children.

Conversely, parental failures to comply with treatment plans and to demonstrate abstinence may be imperfect indicators of their capacity to parent their children at a minimally adequate level. The best evidence to date suggests that parents of substance-exposed infants pose no greater risk to the safety of their children than parents of other children taken into child protective custody.[68] Caseworkers and judges may thus want to consider implementing reunification plans some time after parents engage successfully in treatment but before they demonstrate total abstinence from future drug use. Perhaps the best course of action is to take the spotlight off of parental drug abuse and treatment completion and shine it instead on other co-factors, such as mental illness, domestic violence, and homelessness, that may be more directly implicated in causing harm to a child. A shift of attention from substance abuse to other risk factors could have the additional benefit of reducing stigma and the conflict parents may face if they fear that admitting substance abuse or asking for help with an addiction will lead to loss of child custody.

Although clearly more can be done to improve the integration of services to address the myriad of family and personal problems, such as mental illness, domestic violence, and homelessness, that, along with substance abuse, impair parenting, at some point in the intervention process attention needs to turn to the permanency needs and well-being of the child. Even though the young man profiled in the *Chicago Tribune* story was one of the 50 percent of substance-exposed infants who were never taken into foster care, by his own account life was not easy for him: "Mom would get drunk and hit me. I had to call the cops and send her to the drunk tank a couple of times."[69] Things finally turned around when his aunt, a Chicago Public Schools administrator, took him into her home at age fourteen: "My aunt's house was a place of peace. She gave me a place that allowed me to grow. She had books everywhere, even in the bathroom."[70]

Both personal accounts and the best research evidence indicate that finding a safe and lasting home for children born substance-exposed is critical to their healthy development and well-being. As of December 2007, however, only 39 percent of children assigned to the treatment group under the Illinois AODA demonstration had exited from foster care, compared with 36 percent in the comparison group. Not only does this small, albeit statistically significant, difference raise concerns about the advisability of heavily investing in recovery coach services, it raises additional questions about the permanency needs of the remaining 61 to 64 percent of drug-involved children who are still in foster care. Because the average age of children born substance-exposed who are removed from parental custody is less than three, it should not be too challenging to find them permanent homes with relatives either as

guardians or as adoptive parents or with foster parents who are willing to become their adoptive parents. Although it is unwise to set too firm guidelines, it strikes us as sensible to set a six-month timetable for parents to engage in treatment and twelve to eighteen months to show sufficient progress in all identified problem areas (presuming that both engagement and progress are determined with fair and valid measures). Thereafter, permanency plans should be expedited to place the child under the permanent guardianship of a relative caregiver or in the adoptive home of a relative, foster parent, or other suitable family. As regards the birth of another substance-exposed infant, it seems reasonable, assuming the availability of services, to initiate alternative permanency plans for all of the children unless the parent demonstrates sufficient progress in all problem areas within six months of the latest child's birth.

In light of the difficulty of isolating the direct effects of prenatal substance abuse and the most recent evidence that some detrimental effects of intrauterine substance exposure on child development may increase over time, the newest empirical findings on the efficacy of Illinois' recovery coach model in decreasing births of substance-exposed infants helps to bolster the case for improved treatment and service coordination regardless of whether intrauterine substance exposure is considered a form of child maltreatment in its own right. Preventing another potential risk to future child well-being, even if parental substance abuse and intrauterine substance exposure prove not to be determinative of child maltreatment directly, seems well worth the cost of investing in parental recovery from substance abuse and dependence. Such efforts, however, should not substitute for a comprehensive approach that addresses the myriad of social and economic risks to child well-being beyond the harms associated with parental substance abuse.

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The Prevention of Childhood Sexual Abuse

David Finkelhor

Summary

David Finkelhor examines initiatives to prevent child sexual abuse, which have focused on two primary strategies—offender management and school-based educational programs. Recent major offender managment initiatives have included registering sex offenders, notifying communities about their presence, conducting background employment checks, controlling where offenders can live, and imposing longer prison sentences. Although these initiatives win approval from both the public and policy makers, little evidence exists that they are effective in preventing sexual abuse. Moreover, these initiatives, cautions Finkelhor, are based on an overly stereotyped characterization of sexual abusers as pedophiles, guileful strangers who prey on children in public and other easy-access environments and who are at high risk to re-offend once caught. In reality the population is much more diverse. Most sexual abusers are not strangers or pedophiles; many (about a third) are themselves juveniles. Many have relatively low risks for re-offending once caught. Perhaps the most serious shortcoming to offender management as a prevention strategy, Finkelhor argues, is that only a small percentage of new offenders have a prior sex offense record that would have involved them in the management system. He recommends using law enforcement resources to catch more undetected offenders and concentrating intensive management efforts on those at highest risk to re-offend.

Finkelhor explains that school-based educational programs teach children such skills as how to identify dangerous situations, refuse an abuser's approach, break off an interaction, and summon help. The programs also aim to promote disclosure, reduce self-blame, and mobilize bystanders. Considerable evaluation research exists about these programs, suggesting that they achieve certain of their goals. Research shows, for example, that young people can and do acquire the concepts. The programs may promote disclosure and help children not to blame themselves. But studies are inconclusive about whether education programs reduce victimization. Finkelhor urges further research and development of this approach, in particular efforts to integrate it into comprehensive health and safety promotion curricula.

Finkelhor also points to evidence that supports counseling strategies both for offenders, particularly juveniles, to reduce re-offending, and for victims, to prevent negative mental health and life course outcomes associated with abuse.

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Megan's Law. Jessica's Law. The Adam Walsh Act. These high-profile, recent public policy initiatives aimed at protecting children from sex crimes have all focused on how to manage known sex offenders. The initiatives include efforts to control where such sex offenders can live and work, how they are registered and monitored, and the length and terms of their incarceration.[1]

Bluntly put, this policy area has been discouraging for practitioners and social scientists favoring evidence-based prevention. None of these high-profile strategies has been built on empirical evaluation, and virtually all have gone to national scale without research or even much pilot testing.[2] Several have been legislated and implemented over the objections of sex-offender management authorities. They may yet be shown to have some positive effects, but they also appear to be creating many serious fiscal, bureaucratic, and legal problems, as well as having other unintended negative consequences.[3] It will be years before this is all sorted out.

Meanwhile, another less visible stream of prevention strategies that derive from the 1980s focuses on education and consists mostly of programs that teach children, families, and youth-serving organizations how to prevent and respond to sex offenses and risky situations.[4] These initiatives have been subjected to more evaluation research, though results are as yet inconclusive. The findings are generally positive, suggesting that educational programs achieve certain of their goals, but the research has not demonstrated unambiguously that the programs reduce victimization.[5] These programs have considerable, though not universal, support among practitioners, but their implementation has languished in recent years.

As a whole, it would have to be said that, as yet, no true evidence-based programs or policies exist in the area of preventing child sexual abuse.

Yet in spite of the evidentiary chaos, philosophical disagreement, and meager evidence base in this policy area, sex crimes against children have declined dramatically since the early 1990s, in concert with overall crime declines and other child welfare improvements. This is undeniably good news, suggesting that something is helping. But it is hard to ascertain whether any of the organized prevention initiatives have contributed to this decline.

The Prevention of Child Sexual Abuse

In this article I will briefly review organized prevention efforts, both those relating to offender management and those related to educational programs, as well as several other initiatives, noting in particular the evaluation evidence relevant to each. I will also discuss some developing areas for prevention, try to draw implications from the sex crime decline, and conclude with some recommendations.

Definitions

For purposes of this review, I define child sexual abuse to include the entire spectrum of sexual crimes and offenses in which children up to age seventeen are victims. The definition includes offenders who are related to the child victims as well as those who are strangers. It includes offenders who are adults as well as those who are themselves children and youth. It includes certain kinds of non-contact offenses, such as exhibitionism and using children in the production of

pornography, as well as statutory sex crime offenses, in addition to the sexual fondling and penetrative acts that make up a majority of the cases. I will refer to the offenders variously as child molesters, sexual abusers, and child sex offenders.

Basic Epidemiology

According to widely cited meta-analyses based on surveys of adults, sizable proportions of U.S. adults report a history of sexual abuse—30–40 percent of women and 13 percent of men in one analysis,[6] 25 percent of women and 8 percent of men in another.[7] In light of evidence that sexual abuse rates have declined in the past fifteen years, however, these estimates should probably not be applied to current cohorts of children.

Crime and abuse data are most frequently and accurately presented in terms of annual rates. One recent national victim survey estimated that 3.2 percent of children aged two to seventeen were sexually victimized in a single year (2002).[8] In terms of cases known to authorities, aggregated data show that child protection authorities substantiated 78,000 cases of sexual abuse nationally in 2006.[9] No data source aggregates the number of cases known to child protection authorities and those known to law enforcement.

Studies of risk factors for sexual abuse show girl victims outnumbering boys. For girls, risks rise with age; for boys, they peak around puberty.[10] Other risk markers for child victimization include not living with both parents and residing in families characterized by parental discord, divorce, violence, and impaired supervisory capacities. Histories of sexual abuse are strongly associated with adverse social, psychological, and health outcomes in both retrospective and prospective studies.[11] Offenders are overwhelmingly male, ranging from adolescents to the elderly. There are two life-stage peaks in onset for offending, one during adolescence, when delinquent behavior rises generally, and one during the thirties, when access to children again becomes more common.[12]

Justice System Strategies

Orthodox "preventionists" do not typically favor criminal justice system approaches because they are "tertiary" strategies, applied after the harm has already occurred, and are often expensive. But justice system approaches to sexual abuse have captivated public and policy attention and, for that reason alone, cannot be ignored. Moreover, practitioners committed to their application believe that they have "primary prevention" effects, because in theory the fear of swift, certain, and serious punishment by the justice system will deter the abuse before it happens.

One fundamental problem regarding prevention policy in the justice system is that it is based on an overly stereotyped and generally mistaken characterization of the offender population.[13] The stereotype typifies child sexual abusers as exclusively adult men who are sexually oriented to pre-pubescent children (that is, pedophiles) and who thus are strongly motivated to offend. These men are seen as being guileful and skilled in relating to children, likely to prey on children they encounter in public environments, generally resistant to treatment, deterrence, or rehabilitation, and thus highly likely to offend again.

The well-publicized behavior of a worrisome core of offenders has helped reinforce this stereotype. Overall, the sex abuser population is much more diverse and less uniformly insidious and intractable than the stereotype might suggest. First, most abusers are

probably never caught, arrested, and convicted,[14] which limits generalizations about this population. But among those who are, most are not pedophiles. In fact, about half of all victims are post-pubescent, ranging in age from twelve to seventeen,[15] so that most of their offenders would not qualify as pedophiles. Moreover about a third of offenders against juveniles are themselves juveniles (an even larger share of the offenders against young juveniles are juveniles).[16] These young offenders are also not pedophiles, but include a mixed group of generally delinquent youth and youth who engage in somewhat impulsive, developmentally transitory behavior.[17] Even among adults who victimize children under thirteen, at least a third or more do not qualify as pedophiles.[18] The equation of sexual abuse with pedophilia is thus misleading.

The notion that molesters use public venues or approach unknown children is also misleading. Among victims of sexual abuse coming to law enforcement attention, more than a quarter are victimized by a family member, while 60 percent are abused by someone else from their social network. Only 14 percent are victimized by someone they did not already know.[19] Also in defiance of the child sexual abuse stereotype, as many as one-third of all adult offenses against juveniles are estimated to involve what have been called "compliant victims" or "statutory sex offenses." Such offenses involve teens who have quasi-voluntary sexual relationships with much older adults, the dynamics of which can range from manipulation and seduction by the adult to aggressive initiation by the teen.[20] These are crimes with negative effects on youth and society as whole, but their dynamics differ from the stereotype of child molesting.[21]

The belief that child sexual abusers are incorrigible recidivists is also an oversimplication. In reality, the overall re-offense rate for child molesters is lower than that for other criminals. Some studies find that the likelihood of recommitting sex offenses is strikingly low. In Washington state, for example, 2.8 percent of offenders recommitted a sexual offense, and 24.5 percent recommitted any offense over five years. By contrast, other felony offenders had a 48 percent re-offense rate for all offenses.[22] Meta-analyses that aggregate the findings of many studies estimate that 14 percent of sexual offenders commit another sexual re-offense after five years, 24 percent after fifteen years.[23] Sexual recidivism rates for juvenile offenders and family offenders are considerably lower than the overall rate, while rates for offenders against boys tend to be higher. Child molesters are more likely to be educated and employed than other criminals, which researchers believe may help explain their relatively lower recidivism. In sum, the child sex offender population is diverse. It ranges from a small group with a serious pathology and high recidivism risk to a larger group, including other youth, whose offending may be situational or transitory and who pose a lower risk. Practitioners have available a variety of tools to assess the risk for re-offending. Although these tools are far from foolproof, they perform about as well as any social-scientific prediction instruments and have been improved in recent years.[24]

The major criminal justice policy initiatives of recent years have set up registration systems for offenders, notified communities about their presence, required background checks for employment and volunteer opportunities, controlled where sex offenders can live, and lengthened their sentences. Less prominent efforts have increased detection and arrest, provided mental health treatment to

offenders, and enhanced their integration into the community. Despite wide implementation of these strategies, however, researchers have formally evaluated few of them. Still, some evidence about their success exists, and certain extrapolations can be made from similar policies in other crime domains. In the next section I discuss some of these strategies and the evidence concerning them.

The belief that child sexual abusers are incorrigible recidivists is also an oversimplication. In reality, the overall re-offense rate for child molesters is lower than that for other criminals.

Offender Registration

All states now have electronic sex offender registries. One goal of these registries is to allow more rapid apprehension of re-offenders; another is to prevent crime by deterring existing and future offenders. Some observers, though, argue that registration, like a lot of offender management practices, makes it harder for offenders to reintegrate into society and violates the rights of those who have already paid their debt to society, particularly those forced to register retroactively.

Evidence. Registries were implemented during the late 1990s, after crime had already begun declining, making it unlikely that registries are the primary factor in that decline, although they may have contributed. Cohort and case control studies show mixed results, but some have positive, if very conditional, findings. One time-series analysis, for example, found that registration laws had deterrence effects, specifically among offenders who knew their victims or lived near them. But though the study linked registration with reduced offending among first-time offenders, it found increased offending among those who were already registered, suggesting a possible boomerang effect from the stigma (increased difficulty finding jobs and housing, for example).[25] Another study looked at offending rates in ten states before and after registration laws had been implemented. Six states saw no statistically significant change; in three, sex crime went down; in one (California) sex crime increased considerably.[26] An evaluation in Washington state found lower recidivism rates among offenders who were in compliance with the registration laws than among non-compliant offenders, but the finding may have nothing to do with the effect of registration itself.[27] Another study also found a non-significantly lower recidivism rate for registrees, with a greater effect for felons than for misdemeanants.[28]

Summary. Registration has not been adequately analyzed even by relatively low-quality studies. One can point to a few findings suggesting that registration helps, but also null findings and at least some suggesting negative effects. Analysts have found high rates of non-compliance with registries, and legislatures have recently tried to increase penalties for non-compliance and to bolster enforcement. Before imposing such increased costs in the form of policing and incarceration, however, it would be wise to be more confident about the utility of registration. The issue is complicated by the arguments of some analysts that the public wants to know where sex offenders are, whether or not registration reduces sex

crime. These arguments suggest that researchers should also investigate the effects of registration on public confidence in authorities and on the public's sense of safety.

Community Notification

Although community notification and registration are often implemented and studied together, community notification is in reality a separate policy. Many registries were developed originally as resources for police. Only later were policies developed (promoted by Megan's Law in 1996) to inform the community in general and neighbors in particular of the whereabouts of offenders. In some states law enforcement goes door to door, makes calls, and posts handbills. In theory such notification allows community members to take steps to protect themselves against specific offenders in their midst. It may also help law enforcement to educate the public about how to protect children in general. Once again, critics say that it may inhibit the reintegration of offenders into society and result in more transience, maladjustment, and deviant behavior.

Evidence. No high-quality studies exist, and the correlational studies have mixed results. A Washington state study found that reoffending fell after notification was implemented but was not able to disentangle the decline from the overall downward trend in crime and other factors.[29] A Minnesota study found a significant decline in sex offense recidivism among the highest-risk offenders after a community notification law was implemented.[30] A Wisconsin study found no effect of notification on whether offenders were recommitted to prison.[31] A New Jersey study found no demonstrable effect in reducing sexual re-offenses; it also found escalating implementation costs.[32] Researchers have, though, shown that notification makes families more likely to take steps to protect themselves. And public opinion surveys have generally found the public to favor notification laws.[33] Law enforcement personnel appear less favorable, because of the work involved and because of the belief of probation and parole officials that notification complicates their efforts to find jobs and housing for offenders.[34] Studies have documented the difficulties offenders have in finding jobs and places to live, and in avoiding harassment,[35] when their status is made known. It is unclear how much community notification aggravates these problems.

Summary. Community notification has not been well studied. Correlational studies have found some links between notification and reduced offending,[36] but because crime rates have been declining generally, it is impossible to be certain what role notification has played. Nonetheless, notification policies appear to be popular with the public, who want to know where sex offenders are. Although informed citizens do appear to take some protective steps, it may be that their anxiety is unnecessary in most cases. Nor is it clear that the steps that families take are effective or based on a true understanding of the dynamics of sex offending. Community notification seems to be based primarily on the belief that the danger is posed by strangers, who are in fact a minority of offenders. If community notification takes time away from other more effective things that law enforcement would otherwise be doing, it could be counterproductive.

Mandatory Background Checks

Public offender registries have made it possible to identify potential offenders who may be applying to work or volunteer in various businesses and organizations. Searches are increasingly expected or required as part

of standard employment practices. In theory these searches bar dangerous people from youth-serving environments and discourage others with records from applying. They impose costs, however, particularly on volunteer nonprofits, and questions have been raised about whether they in fact create safer environments. They may also disqualify otherwise useful volunteers or employees with minor offense records who pose little risk.

Evidence. The true benefits and costs of background checks have not been systematically researched. The private company with the largest franchise for background checks has reported, after five years of screening 3.7 million names, that about 5 percent had a criminal record of any sort and that 0.3–0.4 percent were registered sex offenders.[37] It is not clear that those detected with criminal or sex offenses were being screened for work in child-serving organizations, because many other employers use these checks.

Summary. Conducting background checks has become such standard practice that it is not clear that evidence about their efficacy would have much effect on policy. However, research is still badly needed to help organizations and employers develop and use the results from these checks, because it is not at all clear what kinds of histories among which kinds of individuals indicate an unacceptable level of risk.

Residency Restrictions

Since 2000, many states and localities have rushed to enact statutes and ordinances (often called Jessica's Laws) restricting where sex offenders can live and visit. Thirty states as well as many localities have such statutes, which are purported to protect children in schools, day care centers, and churches from predatory activity by sex offenders.[38] The policies have been widely criticized by sex offender management authorities, who note that in some places it is almost impossible for offenders to find housing. Their increased instability and transiency makes it harder to keep track of offenders and raises the likelihood of re-offending. The restrictions can also have cascading effects, as no community wants to be left standing as a sex offender "haven."

Evidence. These policies have been adopted without any evidence about their efficacy. Critics have pointed to research showing how few offenses originate in contacts of the sort that would potentially be inhibited by such statutes.[39] Other research has pointed to the draconian restrictions such statutes impose on where offenders can live and has documented some increased transiency in the wake of their implementation.[40]

Summary. The logic model behind these restrictions appears fundamentally flawed, given that most sexual abuse occurs within established family and social networks and also that motivated offenders, wherever they happen to live, can go where they wish in search of victims. But because the restrictions have been widely implemented, these laws should be evaluated. Their appeal highlights two unfortunate realities. The public in many places feels or can be readily led to feel inadequately protected by the current policy regime. In addition, law enforcement and sex offender management authorities do not have the credibility or evidence base to temper or thwart misguided populist legislation on sex offender policy.

Sentence Lengthening and Civil Commitment

The period of incarceration for sex offenders has increased substantially over the past

twenty years through mandatory minimum sentences, the abandonment of parole, the use of "three strikes" rules, and longer sentences for many sex crimes. More recently, states have also developed policies under so-called "civil commitment" procedures to continue to hold some persons deemed to be sexually dangerous even after they have served their criminal sentences. Advocates see these measures as reducing the number of offenders at large in the community capable of committing new offenses. They also believe stiffer punishments have deterrent effects. Critics see the measures as requiring huge increases in prison costs for an increasing number of offenders who may not pose a serious risk to the community. The costs of civil commitment may be particularly high because the committed must be kept in separate non-prison facilities.

Evidence. No studies have tested whether sentencing practices have an effect on sex crime. Some studies of crime in general have linked higher incarceration rates with decreasing crime in general.[41] The effect is thought to result more from incapacitation than from deterrence. It is not clear how much of the improvement is achieved through longer sentences and how much through increased apprehension and incarceration of criminals. Meta-analyses on the issue of sentence length suggest that length by itself bears no relationship to the likelihood to reoffend.[42] The high cost of increased incarceration, however, has been well established, as has the declining marginal advantage of incarceration as more people are incarcerated—because each new expansion of the prison population tends to involve more of the less recidivistic offenders.

Summary. It is unclear from current evidence the extent to which longer sentences and civil commitment do or can reduce overall risks of child molestation.

The most elemental thing the criminal justice system can do about a crime is to increase its detection and disclosure and the likelihood that the offender will be arrested and prosecuted.

Enhanced Detection and Arrest

The most elemental thing the criminal justice system can do about a crime is to increase its detection and disclosure and the likelihood that the offender will be arrested and prosecuted. Disclosure can terminate abusive relationships, which are frequently ongoing in child sexual abuse, and prevent future ones. The offenders who are caught, even if they are not incapacitated, are deterred through embarrassment, humiliation, and increased vigilance by members of their social network. Other potential offenders are deterred by the circulation of news that offenders get caught. Law enforcement has indeed increased its staffing and efforts in recent decades to promote disclosure and increase its capacity to investigate (including the use of undercover efforts), arrest, and prosecute. The main criticism of these policies has concerned whether law enforcement has targeted too many minor offenders, such as juveniles or statutory sex crime offenders.

Evidence. No studies have tested whether increased law enforcement efforts to disclose, investigate, and arrest have a deterrent effect

on sex crime offending against children. Some general research on criminology seems to support increased detection and arrest. Regarding drunken driving, robberies, and domestic violence, for example, increased enforcement has had demonstrable deterrent effects.[43] Interestingly, in the domestic violence area the deterrence effects have been limited to employed offenders. This finding is particularly relevant to child sexual abuse, much of which occurs in family and network contexts and involves offenders much more likely to be employed than other felons. In the case of adolescent offenders, however, some research suggests that arrest is linked with increased subsequent offending.[44]

The potential efficacy of detection and arrest is confirmed by evidence that many child sex abusers offend repeatedly before getting caught, but thereafter have relatively low recidivism rates compared with other offenders. Getting caught may thus play a crucial role in desistance.[45] General criminology research tends to confirm that offenders are deterred more by an increase in the risk of getting caught than by an increase in the severity of the likely punishment.[46]

Summary. Thanks to the increased disclosure of child sex abuse to authorities, a crime that once rarely made an appearance in court now dominates court dockets. No research, however, exists about the utility of enhanced detection and arrest. Logic and some research from related fields suggest that it could be helpful in preventing and deterring abuse, but such effects cannot be posited based on current evidence.

Mental Health Treatment

Many practitioners and researchers have advocated in favor of counseling for sex offenders both to increase skills for behavioral self-regulation and to help resolve problems that may underlie the offending. The availability of treatment options has grown, but many offenders still do not receive high-quality treatments. Barriers to such treatment include its expense, the lack of trained therapists, and the public perception that therapy coddles rather than controls offenders.

Evidence. Of all justice system policies, therapy for sex offenders has received by far the most extensive evaluation. In regard to adult offenders, the only evaluation that used the gold-standard experimental design (that is, it divided participants randomly into treatment and no-treatment groups) concerned a relapse-prevention treatment program that in the end proved to have no effect on recidivism.[47] But meta-analyses have identified as many as sixty-nine formal evaluations of treatment and have concluded that treatment reduces sexual re-offending as much as 37 percent.[48] Because these studies were not experimental, however, many observers have reserved judgment.[49] The treatment judged most effective by the meta-analytic studies was cognitive-behavioral therapy, which identifies the habits, values, and social influences that contribute to offending and teaches offenders self-management skills to reduce their risk.

Regarding juvenile sexual offenders, the research evidence is more convincing. Three evaluations using experimental designs have supported the use of Multisystemic Therapy, an intensive family intervention that targets parenting skills, affiliations with delinquent peers, and school problems.[50] Two other experimental studies have shown that cognitive-behavioral therapy can prevent additional reports of abusive or inappropriate behavior by preadolescents who are exhibiting such behavior.[51]

Summary. Treatment does not guarantee public safety, but evidence-supported interventions should clearly be offered to juvenile offenders and youth with sexual behavior problems as a prevention strategy. Therapy for adult offenders may eventually prove effective in preventing additional crimes as well, but additional research is needed.

Community Reintegration and Supervision

Some practitioners have argued for improved ways of integrating and supervising sex offenders when they return to the community to prevent re-offending. An innovative program originating in Canada called the Circles of Accountability and Support recruits and trains five community volunteers for each offender; one meets with the offender daily.

Evidence. An evaluation over four and a half years found that offenders paired with Circles volunteers had a 70 percent lower rate of offending than those not so paired.[52]

Summary. This is a promising idea that could use some additional evaluation.

Criminal Justice Policies: Conclusion

Enormous energy has gone into trying to manage sexual offenders to improve safety for children. The fundamental weakness in management as a prevention strategy is that so few new molestations occur at the hands of persons with a known record of sex offending. Only around 10 percent of new arrests for sex crimes against children involve individuals with prior sex offense records.[53] Because it is likely that known offenders are more readily detected, the share of known offenders responsible for all child molestation overall (detected and undetected) is probably even smaller. Thus even strategies that are 100 percent effective in eliminating recidivism among known offenders would reduce new victimizations only a little.

Nonetheless, criminal justice strategies are highly popular and will continue be implemented. Their strongest justification is that they are widely seen by the public as part of a system that holds people accountable for serious crimes and provides a measure of justice for victims and their families. Such justifications may even trump evidence eventually showing that the strategies fail to reduce risk. But to the extent that prevention and increased safety are key objectives of these strategies, researchers should establish a broader foundation and tradition of program evaluation to help guide the strategies in the most favorable direction. It might be useful to establish an institution (perhaps associated with some prestigious entity like the National Science Foundation) to conduct evaluations and provide scientifically informed recommendations on sex offender management policy, just as the Centers for Disease Control and Prevention, for example, helps to promote informed epidemic management policy.

Today the empirical research offers relatively little basis for favoring one criminal justice strategy over another. Nonetheless, policy making must continue. My own sense is that four areas deserve priority attention. First, the justice system should expand its efforts to reveal and apprehend previously undetected offenders. I would hypothesize that the deterrent effect of getting caught has by itself a larger influence in reducing the propensity to offend again than any other likely justice action. I base my thinking in part on the fact that many child molesters commit numerous crimes before being detected, but have relatively low re-offense rates afterward. If so, the criminal justice system can increase disclosures and apprehensions by improving

investigative techniques, including interviewing skills and undercover work, and by improving communication and rapport with the public to promote reporting. In particular, law enforcement might target some specific barriers that children and families sometimes cite as obstacles to reporting: fears of harsh and insensitive responses, publicity, and an overreaction to offenders who are juveniles or cherished family or friends.

Second, in its post-disclosure activities, the justice system should concentrate its limited intensive resources on the highest-risk offenders, perhaps the riskiest 25 percent of the offender spectrum. Arguments in favor of such costly practices as community notification may gain leverage if focused on these offenders. This is not to say that no or only minor sanctions should be applied to other offenders, only that the intensive resources should be directed at the high-risk group.

Third, the justice system must develop and improve tools that can differentiate higher-risk offenders and detect changes in risk. Once validated, such tools must be widely disseminated and used in many contexts to make considered discriminations in the use of resources and restrictions.

Finally, the justice system should cultivate some low-intensity strategies appropriate for relatively low-risk offenders, including youth and family offenders. Educational, mental health, and volunteer recruitment programs for the family and friends of such offenders could minimize re-offense potential and detect signs of relapse. Given the strong appeal and likely efficacy of early intervention to short-circuit offending careers, special attention should be paid to assessing and intervening in sexually inappropriate behavior among juveniles.

Educational Initiatives

The second major strain of child sexual abuse prevention efforts has focused on education. Primarily targeted at children themselves, these efforts have also been aimed at families, teachers, youth service workers, and others who may be in a position to intervene.[54] One central goal has been to impart skills to help children identify dangerous situations and prevent abuse—identifying boundary violations, unwanted forms of touching and contact, and other ways in which offenders groom or desensitize victims—as well as to teach them how to refuse approaches and invitations, how to break off interactions, and how to summon help. But the programs have also had clear secondary goals. One has been to short-circuit and report ongoing abuse. Another, most important from the prevention perspective, has been to mitigate the negative consequences of abuse among children who may have been exposed by helping them not to feel guilty or at fault. The educational programs have been most successfully delivered through schools, but have recently also been adopted by religious education programs and youth-serving organizations. Different programs have targeted children of different ages, ranging from preschoolers to elementary and middle school children. Increasingly the programs have been bundled into larger safety and health education curricula. Widely disseminated models include multisession curricula for school-age children such as the Talking about Touching program[55] and the Child Assault Prevention Program.[56]

Although in wide use at one time during the late 1980s, the programs have drawn a variety of criticisms, among them that the concepts are too complicated to be easily learned, especially by young children. Some critics also believe that the programs have unintended

negative consequences for children, such as creating anxiety or inhibiting cooperation with or trust in adults. Still others argue that children cannot reasonably be expected to foil the intentions of motivated and guileful adults bent on molesting them and that it is morally misguided and perhaps psychologically harmful to place the responsibility for preventing abuse on the shoulders of children.

Research on Educational Programs

Many researchers have conducted studies of these educational programs, but few have addressed the question of whether they prevent abuse. Analysts have, however, examined various aspects of program performance, and overall they have bolstered the credibility of the programs by producing more reassuring than discomfiting findings.

Do children learn the concepts? Many studies summarized in a variety of reviews find that children of all ages acquire the key concepts being taught.[57] In fact, younger children show more learning than older children.[58] An international meta-analysis found that children of all ages who had participated in an education program were six to seven times more likely to demonstrate protective behavior in simulated situations than children who had not.[59] Such a finding is far from establishing that children can necessarily avoid abuse, but it lessens the concern that the concepts are categorically too complicated to be learned.

Are there unintended consequences? Research has not found increased anxiety among children in the wake of program exposure.[60] Few parents and teachers report adverse reactions by children.[61] Indeed, studies have found that parent-child communication improves after involvement in prevention education.[62] Analysts have not found that exposure to the program makes children more likely to misinterpret appropriate physical contact and make false allegations.[63] No research has yet addressed fully a sometimes expressed concern that these programs may have a negative effect on sexual development. Some research, however, has shown that program-exposed children use more correct terminology for and have positive feelings about their genitalia.[64] Another study found no increase in sexual problems among adults exposed to prevention programs during childhood.[65]

Although researchers have conducted no experimental evaluations of whether educational programs prevent sexual abuse, they have provided a variety of supportive empirical findings so far.

Can offenders be foiled? Some observers have argued that the victim empowerment messages of education programs (getting children to say no or retreat from molesters) are doomed to failure because of the inherent authority, motivation, and guile of molesters.[66] The argument is based in part on studies of convicted and incarcerated offenders who reported being highly motivated to abuse, unlikely to be deterred, and willing to use forceful or sophisticated strategies to engage their victims.[67] Such a characterization of abusers and abuse dynamics, however, is greatly oversimplified. As noted, it fails to take into account the wide variety of

offenders and offense situations, many of which would be suited for child refusal tactics.[68] Such situations would include encounters with youthful offenders, such as babysitters or peers, and with adult offenders who may be tentative or anxious in their approach, as well as public encounters, such as on buses, where the child may be able to elicit assistance. In addition, the targets of such education extend beyond young children to include adolescents who have considerably more skill and authority in their own right. In addition, the goal of education is not only to teach resistance behavior, but also to promote disclosure, reduce self-blame, and mobilize bystanders. Meeting such goals could justify the programs even if resistance and avoidance were in themselves difficult to achieve.

Does education prevent victimization? No studies based on strong research designs have looked at the question of preventing abuse. Two observational studies that tried to assess the issue yielded somewhat mixed findings. One, based on a survey of 825 college students,[69] concluded that women who had participated in a school-based prevention program were only about half as likely to have been sexually abused as children as those who had not.[70] Another study, however, based on a two-wave national survey of youth aged ten to sixteen, found no differences in victimization rates between those who had and had not been exposed to comprehensive prevention programs.[71] Program exposure in this study was, nonetheless, associated with a subjective perception of efficacy: when victimized later, youth with program exposure more often expressed beliefs that they had been able to protect themselves, kept the situation from being worse, and kept themselves from being injured.

Additional inferential support for educational programs to prevent sexual abuse comes from broader research on other forms of school-based prevention. A variety of programs with similar theoretical underpinnings have proven effective in high-quality randomized controlled evaluations.[72] One such program attempts to reduce bullying.[73] Other successful school-based prevention programs are aimed at drug use, pregnancy prevention, and interpersonal skills development. Like sexual abuse prevention programs, many of these programs are cognitively complicated, involve judgments about the intentions of other people, and attempt to train children to resist pressures from other, in many cases, more authoritative people. The scientific literature is conclusive that this type of approach works as a general prevention strategy.[74]

Does education accomplish other goals? Exposure to a sexual abuse prevention program also appears to have other benefits. A meta-analysis reports evidence that the programs result in increased disclosure.[75] One study also found that program-exposed youth were less likely to blame themselves in the wake of victimization.[76] Reductions in self-blame are believed to be associated with better mental health outcomes among those who experience sexual abuse.[77]

Summary. Although researchers have conducted no experimental evaluations of whether educational programs prevent sexual abuse, they have provided a variety of supportive empirical findings so far. They show, for example, that young people do acquire the concepts. One observational retrospective study found a reduction in abuse associated with program exposure; others found an increase in disclosure, a sense of personal efficacy, and a decrease in self-blame. Still others have dispelled

concerns about negative effects such as anxiety and disobedience. All this evidence suggests that the approach offers promise and should be further developed and evaluated.

Intimations of potential success also undermine the argument among critics that it is not "moral" or fair to place the burden of prevention on children. Although researchers and practitioners agree that children should not be given sole responsibility for prevention, nonetheless, it might also be considered morally reprehensible not to equip children to take potentially effective actions to prevent sexual abuse. It might, for example, be said that adult motorists should be responsible for protecting children on bicycles from collisions with automobiles, but few would argue that children should not wear helmets when biking. Likewise, it might be said that the responsibility to protect children from kidnappers should be with adults and law enforcement, but few would argue against teaching children not to get into cars with strangers. The "burden of responsibility" argument may mean that adults should do everything they can. But it is not an argument against providing children with potentially useful prevention skills.

Educational Programs: Conclusion

Given some encouraging findings and a prevention model that has proven successful in other youth safety areas, it would seem prudent to continue to pursue educational strategies to prevent sexual abuse. The main challenge would appear to be access. Schools that are under pressure to enhance their academic programs are also receiving appeals to add sexuality education, dating and domestic violence, bullying, suicide prevention, and Internet safety content to their already-full curriculum. The key question for sexual abuse prevention is whether it can be successful if it is part of a more comprehensive prevention curriculum. Certainly there is overlap in many of the skills that these programs teach—refusal, help-seeking, emotion management, and decision making. It would be useful to develop and implement more comprehensive programs and then to evaluate them to assess whether their content allows prevention in each domain to be successful.

In addition, educational approaches should expand to encompass all types of sexual abuse and sex crimes against children, including peer sexual assault in dating relationships, statutory sex crimes between teens and considerably older adults,[78] and both new and conventional kinds of sex offenses that are being facilitated by the Internet.[79]

Community Prevention of Offending

In addition to justice system efforts to control known offenders and educational efforts directed at children, a number of other strategies to prevent sexual abuse have been proposed or implemented on a smaller scale.

Drawing on other community-oriented (as opposed to clinic- or school-based) primary prevention strategies in public health, one recent concept has proposed trying to target potential abusers (usually through public advertisements) with messages that reinforce the awareness that their behavior is wrong and harmful, and urging them to seek help, often through a confidential telephone hot line. A related approach has tried to mobilize third parties or what have also been called "bystanders"—for example, family members and friends and colleagues of either victims or offenders—to detect situations where abuse is actually or potentially occurring and to intervene to protect the child or report the situation.

Evidence. Some surveys have shown that overall community knowledge and attitudes about sexual abuse can shift in the wake of ad campaigns.[80] Follow-up studies have also shown that some offenders do contact the hot lines, meaning that some potential offenders at least attend to the publicity.[81] It is not clear, however, whether the hot line calls have prevented any abuse. The calls, for example, may be simply from individuals already well-inhibited by conscience about their desires.

The bystander research literature is better developed. Some high-quality studies about bystander education in high schools and college campuses show that programs about rape and interpersonal violence are capable of changing attitudes and encouraging actual interventions among bystanders.[82] No studies have shown yet that they reduce the likelihood of sexual assault. But some studies suggest that changing bystander attitudes can decrease bullying among children.[83] This line of research is particularly encouraging about the possibility of bystander education to prevent peer sexual abuse.

Summary. Appeals to potential offenders seem to work best when they involve behavior that is normatively ambiguous or has some subcultural support—for example, driving faster than the speed limit or furnishing liquor to minors. But most sexual acts between adults and children are not in this category. Nor are they similar to the other public health behaviors that have been successfully targeted by advertising, such as smoking or even hitting children, both of which have had considerable normative support, as indicated by public opinion surveys. Some forms of sexual abuse do involve normative ambiguities—for example, adults seducing apparently willing teens—and public awareness campaigns directed at potential offenders in these cases may have the greatest chance of success. A fundamental problem with the hot line and self-referral strategy for potential offenders is that in the current statutory and retributive environment, it is hard to promise or persuade an offender that he will get confidential help. Nor is it clear that promises of confidentiality are ethical. So this seems a strategy fraught with difficulties and without good models of success from other domains.

By contrast, bystander mobilization does seem promising. Models in related areas show its potential for success. The strategy should be more formally developed and evaluated, but as it could easily be incorporated into the school-based educational strategy, it is probably best not thought of as a stand-alone strategy.

Harm Mitigation as Prevention

Prevention strategies in child sexual abuse should encompass efforts to minimize harm as well as to reduce occurrences, to reduce some of the personal and social costs of sexual abuse associated with its legacy of mental health, physical health, and interpersonal problems. The most widely applied strategy for harm mitigation is using counseling and family interventions to alleviate fears, anxiety, depression, and negative self-attributions among abuse victims. Another strategy involves the wide dissemination of educational messages that reduce the stigma of abuse and dissuade victims from blaming themselves. Yet another is to reduce the impact of post-disclosure events on victims—the investigations, justice processes, and publicity that often ensue.[84] Children's Advocacy Centers, for example, offer a model that works to improve investigations and buffer children from additional stresses.

Evidence. The best-supported, evidence-based practices in the sexual abuse field are the therapeutic interventions that have been developed to mitigate harms among victims. Five clinical trials have established that cognitive-behavioral therapy with child sexual abuse victims and their families is effective at reducing symptoms of post-traumatic stress.[85] Trauma-focused cognitive-behavioral therapy involves a package of counseling interventions that educates about abuse, reduces the sense of stigma, teaches skills for regulating emotional arousal, and helps victims overcome fears and anxieties. Some evidence also shows that Children's Advocacy Centers improve outcomes for victims by providing child-sensitive interviewers, arranging for medical evaluations, and connecting victims to mental health services.[86]

Summary. Not all children have symptoms or difficulties in the wake of sexual abuse,[87] so a key research challenge is to ascertain what level of intervention is needed for which children. But clearly a great deal can be done to minimize harm even after an experience of abuse.

Other Strategies

A variety of other possible avenues for prevention have also been suggested. For example, Stephen Smallbone, William Marshall, and Richard Wortley[88] describe a strategy of "developmental prevention" to forestall some of the developmental deficits that may lead a person to become a sexual abuser—early attachment failures in childhood, poor school adjustment, and then non-involvement in early parenting as an adult. The authors also point to a set of "situational prevention" strategies that try to alter environments or interactional contexts (particularly in child-serving organizations) to make abuse less likely—for example, the Boy Scout requirement of "two-deep leadership" prohibiting private activities between one adult volunteer and one child. Although the Centers for Disease Control and Prevention has developed guidelines for preventing abuse in youth-serving organizations,[89] few other coherent programs and no evaluations have yet been undertaken around such ideas. Another speculative prevention strategy has involved attempts to develop a psychological screening tool to identify possible abusers, even those without criminal histories.[90] A key problem with this strategy is that the many false positives from such a screen could risk branding innocent people as child molesters (or even as potential child molesters).

Decline in Incidence: Implications for Prevention

Although the field of child sexual abuse cannot yet point to many proven prevention strategies, it can take considerable encouragement and learn lessons from recent trends. Sex crimes against children appear to have declined dramatically in recent years. Sexual abuse substantiated by state child protection authorities declined 53 percent between 1992 and 2006. Sexual assaults reported by teenagers declined 52 percent in the National Crime Victimization Survey between 1992 and 2005.[91] A victim survey of sixth, ninth, and twelfth graders statewide in Minnesota found declines of more than 20 percent from 1992 to 2004 in sexual abuse by family and non-family perpetrators.

The fact that the evidence for declines comes from victim self-report studies as well as official data tends to confirm that these trends are real and not due simply to reporting or other artifacts.[92] Other analyses of the data also discount the argument that trends are artifacts.[93]

Several salient features of the declines are worth highlighting to identify possible lessons for prevention. The declines occurred, not alone, but in the context of large reductions in crime in general and in physical abuse as well, and at a time when many other child welfare indicators, including teen pregnancy, teen suicide, running away, and drug abuse, were improving. The sex abuse declines, like some of the other positive trends, began between 1992 and 1995 after a worsening trend during the late 1980s. The declines did not appear to be specific to type of victim, or offender (family, acquaintance, stranger, juvenile, or adult), or confined to certain regions.

Although the field of child sexual abuse cannot yet point to many proven prevention strategies, it can take considerable encouragement and learn lessons from recent trends.

A recent review noted four explanations consistent with the timing and breadth of the trends.[94] The first was the economic boom, job growth, and economic optimism of the 1990s. The second was an increase in the number of police, child protection workers, and other agents of social intervention. The third was enhanced efforts to identify, arrest, prosecute, and incarcerate offenders. And the fourth was the widespread diffusion of new psychopharmacology, starting in the early 1990s, to deal with depression, anxiety, hyperactivity, and aggressive behavior in both children and adults.

No evidence as yet causally connects any of these developments with the declines in sexual abuse, but the declines themselves have possible implications for prevention policy. First, they suggest some questions that might be worthy of additional attention—for example, whether and how treatment for mental health problems (such as the psychopharmacology developments) might have prevention effects in the sex crime area. Second, they suggest the need for caution in abandoning interventions, such as the enhanced school-based prevention education that became fairly widespread before and during the 1990s, because they may be connected with the improvements. Finally, the declines encourage us to recognize that sexual abuse is not an intractable problem, but one whose incidence can, under appropriate circumstances, be dramatically reduced relatively quickly.

Conclusion

No strong scientific evidence points as yet in the direction of one strategy or program to prevent sexual abuse. Clearly more research is needed to help develop and identify such strategies.

In setting priorities for further development, educational programs using school settings have some claim, based on five convergent lines of evidence and argument. First, school-based educational programs have been more fully evaluated than any other prevention strategies (with the exception of offender and victim mental health treatment), and results have been encouraging. These evaluations provide a foundation on which more sophisticated studies can be more quickly built. Second, school-based education programs have proven to be a successful primary prevention strategy in other domains, some closely related to sexual abuse

prevention. Successful programs to prevent bullying and delinquency are particularly relevant. Third, school-based programs appear to be an efficient and non-stigmatizing delivery system for addressing multiple forms of child sexual abuse, including adult-on-child abuse, peer-on-peer abuse, and adult-on-teen statutory sex offenses. Fourth, school-based programs are efficient at addressing a variety of prevention goals. In addition to providing avoidance skills to potential victims, they can provide deterrence messages for potential offenders and assistance skills for potential bystanders. They also are well suited to promote reporting by victims and can be adapted to provide some harm-reduction messages, too—for example, encouraging children not to blame themselves for abuse or to see such experiences as very rare or stigmatizing. Fifth, although it would be possible to design other delivery systems for prevention messages, such as advertising and websites, the reality is that schools are a well-established venue for delivering such prevention messages; they have access to nearly the entire universe of children and families; and they have already in many jurisdictions accepted responsibility for this prevention task.

The arguments against these child-focused educational programs—that they cannot foil abuse by adults and that they put all the burden on children—have, as noted, major flaws. Some offenders, especially other youth and ambivalent adults, can almost surely be dissuaded, even by children. Moreover, other child-focused prevention techniques—such as wearing bicycle helmets—have been embraced after they have been proven to work.

The first key challenge for advocates of child-focused educational programs is to develop formats that can fit sustainably into school settings and other instructional environments, such as religious education classes, by being well adapted to and integrated with the other goals of these environments. The second is to undertake research designs of sufficient size and power to answer questions about their ultimate effectiveness.

Research on such educational programs, however, cannot be the sole focus of prevention, because the research evidence is still somewhat equivocal and because in reality advocates have investments in other strategies as well. In particular, the management of known offenders will continue to be a strong preoccupation of the public and policy makers.

Sex offender management strategies pose many problems. The strategies are limited in what they can accomplish, because they focus only on the small group of offenders who have already been identified and ignore all the rest. Many of the strategies are based on flawed logic models and misconceptions about the predominant dynamics of sexual abuse. Moreover, the research evidence in support of these strategies is equivocal. Yet still, they have tremendous support among influential policy makers, many of whom may not be interested in or responsive to evaluation results. Indeed, policy makers' preoccupation with these offender management strategies likely diminishes the resources for and interest in other potential strategies.

There is a clear need to rejuvenate evidence-based practice in offender management policy, but doing so is a daunting challenge. Some jurisdictions, such as Washington state[95] and Canada,[96] are fostering closer collaborations between researchers and policy makers, and these may help. Researchers in the field also need to propose

well-designed experiments. But politicians and corrections and law enforcement officials may also have to take courageous actions to make evaluation a larger component of policy making in this area.

Outside of the justice arena, treatment services should be made available to children who have been victimized and who have symptoms or other disturbances and concerns in the wake of abuse. Solid evidence shows that certain forms of cognitive-behavioral therapy reduce such problems. National initiatives are already under way to make such treatment standard and widely available,[97] and its successes should be highlighted and imitated by those who want to see a planned, empirically based approach applied to related sexual abuse prevention programming.

Other strategies for preventing sexual abuse and its consequences, such as community publicity efforts or outreach to potential offenders, are certainly worth exploring as well. However, it would not be wise to see these strategies as a substitute for school-based prevention,[98] especially given evidence that major improvements have occurred under current practices that do include such prevention approaches. New strategies should be viewed as additions rather than alternatives and should be required to show empirical promise before being widely embraced.

Sexual abuse is a special challenge, different in many of its dimensions from other types of child maltreatment, crime, and child welfare problems. But enormous strides have been made to understand the problem, educate the public, and mobilize resources to address it. With additional research and program development, there is every reason to believe much more can be accomplished.

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Prevention and the Child Protection System

Jane Waldfogel

Summary

The nation's child protection system (CPS) has historically focused on preventing maltreatment in high-risk families, whose children have already been maltreated. But, as Jane Waldfogel explains, it has also begun developing prevention procedures for children at lower risk—those who are referred to CPS but whose cases do not meet the criteria for ongoing services.

Preventive services delivered by CPS to high-risk families, says Waldfogel, typically include case management and supervision. The families may also receive one or more other preventive services, including individual and family counseling, respite care, parenting education, housing assistance, substance abuse treatment, child care, and home visits. Researchers generally find little evidence, however, that these services reduce the risk of subsequent maltreatment, although there is some promising evidence on the role of child care. Many families receive few services beyond periodic visits by usually overburdened caseworkers, and the services they do receive are often poor in quality.

Preventive services for lower-risk families often focus on increasing parents' understanding of the developmental stages of childhood and on improving their child-rearing competencies. The evidence base on the effectiveness of these services remains thin. Most research focuses on home-visiting and parent education programs. Studies of home visiting have provided some promising evidence. Little is as yet known about the effects of parent education.

Waldfogel concludes that researchers have much more to learn about what services CPS agencies should expand to do a better job of preventing maltreatment. Some families, especially those with mental health, substance abuse, and domestic violence problems, are at especially high risk, which suggests that more effective treatment services for such parents could help. Very young children, too, are at high risk, suggesting a potentially important role for child care—one area where the evidence base is reasonably strong in pointing to a potential preventive role. Although preventive services for the lower-risk cases not open for services with CPS are much more widespread today than in the past, analysts must explore what CPS agencies can do in this area too to ensure that they are delivering effective services.

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Every state in the United States has a public child protection system (commonly known by the acronym CPS) that receives and responds to reports of child abuse and neglect. Funding for CPS agencies comes from federal, state, and sometimes county or local sources. Although these state systems vary considerably, they do share some common elements. In particular, all CPS agencies have staff and procedures in place to respond to reports of suspected child abuse and neglect, with some agencies also accepting other types of referrals or applications for services. Although CPS agencies work in partnership with other state agencies as well as community-based agencies, some core functions—in particular, receiving and responding to reports of abuse or neglect—are carried out mainly by CPS agency staff, while other functions—such as services for families or foster or group care—may be contracted out or purchased from other agencies.

Historically, the child protection system has focused most of its limited resources on preventing maltreatment and promoting permanency and well-being among children who are identified as having already been the victims of abuse or neglect. A sizable share (more than a third) of families who come to the attention of CPS are screened out at the time of the initial referral, while others have their cases closed after an investigation. The cases that receive services from CPS on an ongoing basis constitute a minority of those referred—a minority made up of families who are judged to be at highest risk.

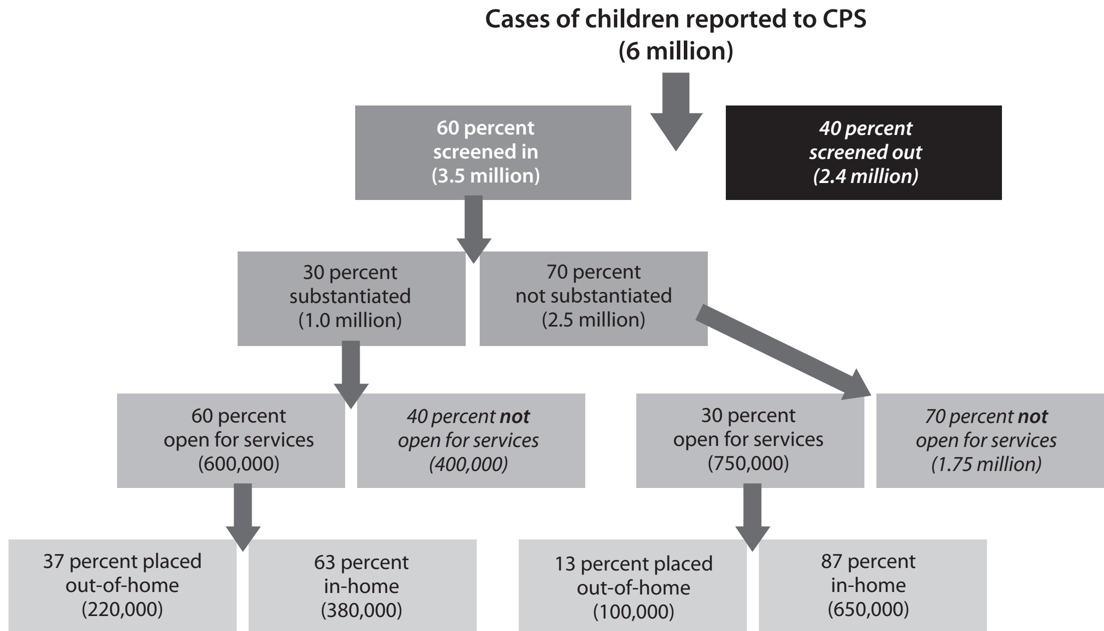
States and localities, however, also invest some resources into services to prevent maltreatment among lower-risk families—families whose cases do not meet the criteria to be screened in, substantiated, or kept open for ongoing protective services with CPS but whose children nevertheless are at risk of becoming victims of abuse or neglect. Such services may be delivered by the CPS agency (with the case kept open on a voluntary or preventive basis) but are more commonly delivered by community-based agencies. Indeed, since the reauthorization of the federal Child Abuse Prevention and Treatment Act (CAPTA) in 2003, CPS agencies have been required to develop procedures to refer children in lower-risk families to community-based agencies or voluntary preventive services.

In this article I examine the effectiveness of both types of prevention efforts. For those focusing on families whose cases are opened for ongoing services with CPS, I describe the services provided, explore their effectiveness in preventing repeat maltreatment, and ask whether other approaches might do a better job. For efforts focused on lower-risk families whose cases are not opened or kept open for services by CPS, I consider what types of services are provided and to what types of families, how widespread the services are, how the services are funded and delivered, and how effective they are in preventing maltreatment. I conclude with suggestions for further research and policy.

Prevention Efforts for Cases Opened for Ongoing Services with CPS

Figure 1 illustrates the flow of families (and children) into the CPS system, using data from the most recent report on child maltreatment issued by the U.S. Department of Health and Human Services (DHHS).[1] Of the 6 million children (representing some 3.3 million families) reported to CPS agencies nationwide in 2006, about 60 percent were

Figure 1. Pathways for Children Reported to CPS in 2006



Source: U.S. Department of Health and Human Services, *Child Maltreatment 2006* (Washington: U.S. Government Printing Office, 2008).

screened in for investigation or assessment and about 30 percent of those cases (roughly 20 percent of the families originally reported) were ultimately substantiated for abuse or neglect. The majority of families whose cases are substantiated (about 60 percent in 2006) go on to receive post-investigation services, whose main focus is on preventing further maltreatment, whether the family remains intact (about two-thirds of cases) or the child is placed out-of-home with kin, in foster care, or in group care (just over a third of cases).

As figure 1 shows, some 380,000 children were provided with in-home services in 2006 as a result of their cases having been reported, investigated, and substantiated by CPS that year (that number excludes children whose cases were opened for services before 2006 and who continue to receive services from CPS). An even larger number of children—roughly 650,000—was provided with in-home services by CPS as a result of their cases having been reported and investigated but not substantiated by CPS (again, that number excludes children whose cases were opened for services before 2006). At first glance it may seem surprising that more unsubstantiated than substantiated cases were kept open for in-home services. But so many more cases are unsubstantiated than are substantiated that even though the unsubstantiated cases receive services at a lower rate, the total number receiving services is larger. It is also important to note that some children whose cases are not substantiated have in fact been maltreated. Following the differential response systems put in place over the past decade by many states, some CPS agencies now provide a family "assessment," in place of an investigation, for low- and moderate-risk cases. In

these assessments the focus is on developing a service plan for the family, rather than identifying a perpetrator and producing a substantiation decision.[2]

The services delivered to intact families typically include case management and supervision by a CPS worker (or perhaps a worker from an agency under contract with CPS), often supplemented by one or more other preventive services. The specific services delivered to any given family depend on the family's assessed need, the willingness of family members to engage in and accept particular services, and the availability of services in their area. According to DHHS, post-investigation services may include "individual counseling, case management, family-based services (services provided to the entire family such as counseling or family support), [and other] in-home services" as well as "foster care services, and court services." Intact families may also receive what DHHS categorizes as preventive services, which may include "respite care, parenting education, housing assistance, substance abuse treatment, daycare, home visits, individual and family counseling, and home maker help."[3]

Researchers know remarkably little about how effective post-investigation and preventive services are in stopping maltreatment among the families whose cases are opened for services with CPS. Although a few studies have found that maltreatment is less likely to recur in open cases that receive services than in those that do not, most studies find that, if anything, families that receive services are more likely to be re-reported and substantiated subsequently.[4] For example, analyses of data on 1.4 million children from nine states from the National Child Abuse and Neglect Data System (NCANDS) find that one-third of the children were re-reported within five years. Children who received post-investigation services were more likely to be re-reported than those who did not receive services. This finding applied alike to children whose cases had and had not been substantiated (and in fact was more pronounced for those who had not been substantiated initially).[5] Similarly, analyses of data on roughly 3,000 children from the National Survey of Child and Adolescent Well-Being (NSCAW), a nationally representative sample of children reported to CPS, find that nearly a quarter of the children whose cases were opened for in-home services were re-reported within eighteen months, and that children were more likely to be re-reported if their families received parenting services.[6]

Such findings are the opposite of what one would expect if post-investigation services were effective at preventing maltreatment. But the findings may be misleading for several reasons. One problem is selection bias. If CPS systems are operating efficiently, the families who receive services should be the ones whose children are at highest risk of maltreatment and hence whose cases are at highest risk of being re-reported or re-substantiated. Estimates that do not take selection bias into account may erroneously interpret a recurrence of maltreatment after service receipt as an effect of service receipt. Another potential source of bias is the "surveillance effect."[7] Clients whose cases are opened for services may be at higher risk of being reported because they have more frequent contact with CPS workers and service providers rather than because they have higher levels of maltreatment.

Because existing research is not designed to address these two potential sources of bias, it is not possible to conclude that the links it

finds between service delivery and heightened risk of reporting or substantiation are causal. But neither does the research provide much evidence that services provided by CPS reduce the risk of subsequent maltreatment.

Why are CPS services for families in open cases not more effective in promoting child safety and preventing future maltreatment? Recent analyses of data from the National Survey of Child and Adolescent Well-Being (NSCAW) and its companion survey, Caring for Children in Child Welfare (CCCW), provide some clues. One possible explanation is that many families receive few services beyond periodic visits by usually over-burdened caseworkers.[8] Another possible explanation is that services are poor in quality and insufficient in quantity. For example, although rigorous research has proved several parent training programs effective, fewer than half of families whose cases are opened for services receive any parent training at all. Those who do get training typically receive only fifteen or fewer hours of training from a program that has not been proven effective. Nor is the training they receive monitored to ensure that it is being implemented as intended.[9]

Given the poor overall track record of today's preventive services, the question arises whether other types of services are or could be more effective in reducing the risk of maltreatment. To date, however, evidence on that question is quite limited.

One indirect way to answer the question is to extrapolate from the characteristics of families whose children are known to be at high risk of recurring maltreatment. For instance, studies have found that families in which parents have substance abuse, domestic violence, or mental health problems are more likely than others to be re-reported, suggesting that developing and delivering more effective treatment services for such parents (as discussed in other articles in this volume) could help prevent further maltreatment.[10]

Young children are also at high risk for repeated maltreatment. For example, both the NCANDS and NSCAW studies discussed above found that the risk of re-reporting was highest for the youngest children (in particular, infants and toddlers) and decreased sharply with age. That pattern suggests a potentially important role for services such as child care. Although research on how child care functions within CPS is limited, the broader evidence base on child care suggests that it could be important in reducing the risk of maltreatment.

Child care has long been a core service provided to open CPS cases with the explicit intent of helping to prevent maltreatment.[11] The Alaska CPS agency, for instance, explains that "protective day care services provide day care to children of families where the children are at risk of being abused or neglected. The services are designed to lessen that risk by providing child care relief, offering support to both the child and parents, monitoring for occurring and reoccurring maltreatment, and providing role models to families."[12] Such care is also expected to enhance the development of children who might otherwise be at risk for poor outcomes. The Illinois CPS agency, for instance, says: "Day care services are provided to high-risk families whose children are in open … cases; they are used to prevent and reduce parental stress that may lead to child abuse or neglect. The services also help children to develop properly and enable families to remain together."[13]

The developmental benefits of child care are well documented. High-quality care has been shown to improve the cognitive development of disadvantaged children and may also improve their social functioning.[14] Researchers have not yet conducted formal evaluations of whether child care prevents maltreatment among families whose cases are open with CPS.[15] But studies of Head Start and other child care programs suggest that child care services can help reduce maltreatment.

Head Start, a compensatory early education program for low-income children, has been in operation since 1965 and now serves nearly 1 million preschool-aged children annually (including about 62,000 children under age three in the Early Head Start program, begun in 1994).[16] Head Start was recently the subject of a randomized study that evaluated, among other outcomes, its effect on parenting and discipline. The findings indicated that parents of three-year-olds who had been randomly assigned to Head Start were less likely than control group parents to report spanking their child in the previous week and also reported spanking less frequently, with particularly pronounced effects for teen mothers (though there were no significant effects for parents of four-year-olds).[17] Although using spanking as a marker for potential child maltreatment requires caution, these findings are nevertheless promising.

Another randomized study found that Early Head Start improved parenting and reduced spanking by both mothers and fathers.[18] Parents of children assigned to Early Head Start were less likely than control group parents to have spanked their child in the previous week. The share of mothers spanking fell most (10 percent) among children in center-based programs but also fell (5 percent) among those in home-based programs.

Similarly, a random-assignment study of the Infant Health and Development Program (IHDP), an early child care program for low-birth-weight children, found reduced spanking by mothers in the previous week, although the effect was confined to boys.[19]

Studies of Head Start and other child care programs suggest that child care services can help reduce maltreatment.

Also suggestive of a potentially protective role of Head Start and other formal child care is evidence from an observational study of children from the Early Childhood Longitudinal Study-Kindergarten (ECLS-K) cohort, a large nationally representative sample of children entering kindergarten in the fall of 1998.[20] In that study, parents of disadvantaged children who had attended Head Start before kindergarten were more likely to report that they never used spanking, and also reported less domestic violence in their home, than parents of children who had not attended child care. Parents whose children had attended Head Start or other center-based child care were also more likely to say they would not use spanking in a hypothetical situation. The study's authors speculated that having a child attend Head Start or other center-based child care may have reduced parents' use of physical discipline by relieving parental stress, by exposing parents to alternative forms of discipline, and by making the children more visible to potential reporters (for example,

child care providers) who would be aware if they were being maltreated.

As noted, measuring the effects of child care on spanking is not the same as measuring its effects on maltreatment. One quasi-experimental evaluation of the Chicago Child-Parent Centers, however, addresses maltreatment directly. The study found that children in the program, which provides care to children from disadvantaged neighborhoods during the two years before kindergarten, had only half as many court petitions related to maltreatment as did children in similar neighborhoods that did not have the program.[21]

Another potentially promising approach to prevention is "differential response," which, as noted, entails greater CPS flexibility in responding to allegations of abuse. States are increasingly coming to believe that they can effect more lasting change in lower-risk cases by providing services that are engaging for families and attentive to their needs rather than by using a more traditional adversarial investigative response.[22] What does the evidence show?

A recent review of the as-yet limited research base suggests the promise of a differential response approach in preventing future maltreatment.[23] The strongest evidence comes from a random-assignment study in Minnesota that found that cases assigned to the alternative response track were less likely to be re-reported subsequently than cases assigned to the investigative track, a finding that was linked to the alternative response track's provision of increased services to families.[24] The evaluation and an accompanying process study provided many indications that families were more engaged. For example, workers delivering an alternative response reported that only 2 percent of caregivers were uncooperative at initial contact, as compared with 44 percent of those in investigation track cases.

Minnesota is exceptional in that funding from the McKnight Foundation allowed it to expand services to low-risk families. Families receiving the alternative response were more likely to have their cases opened for services (36 percent vs. 15 percent). They were more likely to receive not only the types of services, such as counseling, that are traditionally prescribed and paid for by CPS, but also services, such as assistance with employment, welfare programs, and child care, from other community resources not funded by CPS.

At the one-year follow-up, families in Minnesota's alternative response group reported less financial stress and stress associated with relationships with other adults, as well as fewer problems with drug abuse and less domestic violence. Effects on other outcomes for the children and families, however, were few.

It should be noted that the study does not establish which of the Minnesota results were due to the added funding. Most states using differential response have not had extra resources. And the reforms in those other states, while yielding some promising evidence, have not been subject to a random-assignment evaluation.

In addition to altering service delivery for cases opened with CPS, differential response reforms also increase the likelihood that CPS will refer to community-based agencies the cases that are not opened. An explicit part of the alternative assessment approach is working with families to identify their service needs and to make appropriate referrals.

Some differential response models also explicitly set out a preventive track for reports that should be handled by community-based agencies instead of CPS right from the outset. A further impetus to such referrals was the 2003 Child Abuse Prevention and Treatment Act (CAPTA) requirement that states develop the ability to refer children who are not at imminent risk of harm to community organizations or voluntary child protective services. Both differential response and the new CAPTA requirement, then, are likely to have increased the number of lower-risk families receiving some kind of preventive services from community-based agencies, without being open for services with CPS. I turn to this group of families next.

Prevention Efforts for Lower-Risk Families Not Opened or Kept Open for Services with CPS

Figure 1 highlights (in italics) three groups of children in lower-risk cases not opened or kept open for services with CPS. The three groups are: the 2.4 million children annually reported to CPS but screened out; the roughly 1.75 million children annually whose cases are reported to CPS and screened in but not substantiated and not kept open for services with CPS; and the roughly 400,000 children annually whose cases are substantiated but not kept open for services with CPS. Some of these children receive preventive services from community-based agencies (which may or may not be funded by CPS), but data are not available on precisely how many children from each group do so. Another group—not shown in the figure—that receives preventive services from community-based agencies consists of children who are not reported to CPS but whose families apply voluntarily or are advised to do so by someone in the community (these cases are sometimes called "open referrals" because they do not need to be referred by CPS to be served and funded).

The federal Department of Health and Human Services, in its annual report on child maltreatment, distinguishes between children receiving preventive services and those receiving post-investigative services. The distinction perhaps suggests that their data on children receiving preventive services mainly capture children from the above groups—children receiving preventive services funded by CPS even though their cases are not open for services with CPS (while post-investigative services would refer to children whose cases were substantiated and kept open for services). In 2006, state CPS agencies reported a total of 3.8 million children receiving preventive services.[25] Some of these children were referred to CPS in 2006; others were referred earlier; and still others were served without having been referred to CPS at all (the so-called "open referrals").

According to DHHS, preventive services "are designed to increase parents' and other caregivers' understanding of the developmental stages of childhood and to improve their child-rearing competencies." As noted, examples of preventive services include "respite care, parenting education, housing assistance, substance abuse treatment, daycare, home visits, individual and family counseling, and home maker help."[26]

Funding for preventive services for lower-risk cases comes from several different sources.[27] The most common source reported by states in 2006—covering nearly 30 percent of children receiving preventive services nationwide—was Promoting Safe and Stable Families funding under Title IV-B of the Social Security Act. The second most common source—covering nearly 20 percent

Table 1. Federal Funding for Preventive Services for Children Whose Cases Are Not Open with CPS, 2006

Source	Amount
Promoting Safe and Stable Families (Title IV-B of the Social Security Act)	$250 million
Social Services Block Grant (Title XX of the Social Security Act)	$340 million
Community-Based Child Abuse Prevention (Title II of the Child Abuse Prevention and Treatment Act)	$ 42 million

Source: Author's calculations based on data in *2004 and 2008 Green Book.*

nationally—was the Social Services Block Grant (SSBG) under Title XX of the Social Security Act. Community-Based Child Abuse Prevention (CBCAP) grants under Title II of the Child Abuse Prevention and Treatment Act (CAPTA) covered roughly 15 percent, while funds from the Basic State Grant under Title I of CAPTA covered just over 5 percent. Other federal or state programs funded the remaining 30 percent of preventive services for children.[28] States vary considerably in the funding sources they use. New York, for example, relied on SSBG funding for 85 percent of its preventive services in 2006, while Texas relied exclusively on Promoting Safe and Stable Families funding.

DHHS does not track total dollars spent on these preventive services for lower-risk families, but it is possible to create some rough estimates using other data.[29] Thus, of the $410 million appropriated in 2006 for the Promoting Safe and Stable Families program (the single largest source of funding for preventive services nationally, as noted), a reasonable estimate is that about 60 percent, or roughly $250 million, went for preventive services such as family support and prevention and family preservation (with the remainder going for other services such as reunification and adoption planning).[30] With regard to the SSBG (the second largest funding source for preventive services nationally), program data indicate that roughly one-fifth of the $1.7 billion allocated in 2006, or about $340 million, was devoted to preventive services (about 13 percent was devoted to child welfare services other than foster care, with another 8 percent devoted to child care).[31] With regard to the CBCAP program, here we can assume that most (if not all) of the total $42 million available in 2006 went to preventive services, because that is the main focus of the program. (These estimates are summarized in table 1.)

Little information is available about spending on specific types of preventive service programs, such as respite care and parent education. One exception is home-visiting programs, which have been a subject of increased interest in Congress and which received an additional $10 million in federal funding in 2008, under an initiative designed to expand support for empirically validated models of home visiting such as the Nurse-Family Partnership.[32]

The above data on spending for prevention refer only to federal funding and do not include funding from state and local sources. Federal dollars represent only half the funds spent on overall child welfare services and a much smaller share of funding for preventive services, which are more likely than other types of child welfare services to rely on state and local funding.[33] In 2004, states spent a total of $9 billion on child welfare services,

while localities spent at least $2.5 billion.[34] Most of these state and local dollars, however, went for services such as foster care, with only a small portion going for preventive services.

Although prevention programs have expanded rapidly and now exist in all fifty states, researchers still know little about their effectiveness. In 2003, a review conducted by DHHS noted that most of the research focused on just two types of prevention programs—home visiting and parent education.[35] The evidence base on home visiting programs, as discussed in other articles in this volume, is promising. Although not all home visiting programs have been demonstrated to be effective, randomized evaluations of the Nurse-Family Partnership program have found decreased rates of child maltreatment among the group randomly assigned to receive home visits. Regarding parent education programs, perhaps the most commonly provided type of prevention services, the DHHS review concluded: "The record is neither rich nor, on the whole, particularly compelling. However, a few studies have demonstrated positive findings. Many of the existing studies in this area rely on outcomes that do not include actual maltreatment reports, but focus on short-term gains in knowledge, skills, or abilities. Thus, taken as a whole, little is known about the impact of these programs on child maltreatment in the long term."[36]

When the same DHHS review invited nominations for effective programs, only one—the University of Maryland's Family Connections program for at-risk families with children aged five to eleven—met their two standards for effectiveness: having been evaluated by a study using a random-assignment design and having demonstrated significant effects on protective and risk factors for child abuse and neglect. Two other programs were reported to be effective, although they lacked a random-assignment evaluation. Both deliver augmented parenting and family support services in child care settings. One is the Circle of Security parenting program in Head Start and Early Head Start in Spokane, Washington; the other is the Families and Centers Empowered Together (FACET) family support program in child care centers in high-risk neighborhoods in Wilmington, Delaware. Given the promising evidence on the role of child care in preventing maltreatment reviewed above, these programs—which explicitly aim to increase the protective role of child care settings—are potentially promising and worth close attention.

Although prevention programs have expanded rapidly and now exist in all fifty states, researchers still know little about their effectiveness.

The DHHS review also highlights two essential characteristics of effective prevention programs—of whatever type. The first is that the program be delivered in sufficient dosage. In the prevention area, as in other areas of social policy, successful programs are often implemented with less intensity or for a shorter time than the original model specifies, thus diluting the effectiveness of the program and leading to disappointing results. The second essential characteristic is the ability of

frontline staff to engage with families to encourage them to agree to participate in services and to continue participating. But engaging families is also extremely difficult because many of the target families are socially isolated and may distrust helping professionals, however well-intentioned. Thus, recruiting and training effective prevention staff is a common challenge.

Looking Ahead: Suggestions for Further Research and Policy

It is now widely accepted that CPS has an important role to play in preventing maltreatment not just among the relatively high-risk cases opened for services, but also among the lower-risk families who come to its attention but do not meet the thresholds for case opening or continuing service delivery. Failing to prevent maltreatment among open cases is a signal that CPS intervention has failed in its primary role of promoting child safety and well-being among the most vulnerable group of children. And failing to refer lower-risk families for effective preventive services represents a missed opportunity to intervene before the risk of maltreatment escalates into full-blown abuse or neglect, saving children needless suffering while also saving CPS and other agencies the costs that would be entailed by a subsequent report, investigation, and ongoing service delivery.

How well are CPS agencies doing at prevention? We know from the federal Child and Family Services Reviews that in 2005, 6.6 percent of open CPS cases nationally experienced a new incident of substantiated maltreatment within six months of being opened.[37] That rate, although somewhat lower than it was a few years previously, still exceeds the 6 percent target set by the Child and Family Service Reviews, and state CPS agencies are actively trying to lower it. But existing research sheds little light on what types of services might be most effective in meeting that goal. As other analysts have noted, CPS agencies provide "a somewhat haphazard set of services that aim to help abusive families and their children … [with] a shortage of effective intervention programs to provide needed services [and] a dearth of prevention services."[38]

Program data—and common sense—suggest that any intervention that aims to prevent maltreatment must be intensive, and its frontline staff must be able to engage with families. But beyond that, researchers have much more to learn about what types of services should be expanded if CPS agencies are to do a better job of preventing maltreatment among their open cases. The demographics of recurrence suggest that some families, especially those with mental health, substance abuse, and domestic violence problems, are at higher risk than others, pointing to issues that services will need to address effectively if they are to reduce the risk of maltreatment. The demographics of recurrence also point to young children as being particularly at risk, suggesting a potentially important role for such services as child care. Indeed, child care is one area where the evidence base is reasonably strong in pointing to a potential preventive role. This is certainly an area where further experimentation would be worthwhile.

With regard to the lower-risk cases not open for services with CPS but referred to preventive services, the good news is that such services seem to be much more widespread today than in the past, reflecting the expanded availability of federal and other funds as well as the increased recognition that a one-size-fits-all investigative response will not meet the needs of all families

referred to CPS. Nevertheless, challenges remain. Analysts have much to learn about what CPS agencies can do to support and monitor preventive programs to ensure that they are delivering effective services.[39] They also have much to learn about coordinating services across the many types of community agencies that may play a role in prevention.[40]

Although the evidence base on preventive programs for lower-risk families remains fairly thin, with a few exceptions such as the results from randomized studies of the Nurse-Family Partnership program, programs and evaluations in this area are expanding rapidly. Both DHHS and the federal Centers for Disease Control and Prevention are actively reviewing program effectiveness and spurring states to commission and participate in program evaluations. It seems the nation may be on the threshold of an exciting new era in the provision of prevention programs. To take fullest advantage of the opportunities this expansion of interest is likely to offer, it is worth keeping a few principles in mind. The first is that if studies are to yield reliable evidence documenting that programs successfully prevent maltreatment, they must use randomized designs whenever possible and must measure maltreatment outcomes. The second is that policy makers must keep in mind the lessons learned from past efforts, in particular, the importance of dosage and family engagement. As tempting as it may be to cut corners and save dollars, there is no substitute for systematically implementing and evaluating promising interventions. If not, we could well find ourselves a decade from now with no more evidence on prevention in CPS than we have today.

Endnotes

1. All statistics in this paragraph are from U.S. Department of Health and Human Services, Administration on Children, Youth, and Families, *Child Maltreatment 2006* (Washington: U.S. Government Printing Office, 2008) (www.acf.hhs.gov/programs/cb/pubs/cm06/cm06.pdf [accessed July 29, 2008]).
2. For an overview of alternative response systems, see Jane Waldfogel, “Differential Response,” in *Community Prevention of Child Maltreatment,* edited by Kenneth Dodge (New York: Guilford Press, 2009).
3. U.S. Department of Health and Human Services, *Child Maltreatment 2006* (see note 1), p. 83.
4. These studies are reviewed by John D. Fluke and Dana Hollinshead, “Child Maltreatment Recurrence,” report prepared for the National Resource Center on Child Maltreatment (Duluth, Ga.: NRCCM, 2003) (www.nrccps.org/PDF/MaltreatmentRecurrence.pdf) [accessed April 1, 2009]), and by John D. Fluke and others, “Reporting and Recurrence of Child Maltreatment: Findings from NCANDS,” report prepared for the U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (DHHS, 2005) (www.aspe.hhs.gov [accessed August 1, 2008]). See also Jessica Kahn, “Child Welfare Recidivism,” doctoral dissertation, Columbia University School of Social Work, 2006. These reviews cite only a few studies that find that families who received services had a lower likelihood of being re-reported. See Brett Drake and others, “Substantiation and Recidivism,” *Child Maltreatment* 4, no. 4 (2003): 297–307; M. J. Camasso and R. Jagannathan, “Modeling the Reliability and Predictive Validity of Risk Assessment in Child Protective Services,” *Children and Youth Services Review* 22, no. 11/12 (2000): 873–96; T. L. Fuller, S. J. Wells, and E. E. Cotton, “Predictors of Maltreatment Recurrence at Two Milestones in the Life of a Case,” *Children and Youth Services Review* 23, no. 1 (2001): 49–78; and Diane DePanfilis and Susan J. Zuravin, “The Effect of Services on the Recurrence of Child Maltreatment,” *Child Abuse and Neglect* 26, no. 2 (2002): 187–205.
5. Fluke and others, “Reporting and Recurrence of Child Maltreatment” (see note 4). The study also found that among children who had initially been substantiated, about 17 percent were the subject of another substantiated investigation over the next five years. Nationally, data compiled for the Child and Family Services Reviews indicate that in 2005, 6.6 percent of substantiated victims were the subject of another substantiated investigation in the next six months, an improvement over the rate of 7.5 percent in 2002; see U.S. Department of Health and Human Services, Administration for Children and Families, “Child Welfare Outcomes 2002–2005: Report to Congress” (DHHS, 2008) (www.acf.dhhs.gov/programs/cb/pubs/cwo05/chapters/executive.htm [accessed September 12, 2008]).
6. Patricia Kohl and Richard Barth, “Child Maltreatment Recurrence among Children Remaining In-Home: Predictors of Re-Reports,” in *Child Protection: Using Research to Improve Policy and Practice,* edited by Ron Haskins, Fred Wulczyn, and Mary Bruce Webb (Washington: Brookings Institution Press, 2007).
7. The “surveillance effect” is discussed on p. 13 of Fluke and Hollinshead, “Child Maltreatment Recurrence” (see note 4).
8. Ron Haskins, Fred Wulczyn, and Mary Bruce Webb, “Using High-Quality Research to Improve Child Protection Practice: An Overview,” in *Child Protection: Using Research to Improve Policy and Practice,* edited by Haskins, Wulczyn, and Webb (see note 6).
9. Michael Hurlburt and others, “Building on Strengths: Current Status and Opportunities for Improvement of Parent Training for Families in Child Welfare,” in *Child Protection: Using Research to Improve Policy and Practice,* edited by Haskins, Wulczyn, and Webb (see note 6).

10. See reviews by Fluke and Hollinshead, "Child Maltreatment Recurrence" (see note 4), and Fluke and others, "Reporting and Recurrence of Child Maltreatment (see note 4); and Nick Hindley, Paul G. Ramchandani, and David P. H. Jones, "Risk Factors for Recurrence of Maltreatment: A Systematic Review," *Archives of Disease in Childhood* 91, no. 9 (2006): 744–52.

11. See, for example, Martha G. Roditti, "Child Day Care: A Key Building Block of Family Support and Family Preservation Programs," in *Child Day Care,* edited by Bruce Hershfield and Karen Selman (Edison, N.J.: Transaction Publishers, 1997).

12. State of Alaska, Office of Children's Services (OCS), "OCS Family Preservation" (OCS, 2008) (www.hss.state.ak.us/ocs/services.htm [accessed July 10, 2008]).

13. Illinois Department of Children and Family Services, "Day Care and Early Childhood"(DCFS, 2008) (www.state.il.us/dcfs/daycare/index.shtml [accessed July 10, 2008]).

14. Regarding cognitive development, see, for example, Margaret O'Brien Caughy, Janet A. DiPietro, and Donna M. Strobino, "Day-Care Participation as a Protective Factor in the Cognitive Development of Low-Income Children," *Child Development* 65, no. 2 (1994): 457–71. Regarding social development, see, for example, Sylvana Cote and others, "The Role of Maternal Education and Nonmaternal Care Services in the Prevention of Children's Physical Aggression Problems," *Archives of General Psychiatry* 64, no. 11 (2007): 1305–12.

15. Although a small-scale study (of twenty-two children) found that infants placed into protective day care were more likely than other infants to be removed from their families subsequently, this appears to be an isolated finding. See Patricia M. Crittenden, "The Effect of Mandatory Protective Daycare on Mutual Attachment in Maltreating Mother-Infant Dyads," *Child Abuse and Neglect* 7, no. 3 (1983): 297–300.

16. Information on Head Start from the U.S. House of Representatives, Committee on Ways and Means, *2008 Green Book* (www.waysandmeans.house.gov/Documents.asp?section=2168 [accessed August 1, 2008]).

17. U.S. Department of Health and Human Services, Administration for Children and Families, "Head Start Impact Study: First Year Findings" (Washington: DHHS, 2005) (www.acf.hhs.gov/programs/opre/hs/impact_study [accessed August 6, 2008]).

18. John M. Love and others, "Making a Difference in the Lives of Infants and Toddlers and Their Families: The Impacts of Early Head Start. Final Technical Report" (Princeton, N.J.: Mathematica Policy Research, 2002).

19. Judith R. Smith and Jeanne Brooks-Gunn, "Correlates and Consequences of Mothers' Harsh Discipline with Young Children," *Archives of Pediatric and Adolescent Medicine* 151 (1997): 777–86.

20. Katherine Magnuson and Jane Waldfogel, "Pre-School Enrollment and Parents' Use of Physical Discipline," *Infant and Child Development* 14, no. 2 (2005): 177–98.

21. Arthur J. Reynolds and D. Robertson, "School-Based Early Intervention and Later Child Maltreatment in the Chicago Longitudinal Study," *Child Development* 74 (2003): 3–26.

22. Differential response reforms in many states have complicated efforts to measure the effectiveness of services provided by CPS in preventing future maltreatment, because states now differ sharply in how they define reports and substantiated cases. For a discussion of the origins and rationale for differential response, see Jane Waldfogel, *The Future of Child Protection: Breaking the Cycle of Abuse and Neglect*

(Harvard University Press, 1998), and Jane Waldfogel, "The Future of Child Protection Revisited," in *Child Welfare Research: Advances for Practice and Policy,* edited by Duncan Lindsey and Aron Shlonsky (Oxford University Press, 2008). For a brief overview, see U.S. Department of Health and Human Services, Administration for Children and Families, "Differential Response to Reports of Child Abuse and Neglect," an issue brief prepared for the Child Welfare Information Gateway (DHHS, 2008) (www.childwelfare.gov [accessed August 1, 2008]).

23. Waldfogel, "Differential Response" (see note 2).

24. The Minnesota results are reported in Anthony L. Loman and Gary L. Siegel, *Minnesota Alternative Response Evaluation: Final Report* (St. Louis: Institute of Applied Research, 2004) (www.iarstl.org [accessed July 24, 2006]); Anthony L. Loman and Gary L. Siegel, "Alternative Response in Minnesota: Findings of the Program Evaluation," *Protecting Children* 20, no. 2–3 (2005): 79–92; and Anthony L. Loman and Gary L. Siegel, "Extended Follow-Up Study of Minnesota's Family Assessment Response: Final Report" (St. Louis: Institute of Applied Research, 2006) (www.iastl.org [accessed September 18, 2007]). Results from Minnesota as well as other states are reviewed in Waldfogel, "Differential Response" (see note 2).

25. U.S. Department of Health and Human Services, *Child Maltreatment 2006* (see note 1).

26. Ibid., p. 83.

27. All statistics in this paragraph are from U.S. Department of Health and Human Services, *Child Maltreatment 2006* (see note 1).

28. These other sources of funding are quite varied and include other federal agencies such as the Centers for Disease Control and Prevention, the Maternal and Child Health Bureau, and the U.S. Department of Justice, as well as a variety of state and private funding sources.

29. In particular, I rely on estimates from various editions of the *Green Book,* published at regular intervals by the U.S. House of Representatives, Committee on Ways and Means. As of this writing, the 2008 version of the *Green Book* was being published in stages. For some sections, the 2008 version is available, while for others, the latest release was the 2004 version. See also Emilie Stoltzfus, "Child Welfare Issues in the 110th Congress," CRS Report for Congress RL34388 (Congressional Research Service, 2008) (http://opencrs.cdt.org [accessed January 15, 2009]); and Emilie Stoltzfus, "Child Welfare: Recent and Proposed Federal Funding," CRS Report for Congress RL34121 (Congressional Research Service, 2007) (http://opencrs.cdt.org [accessed January 15, 2009]).

30. Data from the U.S. House of Representatives, Committee on Ways and Means, *2004 Green Book,* Section 11—Child Protection, Foster Care, and Adoption Assistance (http://waysandmeans.house.gov [accessed January 15, 2009]).

31. Data from the U.S. House of Representatives, Committee on Ways and Means, *2008 Green Book,* Section 10—Title XX Social Services Block Grant Program (http://waysandmeans.house.gov/Documents.asp?section=2168 [accessed January 15, 2009]).

32. See Stoltzfus, "Child Welfare Issues in the 110th Congress" (see note 29), and Stoltzfus, "Child Welfare: Recent and Proposed Federal Funding" (see note 29).

33. In 2005, federal funds were 49 percent of total child welfare spending, with state funds making up 39 percent and local funds making up 12 percent; see Cynthia Andrews Scarcella and others, "The Cost

of Protecting Vulnerable Children, V: Understanding State Variation in Child Welfare Financing" (Washington: Urban Institute, 2006).

34. Ibid.

35. David Thomas and others, "Emerging Practices in the Prevention of Child Abuse and Neglect," report prepared for the U.S. Department of Health and Human Services, Children's Bureau Office on Child Abuse and Neglect (DHHS, 2003) (www.childwelfare.gov/preventing/programs/whatworks/report [accessed July 28, 2008]). The federal Centers for Disease Control and Prevention (CDC) are also involved in reviewing the effectiveness of prevention programs; see, for example, Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, "Using Evidence-Based Parenting Programs to Advance CDC Efforts in Child Maltreatment Prevention" (CDC, 2004) (www.cdc.gov/ncipc/pub-res/parenting/ChildMalT-Briefing.pdf [accessed August 3, 2008]).

36. Quote from p. 15 of Thomas and others, "Emerging Practices in the Prevention of Child Abuse and Neglect" (see note 35).

37. See U.S. Department of Health and Human Services, Administration for Children and Families, "Child Welfare Outcomes 2002–2005: Report to Congress" (DHHS, 2008) (www.acf.dhhs.gov/programs/cb/pubs/cwo05/chapters/executive.htm [accessed September 12, 2008]).

38. Quote from p. 2 of Haskins, Wulczyn, and Webb, "Using High-Quality Research to Improve Child Protection Practice" (see note 8).

39. See discussion in Fred Wulczyn, "A Community's Concern," *Child Welfare Watch* 14 (Summer 2007): 29–30.

40. The need for coordination arises, in large part, because children at risk for maltreatment often have multiple needs and thus require services that cut across agencies. See Roger Bullock and Michael Little, "The Contribution of Children's Services to the Protection of Children" (Dartington, England: Dartington Social Research Unit, 2002) (www.dartington.org.uk); and Nick Axford and Michael Little, *Refocusing Children's Services towards Prevention: Lessons from the Literature* (London: Department for Education and Skills Research Report RR10, 2004) (www.dartington.org.uk).

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