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# The Prevention of Child Abuse and Neglect

## Pipe Dreams or Possibilities?

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In 1962, C. Henry Kempe and colleagues brought to the attention of physicians and other clinicians the shocking problem of physical abuse of children (Kempe, Silverman, Steele, Droegemueller, & Silver, 1962). What followed was a remarkable effort to define the problem, improve the recognition and reporting of abused children and subsequently those who had been neglected or sexually abused, develop a legally mandated reporting and investigative system (in the USA), develop treatment programs for children and adult victims, and understand how maltreatment occurred and its consequence to children and families. Although there was some early attention to the issue of prevention, only in the last 10 to 15 years has there been increasing attention among clinicians and researchers and even governmental agencies and foundations about the need to focus on the prevention of abuse and neglect. In this article, I review some of these recent efforts and the evidence suggesting that prevention of abuse and neglect is more a possibility than a pipedream.

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## Why Focus on Prevention?

There are a number of reasons why it is worthwhile focusing on prevention. First, there is the magnitude of the problem. The abuse and neglect of children have come to be recognized as substantial problems in our society. For example, in 1995 in the USA, approximately three million children were reported to protective service agencies, and one million of these reports were substantiated, resulting in 46 reports and 14 substantiated reports per 1000 children less than 19 years of age (Lung & Daro, 1996). Of these cases, about 25% were due to physical abuse, and 50% due to neglect. In the UK in 1995, 48,000 children were referred for child-protection conferences (a rate of 4.4 per 1000 children), and 63% of the children were placed on the registry (Department of Health, England, 1996).

Second is the enormous costs in terms of the affected lives of children and families and the financial expense to society. Although some studies have examined the consequences of maltreatment, much less information is available about the financial costs. The National Committee to Prevent Child Abuse (NCPCA) (1994) has estimated that the minimal annual cost of child maltreatment in the USA is \$9 billion, which includes the costs of health care, out-of-home placements, child-protective services and family-preservation services. Not included in these estimates are costs due to special educational services, mental health counseling, juvenile court services, or the criminal justice system. Clearly, the costs to society of maltreatment are substantial and cannot be ignored.

Third, once abuse or neglect has occurred, it is difficult to change the human behaviors that resulted in the child or children in the family getting hurt. Resources in the community often are inadequate in scope and number to treat maltreating parents, and families often have other important problems that directly or indirectly influence how the children are cared for, including substance abuse, domestic violence, mental health problems and the like.

Fourth, preventive efforts can focus on families before they develop fixed and negative ways of behaving towards their children and before substantial dysfunctions develop in the children related to the abuse or neglect. An ounce of prevention may, in fact, be worth a pound of cure.

## Thinking Preventively

Most clinicians are not accustomed to thinking preventively. They are used to seeing a child or family after a problem occurs, help is sought, and the family or child takes on the role of a patient. Although the clinician who provides preventive services takes on a helping role, there are at least three differences about preventive efforts compared to the traditional clinical role. First, clinicians need to recognize that they will be working with families before they become 'patients'. Thus, families may not believe that they have a problem and may not necessarily seek out preventive services. In fact, preventive services usually find families as opposed to families finding the services. Second, when preventive services are offered, families need to be interested. Since most preventive programs are voluntary, families can refuse. An important aspect of the provision of preventive services is to make them attractive to families by offering something special. Third, since it is difficult and expensive to offer services to everyone, an important task for those providing preventive services is to identify who is at risk of the outcome, in this case abusing or neglecting a child.

In addition to a shift in conceptual thinking about the provision of services, it is helpful to have a framework, which, as demonstrated in Figure 1.1, includes the levels of prevention and the targets of services. The three levels of prevention that usually are considered include

1. Primary, in which preventive services are offered to the entire population
2. Secondary, in which services are offered to a selected, high-risk population, and
3. Tertiary, in which services are offered after the outcome has occurred, but usually a mild version of the outcome.

**Figure 1.1** Framework for Preventive Services

<i>Levels of prevention</i>	<i>Targets of service</i>
Primary	Community
Secondary	Parents
Tertiary	Children

Services might be directed at the following targets: the community, parents or children. In the examples of preventive services that follow, I focus mainly on services directed toward parents.

## Two Approaches to Preventing Abuse and Neglect

Two basic approaches are available to prevent the abuse and neglect of children. The first includes programs that generally are supportive of parents and families. Thus, affordable, quality child care, parenting programs, decent housing, Head Start programs, mental-health services for parents and children, medical insurance either through employment or the government and the like are all examples of services that support families and therefore directly or indirectly support parenting. Although no studies have examined the effects of quality child care or Head Start on the occurrence of abuse or neglect, it seems reasonable to believe that if such programs are available in communities, parents are likely to be supported and less likely to maltreat their children. A major concern in the USA is that federal and state governments have been less likely to support these types of service, particularly for impoverished families. Without such services, not only will it be difficult to support families but even programs that specifically focus on preventing abuse and neglect will likely be less successful. A caring community truly is necessary to raise a child.

The second approach includes programs that specifically target the prevention of child abuse and neglect. One such approach that has gained considerable interest over the last several years has been home visiting by nurses, paraprofessionals or even trained volunteers (Center for the Future of Children, 1993; U.S. Advisory Board on Child Abuse and Neglect, 1993; U.S. General Accounting Office, 1990). Home visitors are able to work on relationships, parenting behaviors and concrete needs in the family's own environment. Fraiberg, Adelson, and Shapiro (1975) called this kind of intervention 'psychotherapy in the kitchen'.

Child abuse occurs when an adult's (usually a parent's) hand strikes, hits, slaps, punches, twists or, in some other way, directly harms a child. Neglect occurs when the parent's hand fails to provide adequate nurturing including food, shelter, clothing, supervision or medical care. In both abuse and neglect, parental behaviors are influenced by a rejecting relationship with the child and feelings of anger and hatred toward and disappointment with the child. Parental behaviors also are influenced by a parent's own degree of impulsiveness and by other stresses in the parent's current or past life, such as substance abuse, domestic violence or having been abused as a child. Consequently, programs that target the prevention of abuse and neglect need to focus on four aspects of parenting: the parents' behaviors towards the child; their feelings towards the child; their own impulsiveness; and the internal and external stresses that can influence their behaviors. Thus, it is not surprising that prevention is not a simple task.

### **Nine Ingredients of Home-Based Services**

There are at least nine ingredients necessary for home-based services to be successful (Leventhal, 1996).

1. Services should begin early either prenatally or shortly after a child's birth. The pregnancy, the child's birth and bringing the new baby into the family's life are emotionally critical periods. Helfer has called the perinatal period 'a window of opportunity for enhancing parent-infant communication' (Helfer, Bristor, Cullen, & Wilson, 1987). At this time, parents may be particularly open to emotional and physical support.
2. Home visiting needs to occur frequently and over an extended period of time so that relationships can develop between the home visitor and the parents. Most programs begin with weekly visits, which are then spaced out to visits every 4 to 8 weeks. In the most widely cited study of home visiting conducted by Olds and colleagues in Elmira, New York, nurses averaged 8 visits prenatally and 23 visits during the child's first two years of life (Olds, Henderson, Chamberlin, & Tatelbaum, 1986). In Hawaii's Healthy Start program, which is funded by the state's Health Department, the goal is to provide home visiting through the child's fifth birthday (Department of Health, Hawaii, 1992).
3. The primary goal of the home visitor is to develop a therapeutic relationship with the family. For a home visitor to develop a trusting, honest relationship may be especially difficult with families that are vulnerable or feel disenfranchised (Kennel, 1996). Ongoing mental-health supervision can help the home visitor understand the dynamics and practical issues concerning such relationships. Through the relationship, the home visitor helps the parent feel better about himself or herself, and the parent, in turn, feels better about the relationship with the child.
4. The home visitor needs to be a watchful eye in the home. By making frequent visits to the home, the worker can be aware of early signs of trouble—small bruises on the child, inappropriate discipline, early signs of domestic violence—and can help the family recognize these problems and get appropriate help. Grandparents or other supportive relatives who may be involved with the child's care often have difficulty recognizing these early signs of trouble, or, if such signs are recognized, have difficulty believing that the mother or father is actually hurting the child.
5. The home visitor needs to focus on parenting. This can be accomplished by modeling effective parenting, providing alternative approaches to care, and reflecting with parents about the child's development and needs. In Olds's studies, a curriculum for the home visitor was provided so that important issues were discussed at specific times (Olds et al., 1986). In the evaluations reported to date, there have been differences in parenting behaviors between the intervention and control

groups, but there have been no differences in the child's intellectual development. Some have suggested that an additional center-based developmental program might be necessary to enhance the child's development (Daro & McCurdy, 1996).

6. The child's needs should be the primary focus of the intervention. Although the home visitor must form an alliance with parents and help them get appropriate services, such as treatment for substance abuse or enrollment in an educational program, the child and his or her needs cannot be ignored. Balancing the needs of the child and parents can become particularly difficult when the parents' needs are substantial and even overwhelming. In such circumstances, it may be very difficult to remember that the focus of the services is on the child's needs for appropriate nurturance.
7. The home visitor should be able to provide concrete services, such as helping to find appropriate housing, providing transportation to the child's health-care provider and the like. The provision of such services can help establish a relationship between the worker and the family and help the family overcome real barriers to adequate parenting.
8. Fathers need to be included in the preventive efforts. Although programs generally have focused on mothers and some have successfully reduced the occurrence of maltreatment, serious abuse of young children is often caused by males in the home (Starling, Holden, & Jenny, 1995).
9. The frequency and intensity of services need to be titrated according to the family's needs. Providers should examine on a periodic basis whether the services being provided are helpful to the child and family and what kinds of changes, if any, are necessary in the service plan.

## Evaluating Prevention Programs

The evaluation of prevention programs can be a difficult scientific endeavor. The most methodologically rigorous approach is a randomized-controlled trial, which can be very costly and take many years to conduct. In addition, large sample sizes are needed because abuse and neglect are relatively rare outcomes.

### Ascertainment of Abuse and Neglect

A particular problem related to the prevention of maltreatment is the measurement of the occurrence of the outcome, namely abuse or neglect. Most studies have relied on counting reports to protective service agencies. An inherent problem with this approach is the possibility of detection bias, which can occur when one of the two groups under study is observed or followed more carefully and therefore the outcome is more likely to be detected in this group (Leventhal, 1982). In the randomized trials of home visiting, frequent home visits occur in the intervention group; thus less severe injuries due to abuse or neglect are likely to be recognized and reported to protective services. In contrast, these types of injury would be unlikely to be detected or reported in the control group, which is not receiving home visits.

My colleagues and I have proposed an alternative strategy, which is less likely to result in detection bias, to ascertain injuries due to abuse or neglect (Leventhal, Garber, & Brady, 1989; Stier, Leventhal, Berg, Johnson, & Mezger, 1993). In this approach, all injuries resulting in a visit to a health-care provider are reviewed and classified using predefined criteria, which include the following categories: definite, probable, and possible physical abuse; four categories of neglect; unintentional (or accidental) injuries; unintentional injury-neglect (for injuries such as those due to falls off the bed that could

have been prevented by reasonable parenting efforts). This approach to determining whether abuse or neglect has occurred does not rely on reports to protective services. Although we used this approach in cohort studies of perinatal risk factors, a problem that has not been addressed is how the rates of maltreatment determined by classifying injuries seen by health-care providers compare to rates determined by examining reports to protective services. In studies of home visiting, this alternative approach might minimize the problem of detection because occurrences of maltreatment would be based on injuries receiving medical care as opposed to referrals to protective services. This approach, however, is unlikely to eliminate completely the problem of detection bias, since the home visitor might send the child with a minor injury to be examined by the health-care provider, while the same injury in the comparison group might not be seen at all.

### **Ascertainment of Other Outcomes**

Since programs aimed at the prevention of abuse and neglect are thought to be effective because they improve parenting and parent-child relationships and help parents feel better about themselves and more efficacious, outcomes other than maltreatment have been measured. Child-related outcomes have focused on the child's growth, development, behavior and health (including immunization status) and the child's utilization of health-care services (e.g., visits to the emergency department). Parent-related outcomes have focused on mothers and included the timing of subsequent pregnancies, whether the mother continues with her education or gets a job, and her self-esteem. Finally, costs of the services and the money saved by the program have been examined in one study.

## **Examples of Evaluations**

### **Primary Prevention**

To date, evaluations of primary preventive efforts to decrease abuse and neglect have been minimal. Showers (1992) described a primary prevention program to reduce the occurrence of the shaken baby/impact syndrome. An educational program, entitled 'Don't Shake the Baby', was developed to increase parental knowledge about the dangers of shaking infants. Over a one-year period in 1989 and 1990, 15,700 educational packets were distributed to parents on the postpartum wards in the state of Ohio. Although parents reported that they found the information helpful, no data were collected about whether the occurrence of the shaken baby/impact syndrome decreased because of this primary preventive effort.

Contrast this evaluation, which focused on parental views, with the one conducted to determine whether a community-wide prevention program to promote the use of bicycle helmets could decrease head trauma from bicycle-related injuries (Rivara et al., 1994). The program included an annual campaign beginning in 1986 to promote the use of helmets through stories in the media, public service announcements, posters, stickers, health fairs, programs at school and the like. The use of helmets in Seattle, Washington, increased substantially from 5.5% of school-age children riding bicycles in 1987 to 40.2% in 1992. During this same time period, bicycle-related head injuries decreased by 67%.

In this study of primary prevention, the interventions had a clear impact on the occurrence of the outcome. Similarly, in studies of primary prevention of abuse and neglect, it will be important to go beyond determining whether parents find the preventive information useful by examining whether educational programs such as 'Don't Shake the Baby' actually decrease the rates of the outcomes.

## Secondary Prevention

There have been several randomized trials attempting to prevent abuse and neglect in high-risk populations. These high-risk populations usually have been defined by sociodemographic characteristics, such as low income or young maternal age, or by psychosocial characteristics, such as a history of abuse during childhood or an unwanted pregnancy. Three recent reviews of the randomized trials of secondary preventive efforts have suggested that home visiting can prevent childhood injuries and appears promising in reducing the occurrences of abuse and neglect (Guterman, 1997; H. MacMillan, J. MacMillan, Offord, Griffith, & A. MacMillan, 1994; Roberts, Kramer, & Suissa, 1996). A concern raised in these reviews is the difficulty of determining the outcome in an unbiased way because the home visitor increases the likelihood of detecting maltreatment.

I will briefly review three of the home-based efforts in the USA: the randomized trial of home visiting by nurses conducted by Olds and colleagues in Elmira, New York; the Healthy Start program, which serves many high-risk families in Hawaii; and Healthy Families America, an effort to develop a nationwide home-visiting program.

*Study in Elmira, New York.* The best known of the secondary prevention projects was conducted by Olds and colleagues; from 1978 to 1980, they enrolled first-time mothers who entered prenatal care before 30 weeks of gestation at a public health clinic and private obstetrical offices (Olds et al., 1986). The sample was 89% white, 61% poor and 62% unmarried, and 47% of the women were less than 19 years of age. The intervention group ( $n = 116$ ) received home visits from a nurse (an average of 8 prenatally and 23 from birth to 24 months of age). The comparison group ( $n = 184$ ) received customary care. Because minorities represented a small percentage of the sample, the authors excluded this group from all analyses. Four domains of outcomes were examined: child maltreatment, child-related outcomes, mother-related outcomes and costs.

1. By 2 years of age, reports to child-protective services (CPS) were lower (5% vs 19%,  $p = .07$ ) in the intervention group in a subgroup of children cared for by poor, unmarried teenagers. By 4 years of age, there were no differences in the rates of reports to CPS between the intervention and control groups (Olds, Henderson, & Kitzman, 1994). By 15 years of age, however, 24% of the families in the intervention group had at least one report to CPS compared with 46% of control families ( $p = .007$ ), although part of this difference was due to the fact that there were fewer children in the families of the intervention group (Eckenrode, Powers, Olds, Kitzman, & Cole, 1996).
2. There were effects, as well, on outcomes related to the children (Olds et al., 1994). Between 25 and 48 months of age, in the intervention group, there were fewer household hazards, fewer injuries and ingestions, and fewer notations in the child's medical record regarding behavioral or parental coping problems. Children made fewer visits to the emergency department, although they spent more days in the hospital. There were differences between the two groups in how mothers provided care to their children; for example, mothers in the intervention group provided more language stimulation, were more involved with their children and punished their children to a greater extent (which was interpreted as a positive aspect of parenting since increased punishment in the intervention group was associated with a decrease in injuries and ingestions). In contrast, a major outcome that was not affected by the home-visiting program was the intellectual functioning of the children.

3. This study also examined outcomes in the mothers (Olds, Henderson, Tatelbaum, & Chamberlin, 1988). During the four years after delivery, mothers in the intervention group were more likely to return to school and be employed and were less likely to have subsequent pregnancies. The effect of the intervention on subsequent pregnancies was more pronounced in poor, unmarried women: in the overall study, there was a 23% reduction in subsequent pregnancies in the intervention group vs. the control group; in the high-risk subgroup, there was a 43% reduction. It is interesting to compare these results with those of Seitz and Apfel (1993), who found similar results with a different type of supportive program. Inner-city pregnant girls who attended a special school for pregnant teenagers were less likely to have subsequent pregnancies than were pregnant girls who did not attend because of the timing of their pregnancies. Apfel and Seitz (1997) also showed that the outcome for the first-born child was much improved if a second pregnancy was delayed for at least two to five years.
4. The costs of home-based services are between \$2500 and \$3500 per family per year. A sophisticated cost analysis was conducted in the Elmira study (Olds, Henderson, Phelps, Kitzman, & Hanks, 1993). By the time the children were 4 years of age, there were substantial savings to the government in the intervention group, and these savings equaled the costs of the intervention for the low-income families. Most of the savings were because families became economically self-sufficient: 56% of the savings were due to reductions in welfare benefits; 26%, food stamps; 11%, health benefits; and 3%, reports of abuse or neglect; 5% were due to increases in revenues from taxes.

Although the Elmira study produced impressive and promising results, concerns have been raised about the generalizability of the intervention and the results. The study was conducted with a mostly white population and in a rural setting. Questions, therefore, have been raised about whether similar results would be seen in minority, urban populations where the problems of poverty, violence and drug abuse are substantial. Preliminary results from a replication study that was begun by Olds in 1990 in Memphis, Tennessee, in an urban, minority population are similar to those from Elmira, suggesting that a nurse-based intervention can have a substantial impact on parenting in urban families (Olds, Kitzman, & Cole, 1995).

*Hawaii's Healthy Start.* In 1985, a pilot program of home visiting by paraprofessionals was developed in an attempt to prevent abuse and neglect. Since then, the 'Healthy Start' program, which was developed jointly by the state's Maternal and Child Health Department and the Family Stress Center, has been expanded so that approximately 50% of the 20,000 births per year in the state of Hawaii are screened at delivery using a combination of sociodemographic factors and psychosocial factors gathered on a 10-item interview (the 'Family Stress Checklist'; Orkow, 1985). Of the families screened, about 20% are identified as high risk and offered services, and 85% of these receive some services. The goal is to provide services for the first five years of the child's life. Although there have been claims that this program has been very successful at reducing the rates of abuse and neglect, there have been no methodologically rigorous evaluations of the program. Recently, however, two randomized trials have been funded and are now evaluating the Healthy Start model—one conducted by the National Committee to Prevent Child Abuse and the other by Johns Hopkins Medical School.

Preliminary results of the National Committee's study have been presented (Daro & McCurdy, 1996). Of the 372 families agreeing to participate, 304 (82%) underwent at least one assessment interview. Of these, 147 were assigned to the home-visiting group, and 157 to the control group. The families were mostly poor, with more than two-thirds unemployed and receiving some type of



public assistance. By 1 year of age, there were fewer reports to child protective services in the home-visited group (4.1% vs 8.3%,  $p = .16$ ). In addition, mothers in the intervention group had improved scores on the Child Abuse Potential Inventory (a self-reported measure of parenting behaviors and beliefs) and demonstrated more responsiveness and sensitivity to their children. On the other hand, home visiting had no impact on the child's functioning or development.

Although these preliminary results are similar to those of Olds's studies, a valid comparison will be possible only when data from the Healthy Start study are collected at the children's second birthdays.

*Healthy Families America.* In the USA, a national program of home visiting by paraprofessionals is being promoted by the NCPA, in partnership with Ronald McDonald Charities and in collaboration with the Hawaii Family Stress Center (National Committee to Prevent Child Abuse, 1995). Although the aim of this program is to provide home visiting to all new parents, communities that have received funding from state and local governments and foundations have targeted socially high-risk families. Home-based services are being provided by paraprofessionals beginning shortly after birth. As of early 1997, there were 244 Healthy Families America sites in 36 states providing home-based services. Assuming approximately 50 families per site per year, approximately 12,000 families are receiving services. Although this number represents only 1.5% of the 800,000 births per year to socially high-risk families, it is truly an impressive beginning.

The ongoing challenge will be to sustain these programs and develop new ones so that at least 10% to 15% of births to high-risk families can be served annually over the next few years. This challenge will be a difficult one for several reasons. Legislators will want to see a quick answer about the success of Healthy Families America, but funds for evaluations are usually limited, and the programs might take several years to have an impact. Additionally, the impact may be lessened if other programs for high-risk families are decreased and families are no longer supported by the 'safety net'.

Despite the new-found interest in secondary prevention, there is still a considerable imbalance when comparing home-based preventive efforts to after-the-fact child protective services. For instance, in the state of Connecticut, which includes about 1.5% of the population, less than \$1 million is spent on home-based child-abuse prevention efforts compared with \$200 million for protective services and foster care.

### **Tertiary Prevention**

The 1980s and 1990s saw a remarkable growth in tertiary preventive efforts in the USA. Child-protective services around the country funded agencies to provide intensive, short-term, home-based services to families after abuse or neglect had occurred. The purpose of such family preservation programs is to help families at the time of the crisis, prevent placement in foster care, and link families with agencies in the community for long-term help. Services are provided by a paraprofessional who works with two to four families over 6 to 12 weeks and might visit a family daily. Services often include case management, family counseling and provision of concrete help, such as the provision of transportation.

Despite the growth in these kinds of program, evaluations have been limited. We recently reviewed 46 evaluations of family preservation programs (FPS) and found 10 studies with comparison group (5 randomized trials and 5 quasi-experimental studies; Heneghan, Horwitz,

& Leventhal, 1996). Although one of the major goals of FPS is to reduce out-of-home placements, in only 2 of the 10 studies were the rates of placement significantly reduced in the FPS group vs the comparison group. Other important outcomes, such as the reoccurrence of abuse or neglect or the child's development or health, were less frequently measured.

The results of this review suggest that family preservation services do not consistently reduce the rates of out-of-home placements and that future evaluations need to examine carefully outcomes related to the child's and family's functioning. Others have raised concerns that these kinds of tertiary preventive effort sometimes try to keep families together at all costs and that this can, in some circumstances, result in a child dying (Gelles, 1996). In certain circumstances, however, FPS clearly have the potential for being helpful to families in crisis. Programs that offer services to selected families and work with these families over a longer period of time than 6 to 12 weeks would likely be more helpful, especially in circumstances where the maltreatment and family problems are chronic.

## Costs of Prevention

Estimates of the costs of home-based, primary or secondary preventive services are about \$3000 (\$2500 to \$3500) annually per family. In the USA, there are four million births each year, so a universal primary prevention program would cost \$12 billion. Secondary prevention would cost \$2.4 billion (assuming that 20% of the births are considered high risk).

Although these costs are substantial, the lifetime costs of abuse and neglect are enormous and probably far exceed the costs of prevention (NCPCA, 1994). Comparisons of preventive costs and lifetime costs, however, need to be done carefully, since preventive efforts are by no means 100% successful. In the only study that examined the savings due to a prevention program, Olds showed in his Elmira study that over the first 4 years of the child's life, there were savings attributed to the intervention. For low-income families, the savings to the government were equal to the costs of the program (Olds et al., 1993).

## Conclusions

Although it has been less than 40 years since Kempe and his colleagues published their article on the 'battered child syndrome', we have learned much about the prevention of abuse and neglect, and, I contend, we do know how to prevent these forms of maltreatment. Our current state of knowledge suggests that the cornerstone of prevention is providing a long-term, therapeutic relationship with a family by providing home-based services that begin early, occur frequently and extend over the first few years of a child's life. We still know very little about primary prevention. There seems to be great promise for secondary prevention, but more attention needs to be focused on the ascertainment of abuse and neglect in an unbiased way and on methodologically rigorous evaluations that include a range of outcomes. Tertiary prevention clearly has its place, but models of care are needed that offer services over a longer period of time, and evaluations need to determine which families benefit from these services and examine important child-related outcomes including the child's safety, development and health.

The enthusiasm for prevention should be tempered with appropriate cautions, and so I will conclude with a few questions. How generalizable are the results from Olds's studies or from the studies that are now evaluating Hawaii's Healthy Start program? Will the results be similar in

communities with fewer resources for families? Once secondary prevention programs are established in communities will reports of abuse and neglect actually decrease or will the severity of injuries and the level of services provided by CPS decrease? Can society afford the costs of universal prevention programs or the costs of prevention programs for all sociodemographically high-risk families? And finally, can the same types of outcomes be achieved with fewer resources?

These questions and others will need to be examined over the next decades as preventive efforts are expanded and refined. Stephen Jay Gould (1989), a noted scientist, wrote, 'Science is a method for testing claims about the natural world, not an immutable compendium of absolute truths'. If clinicians and researchers continue to develop models of preventive care and strive to test the effectiveness of these models, then prevention of child abuse and neglect should become more a possibility than a pipedream.

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