



National Clearinghouse on Child Abuse and Neglect Information National Adoption Information Clearinghouse



Gateways to Information: Protecting Children and Strengthening Families

Prevention Pays: The Costs of Not Preventing Child Abuse and Neglect

Background

Child abuse and neglect cost our society dearly, not only in terms of the trauma caused to the maltreated individuals but also in economic terms. Economic costs include the funds spent each year on child welfare services for abused and neglected children as well as the large sums dedicated to addressing the short- and long-term consequences of abuse and neglect. Effective prevention programs that promote the safety and well-being of children and families hold potential for lessening the suffering and trauma experienced by children and greatly reducing these economic costs.

To date, few in-depth and rigorous financial analyses have been conducted to give us a solid understanding of the total costs of maltreatment (i.e., the costs of *not* preventing child abuse and neglect) as compared with the economic savings associated with prevention. Nevertheless, several prevention advocates, researchers, and evaluators have begun to grapple with these issues. The purpose of this paper is to promote greater understanding of what is known about the financial costs of maltreatment and to encourage continued examination and comparison of these costs with the benefits of prevention. The paper begins with a discussion of the cost elements that make up the total cost of child maltreatment. The second section highlights findings from selected studies that have conducted cost-benefit and cost-of-failure analyses.

The costs of child maltreatment

Child abuse and neglect have known detrimental effects on the physical, psychological, cognitive, and behavioral development of children (National Research Council, 1993). These consequences range from minor to severe and include physical injuries, brain damage, chronic low self-esteem, problems with bonding and forming relationships, developmental delays, learning disorders, and aggressive behavior. Clinical conditions associated with abuse and neglect include depression, post-traumatic stress disorder, and conduct disorders. Beyond the trauma inflicted on individual children, child maltreatment also has been linked with long-term, negative societal consequences. For example, studies associate child maltreatment with increased risk of low academic achievement, drug use, teen pregnancy, juvenile delinquency, and adult criminality (Widom, 1992; Kelly, Thornberry, and Smith, 1997). Further, these consequences cost society by expanding the need for mental health and substance abuse treatment programs, police and court interventions, correctional facilities, and public assistance programs, and by causing losses in productivity. Calculation of the total financial cost of child maltreatment must account for both the direct costs as well as the indirect costs of its long-term consequences.

Direct costs

Direct costs reflect expenditures incurred by the child welfare system as well as the judicial, law enforcement, health, and mental health systems in responding to abused and neglected children and their families. Direct costs include expenses associated with

hospitalization and medical services provided to treat injuries resulting from abuse, child protective services (CPS) and/or police investigations; foster care and other out-of-home placement services for maltreated children; and family preservation, rehabilitation, and treatment programs.

Government expenditures for child welfare programs provide a benchmark for estimating a portion of the annual direct costs of child abuse and neglect. For fiscal year 1998, Federal expenditures to States for major child welfare programs will exceed \$4.5 billion. This figure includes child welfare services, foster care, adoption assistance, and family preservation and support, but excludes Medicaid dollars, an important source of treatment funding for children and families. Based on a survey of State child welfare agencies (CWLA, 1997), Federal funding accounts for less than half (42%) of State child welfare expenditures with the remainder supported by State (49%) and local (9%) funding.

A recent study by the Missouri Children's Trust Fund (1997) provides a different lens through which to view direct costs of maltreatment. The study analyzed the direct economic costs of one type of child maltreatment-Shaken Baby Syndrome (SBS)-in Missouri over a 10-year period. The study found that the State spent at least \$6.9 million, or approximately \$32,500 on each of the 214 identified SBS victims. These costs included \$4 million in Medicaid expenses, \$1.9 million for Division of Family Services expenditures, and nearly \$1 million for Department of Mental Health services.

Indirect costs

Indirect costs reflect the long-term economic consequences of child maltreatment in such areas as special education, mental health, substance abuse, teen pregnancy, welfare dependency, domestic violence, homelessness, juvenile delinquency, and adult criminality. Indirect costs are more difficult to assess than direct costs, and frequently calculations are based on assumptions or they are extrapolated from research. For example, Deborah Daro (1988) estimated a national indirect juvenile delinquency cost of \$14.9 million based on the following: an estimated 177,300 adolescent maltreatment victims nationwide in 1983; research indicating a 20 percent delinquency rate among adolescent victims; and average costs (\$21,000 per year) for 2 years of correctional institutionalization for these abused and delinquent youth. The same analysis estimated that if 1 percent of severely abused children were to suffer permanent disabilities, the annual cost of community services for treating children with developmental disabilities would increase by \$1.1 million.

Indirect costs also may include inferred costs of lost productivity associated with injury, incarceration, long-term unemployment, or death. For example, Daro's cost analysis (1988) projected that the national cost in future lost productivity of severely abused or neglected children is between \$658 million and \$1.3 billion each year, assuming that their impairments reduce their future earnings by as little as 5 percent to 10 percent. A Michigan study (Caldwell, 1992) used rates of per capita income and average lifetime participation in the labor force to generate average lifetime earnings of, and calculate lost tax revenue from, those children who died as a result of child abuse or preventable infant mortality. The study concluded that, in addition to the devastating personal losses experienced by the families of the infants and children who died, the State lost an estimated \$46 million in tax revenue. (Although this figure represents the loss of tax revenue over a lifetime, it can also be interpreted as the per year loss to the State if the rates of tax, abuse, and mortality remain relatively stable.)

**Prevention
cost/benefit
analyses**

As the above examples show, the total financial costs of child abuse and neglect can be quite high. Conversely, the potential benefits or savings from prevention also are high. These costs and potential savings form the basis of cost-benefit analyses.

Few in-depth economic analyses have been conducted to assess the cost-effectiveness of child abuse prevention. Four key studies, presented below, compare the costs of preventive family support services with the savings generated from the positive outcomes of prevention programs and/or the direct and indirect costs of not preventing child maltreatment. Many prevention programs, including those referenced in the studies below, address not only prevention of child abuse and neglect, but also prevention of other threats to child and family well-being. Examples of such threats include preventable health conditions (e.g., low birthweight, infant mortality, newborn addictions), lack of economic self-sufficiency, social isolation, lack of parenting skills or knowledge, and inappropriate child rearing behaviors. Several of these other threats also represent precursors or risk factors associated with abuse and neglect. As such, the benefits generated by addressing these risk factors are included in this broad view of the costs related to child maltreatment.

***Elmira,
New York***

A 1990 report by David Olds and colleagues presents an economic analysis within a rigorous evaluation based on a randomized trial of a nurse home visitation program serving 400 pregnant women in Elmira, New York (Olds et al, 1993). The evaluation indicated that frequent home visits by nurses during pregnancy and the first 2 years of the child's life improved a wide range of maternal and child health outcomes among adolescent, unmarried, and low-income first-time mothers (Olds & Kitzman, 1993). The study found that in contrast to women assigned to the comparison group, nurse-visited women experienced: (1) improved health related behaviors (e.g., reduced cigarette use and improved diets) and use of prenatal services during pregnancy; (2) fewer emergency-room visits for children during the second year of life; (3) greater workforce participation; and (4) fewer subsequent pregnancies for low-income and unmarried women. In addition, among poor, unmarried teenage women, the study observed a 75 percent reduction in State-verified cases of child abuse and neglect during the first 2 years of a child's life.

The economic analysis for the Elmira home visitation program concluded that government savings could offset the program costs for low-income participants within 4 years (Olds et al, 1993). The analysis estimated an average cost of \$3,133 per family (1980 dollars) for providing home visitation services to low-income participants, based on expenditures for nurses' salaries, benefits, supplies, and transportation. These costs were compared with reduced expenditures in other government programs affected by the positive outcomes of home visitation. The economic impact of improved maternal and child functioning was evaluated from a standpoint of four government programs-Aid to Families with Dependent Children, Medicaid, Food Stamps, and CPS-as well as increased tax revenues generated by subsequent employment. Within low-income families, for the 4-year period following the child's birth, the estimated per family government savings was \$3,498 (Olds et al, 1993). The majority of estimated government savings (based on comparison group expenditures) was derived from reductions in AFDC and Food Stamp payments, which were associated with increased employment and reduced subsequent pregnancies among program clients.

Michigan

A 1992 study for the Michigan Children's Trust Fund (Caldwell, 1992) concluded that providing either comprehensive parent education or home visitation service for every Michigan family expecting its first child would amount to only 5 percent of the estimated total State cost of maltreatment. Based on an estimated per-family cost of \$712, statewide prevention services were projected at approximately \$43 million. In comparison, analysts figured that child maltreatment and inadequate prenatal care cost the State approximately \$823 million. Michigan's total estimated annual cost of child maltreatment and inadequate prenatal care included direct and indirect costs associated with the following:

- Protective services (\$38 million)
- Foster care (\$74 million)
- Health costs of low birth weight babies (\$256 million)
- Medical treatment of injuries due to abuse (\$5 million)
- Special education costs (\$6 million)
- Psychological care for child maltreatment victims (\$16 million)
- Juvenile justice system and correction services (\$207 million)
- Adult criminality (\$175 million)
- Projected tax revenue lost from infant deaths (\$46 million)

In making these estimates, a series of extrapolations were used to account for the proportion of total spending that can be linked to maltreatment. For example, prior research (Loeber & Stouthamer-Loeber, 1987), suggests that approximately 20 percent of children from abusive homes commit delinquent acts as juveniles and 25 percent of these go on to commit crimes as adults. Based on these findings, the Michigan researchers predicted that of the 39,452 children identified as abused that year, 1,996 would become involved in the adult criminal justice system. With an average annual State adult prison cost of \$25,000, and an average prison sentence of 3.5 years, total adult criminality associated with child abuse and neglect was estimated to cost \$175 million (1,996 x \$25,000 x 3.5).

Colorado

A similar 1995 analysis, commissioned by the Colorado Children's Trust Fund, examined the costs incurred in the State of Colorado by failing to prevent child abuse and neglect, and then compared these costs with the savings that would accrue from an investment in effective prevention services (Gould & O'Brien, 1995). The State estimated \$190 million in annual direct costs for child maltreatment, including the costs of CPS investigations, child welfare services to children in their own homes, and out-of-home placements. In addition, annual indirect costs were calculated based on an assumption that \$212 million (approximately 20 percent of the \$1 billion total expenditure) in State social programs were associated with the long-term consequences to individuals maltreated as children (e.g., special education, AFDC assistance payments, job training programs, youth institutional and community programs, mental health programs for children and adults, substance and drug abuse programs, victim services, criminal justice programs, domestic violence shelters, and prisons). Indirect costs (\$212 million) and direct costs (\$190 million) combined for an estimated total of \$402 million in annual expenditures related to abuse and neglect.

The State costs of maltreatment were compared to the potential savings associated with an intensive home visitor prevention program targeted toward those families most at risk of abuse and neglect. Based on an estimated \$2,000 per-family cost of a State-wide

**Allegheny
County,
Pennsylvania**

home visitation program for high risk families with children from birth to 3 years old, the Colorado analysis projected total costs of \$32 million. At the time of the study, \$8 million was being spent in the State on home visitation and family support, thus suggesting a need for \$24 million in new money. The Colorado analysis concluded that if the program were able to reduce child maltreatment expenditure by only 6 percent (.06 x \$402 million annual expenditure), the cost of the prevention investment would be offset.

In a recent study, Bruner (1996) used statistical modeling to estimate benefits or savings as the potential returns on investment from family centers for high-risk neighborhoods in Allegheny County, Pennsylvania. This study approaches the *cost-of-failure* by contrasting the level of spending on remediation, maintenance, and CPS for residents living in the highest-risk, distressed neighborhoods of the county with the level of spending in lower risk neighborhoods in the same county. This approach captures real-world comparisons for estimates of "what could be." (Bruner, 1996).

The study first determined the potential "savings" obtainable by transforming the high-risk neighborhoods into neighborhoods similar to the rest of Allegheny County. This potential savings, or cost-of-failure, included expenditures across a number of public spending areas most associated with preventable maltreatment and health problems in childhood-AFD and Medicaid, food stamps, children and youth social services, juvenile justice, jail and prison, and lost economic activity and tax revenue. The analysis concluded that the county would save approximately \$565 million annually in public spending, or \$416.3 million, if these costs were discounted over a 20-year timeframe. Costs were calculated for establishing family centers to serve populations within the high-risk neighborhoods. This analysis was grounded in the existing body of research on the various elements needed for children to succeed, the principles of effective frontline practice, and the potential long-term effects of such strategies upon child outcomes. The study projected that to serve 45 percent to 60 percent of all families with very young children in Allegheny County high-risk neighborhoods would require an expansion of funding of \$11.9 million, from \$6.6 million (for existing centers with a capacity for 2,640 families) to \$18.5 million (to serve up to 8,400 families).

From a return-on-investment perspective, the \$18.5 million expenditure can be compared with the \$416.3 million estimated long-term preventable expenditures. An \$18.5 million investment would have to contribute to reducing such preventable financial costs by only 5 percent for it to be considered cost-effective.

Conclusion

In each of the above studies, the analysts concluded that the positive outcomes of prevention programs, with even relatively small reductions in the rate of child maltreatment, demonstrate that prevention can be cost effective. Although much remains to be learned about the optimal levels of investment in prevention, these studies present a starting point for continued analysis and discussion.

To estimate the financial costs of the long-term consequences of child maltreatment on adolescent and adult development and behavior, cost-benefit analyses must take a holistic and long-term perspective. Most of the investments in prevention, particularly as they apply to investments in families with young children, are likely to have "payback curves" that extend over a long period of time, with much of the savings occurring when the child reaches a healthy, productive, and non-violent adulthood (Bruner and Scott, 1994). While additional investment, research, careful documentation, and well-designed

Resources

analysis is needed within the prevention field-both to assess the effectiveness of prevention programs as well as its cost-effectiveness-current findings suggest that over the long-term, *prevention pays*.

Barnett, W. S. (1993). "Economic Evaluation of Home Visiting." *The Future of Children* 3 (3): 93-112.

Bruner, C. (1996). *Potential Returns on Investment from a Comprehensive Family Center Approach in High-Risk Neighborhoods: Background Paper, Allegheny County Study*. Des Moines, IA: Child and Family Policy Center.

Bruner, C. (1993). *Toward Outcome-based Accountability: Readings on Constructing Cost-of-Failure/Return on Investment Analysis of Prevention Initiatives*. Des Moines, IA: Child and Family Policy Center.

Bruner, C. and Scott, S. (1994). *Investment-Based Budgeting-The Principles in Converting from a Remediation Response to a Prevention/Investment Budget. Occasional Paper #11*. Des Moines, IA: Child and Family Policy Center.

Caldwell, R. A. (1992). *The Costs of Child Abuse vs. Child Abuse Prevention: Michigan's Experience*. East Lansing, MI: Michigan Children's Trust Fund.

Courtney, M. E. (1998). "The Costs of Child Protection in the Context of Welfare Reform." *Future of Children* 8(1): 88-103.

Daro, D. (1988). *Confronting Child Abuse: Research for Effective Program Design*. NY: The Free Press, Macmillian, Inc.

Dubowitz, H. (1990). "Costs and Effectiveness of Interventions in Child Maltreatment." *Child Abuse and Neglect* 14 (2): 177-186.

Franey, K, Geffner, R., & Falconer, R., editors. (2001). *The Cost of Child Maltreatment: Who Pays? We All Do*. San Diego, CA : Family Violence & Sexual Assault Institute.

Gould, M. S. & O'Brien, T. (1995). *Child Maltreatment in Colorado: The Value of Prevention and the Cost of Failure to Prevent*. Denver, CO: Center for Human Investment Policy, University of Colorado at Denver.

Kelley, B.T., Thornberry, T.P. & Smith, C. A. (1997). *In the Wake of Childhood Violence*. Washington, D.C.: National Institute of Justice.

Missouri Children's Trust Fund (1997). *The Economic Costs of Shaken Baby Syndrome Survivors in Missouri*. Jefferson City, MO: Missouri Children's Trust Fund.

Myers, J. E. B., Berliner, L., Briere, J., and Hendrix, C. T., et al. (2001). *The APSAC Handbook on Child Maltreatment. Second Edition*. Sage Publications, Inc., Thousand Oaks, CA.

National Research Council. (1993). *Understanding Child Abuse and Neglect*. Washington, DC: National Academy Press.

Petit, M. R. & Curtis, P. (1997). *Child Abuse and Neglect: A Look at the States. 1997 CWLA Stat Book*. Washington, DC: CWLA Press.

Olds, D. L., Henderson, C.R., Phelps, C., Kitzman, H. & Hanks, C. (1993). "Effect of Prenatal and Infancy Nurse Home Visitation on Government Spending." *Medical Care* 31 (2): 155-174.

Olds, D. & Kitzman, H. (1993). "Review of Research on Home Visiting for Pregnant Women and Parents of Young Children." *The Future of Children*. 3 (3): 53-92.

Plotnick, R. D.; Deppman, L. (1999). "Using Benefit-Cost Analysis to Assess Child Abuse Prevention and Intervention Programs." *Child Welfare* 78(3): 381-407.

U.S. General Accounting Office (1992). *Child Abuse: Prevention Programs Need Greater Emphasis*. Washington, DC: GAO.

Walker, E. A., Unutzer, J., Rutter, C., Gelfand, A., et al. (1999). "Costs of Health Care Use by Women HMO Members With a History of Childhood Abuse and Neglect." *Archives of General Psychiatry* 56(7): 609-613. For abstract, see <http://archpsyc.ama-assn.org/issues/v56n7/abs/yoa8416.html>.

Widom, C.S. (1992). *The Cycle of Violence*. Washington, DC: National Institute of Justice.