

## MALTREATMENT (CHILD)

# Child Maltreatment and Its Impact on Psychosocial Child Development

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#### Introduction

Child maltreatment is a pervasive societal problem that frequently exerts a devastating negative impact on children, not simply during childhood, but across the life course.<sup>1,2,3,4</sup> Although media portrayals of maltreated children graphically portray bruises, burns, head trauma, abandonment and malnutrition, a growing body of research suggests that the emotional damage accompanying abusive and neglectful acts, and not solely the physical damage, may result in the most significant and long-term harmful effects on the child. Maltreatment that occurs in the first five years of life may be especially detrimental, given the vulnerability of these youngsters and the fact that the early years of life are characterized by more rapid neurobiological and psychological growth than are subsequent years.

### Subject

In recent years, the numbers of children who have experienced some form of maltreatment have escalated. According to the stringent operational criteria utilized in the most recent National Incidence Study conducted in the United States, almost 1.6 million American children were abused or neglected in 1993,<sup>5</sup> an increase of 149% over the seven-year period between studies. In 1993, 11.1 out of every 1,000 children experienced abuse and 13.1 experienced neglect. Of these maltreated children, 50% were less than seven years of age and 25% were younger than age four. In the first nation-wide study to examine the incidence of child maltreatment in Canada, similarly startling statistics emerge, with an estimated 21.52 investigations of child maltreatment per 1,000 children in 1998.<sup>6,7</sup> Importantly, the Canadian statistics represent only a portion of actual occurrences of maltreatment, since the study assessed only those cases that were investigated by child welfare workers.

### Problems

Research and intervention within the area of child maltreatment have faced a number of challenges.

- The field has been hampered by the lack of clear operational criteria for acts constituting child maltreatment.<sup>2,8,9</sup> Consequently, estimates of the magnitude of the problem vary considerably as a function of criteria utilized to define maltreatment.
- There has been some controversy regarding the best way to ascertain the occurrence of maltreatment. Some investigators advocate the use of official records while others believe that querying the child who has been maltreated or the maltreating caregiver is preferable. Ideally, a combination of report sources would be used.
- Because maltreated children rarely experience a single type of maltreatment, investigators also have grappled with how best to distinguish among the sequelae associated with a particular type of maltreatment.
- Moreover, because maltreatment is more common in low-income families, disentangling the effects of maltreatment per se as opposed to the effects of poverty and its associated stresses is challenging.
- Although there is now a consensus that maltreatment adversely affects development, less progress has been achieved in explicating the processes and mechanisms that contribute to the range of developmental outcomes observed in maltreated children.
- Similarly, in order to elucidate the developmental processes that are implicated in the consequences of child maltreatment, longitudinal research is needed. However, given issues related to the attrition of the study population as a function of factors such as mobility, incarceration, psychiatric hospitalization and foster-care placement of children, sufficiently large cohorts are difficult to retain.
- An almost exclusive focus on behavioural and psychological outcomes of maltreatment during the first five years largely fails to consider the neurobiological sequelae of abuse and neglect.
- The heterogeneity of outcomes among maltreated children suggests that maltreatment does not affect all children similarly. Varied outcomes underscore the importance of examining predictors of resilience despite the adversity of maltreatment.
- Despite extensive knowledge regarding the adverse effects of maltreatment, with the exception of the work of David Olds,<sup>10,11</sup> considerably less progress has been made in devising effective prevention and intervention strategies.

### Research Context

Investigations in the area of child maltreatment have necessarily been broad in scope, encompassing aspects of epidemiology and definition, developmental consequences, long-term outcomes and interventions. Although child maltreatment cuts across economic classes, much of the work has focused on low-income populations.

### **Key Research Questions**

The key research questions emanate directly from those issues highlighted under the heading of problems. We need to build upon the extensive knowledge of the negative effects of maltreatment to address increasingly sophisticated questions. Investigations must utilize clear operational definitions of maltreatment and these

definitions must be specified. In this regard, the full range of experiences of maltreatment must be examined, including variables such as age of onset, perpetrator, severity and chronicity. Efforts need to be focused on identifying pathways to adaptive and maladaptive outcomes and multiple versus single domains of development. Investigations of outcome also need to examine neurobiological and psychophysiological indicators in conjunction with socio-emotional variables. Finally, longitudinal investigations that also incorporate cost-benefit analyses of failing to prevent maltreatment or to provide sufficient treatment once maltreatment has occurred are necessary.

#### **Recent Research Results**

Child maltreatment exerts a devastating and enduring impact on children and the cost to society overall is high. In a longitudinal investigation,Widom and Maxfield<sup>12</sup> found that abused and neglected children were 1.8 times more likely to be arrested as juveniles than were their non-maltreated age mates. Maltreated children also are more likely to develop substance abuse problems.<sup>13,14</sup> In addition, more than 50% of maltreated children experience difficulties in school and approximately 25% require special education services.<sup>15,16</sup>

Unfortunately, most theoretically guided and methodologically rigorous research to date has focused on the impact of maltreatment on youngsters who are preschool-age and older. Research conducted on children during the first five years of life has consistently underscored the negative socio-emotional sequelae of maltreatment across multiple domains of development.<sup>3,17</sup> Considerable research has demonstrated that maltreatment during infancy can lead to insecure attachment relationships with caregivers.<sup>17</sup> Importantly, these insecure attachment patterns are not specific to the early years, but have been shown to carry over into the preschool- and school-aged years.<sup>1</sup> The early difficulties of maltreated children in forming a secure attachment relationship with a primary caregiver also potentiate continued disturbances in interpersonal relationships as development proceeds. Difficulties in the attainment of other age-appropriate competencies have also been identified, including disturbances in the development of the self;<sup>18,19</sup> an inability to form effective peer relationships;<sup>20,21,22</sup> challenges adapting to the school environment;<sup>23,24,25</sup> and increased rates of behaviour problems and psychopathology.<sup>26,27</sup> Recent research has also shed light on difficulties in the acquisition of theory of mind in children who have been maltreated.<sup>28,29</sup>

### Conclusions

There is no doubt that child maltreatment is an enormous problem that exerts a toll not only on its victims, but also on society more broadly. A National Institute of Justice<sup>30</sup> report estimated the annual costs of the consequences of child abuse and neglect in the United States at \$56 billion. That estimate included direct costs such as medical, lost earnings and public programs, as well as indirect costs associated with pain and diminished quality of life. More recently, a study conducted by Prevent Child Abuse America estimated the total cost of child abuse in the United States at over \$94 billion per year.<sup>31</sup> Child maltreatment may affects children's successful development of competencies not just at a single period of development, but across the life span. It is important, however, to recognize that there is considerable diversity in process and outcome associated with child maltreatment. Important new directions for research on this critical societal problem have also been highlighted. It is no longer productive to conduct investigations that focus exclusively on uncovering main effects associated with child maltreatment because such approaches are likely to yield results that do not convey accurately the developmental risks that accompany maltreatment. There is also a pressing need for

more research on the effects of child maltreatment during infancy and toddlerhood. The development and implementation of comprehensive, longitudinal investigations of child maltreatment and its co-occurring risk factors are also critical.

### Implications on the Policy and Services Perspective

Research on the socio-emotional consequences of maltreatment during the early years of life provides a foundation of knowledge regarding how adverse caregiving can erode development. However, if these scientific findings are to be appropriately applied to the formulation and evaluation of prevention and intervention strategies for vulnerable children and families, then a number of recommendations need to be implemented.

- It is critical to provide intervention as quickly as possible after maltreatment has been identified. Even if symptoms or a diagnosable mental illness are not manifested immediately, referral to a mental-health provider to assess the possible
- need for the provision of early intervention is an important way to prevent or mitigate the occurrence of negative developmental consequences. Removing a maltreated child from the home does not constitute treatment.
- Because maternal substance abuse and the accompanying inability to care for children is an increasingly prevalent reason for the occurrence of maltreatment during infancy, the comorbid effects of maltreatment and pre- and postnatal substance exposure and their implications for treatment should be investigated.
- Methodologically sound evidence on the efficacy of intervention for maltreated children is scarce. If expectations for policy modification and increased resource allocation are to be realized, then we must be able to provide cost-benefit analyses regarding the effectiveness of prevention and intervention for maltreated children.
- We must not delay improving the training of those grappling with issues of child abuse and neglect. Childprotection workers must be given information regarding the importance of providing psychological interventions to young children who have been maltreated and to their biological or adoptive caregivers. Minimally, protective service personnel need to be knowledgeable about research on the short- and longterm effects of maltreatment and increase their efforts to refer these children for evaluation and possible services prior to the emergence of a full-blown behavioural or psychiatric disorder. Similarly, the training of therapists must incorporate a consideration of broader systemic issues that accompany work with children in the child welfare system.
- Developmental principles need to be integrated into the training of clinicians who are likely to be involved with maltreated children. Because the consequences of maltreatment may vary as a function of the developmental period during which the trauma occurred, therapists need to be prepared to incorporate this developmental understanding into their work.
- Because our identification systems, research knowledge, and prevention and treatment strategies for occurrences of maltreatment during the early years of life lag behind those developed for addressing maltreatment in later childhood and adolescence, efforts must be directed toward filling in these gaps.

#### References

- Cicchetti D, Toth SL. Developmental psychopathology perspective on child abuse and neglect. Journal of the American Academy of Child and Adolescent Psychiatry 1995;34(5):541-565.
- Manly JT, Kim JE, Rogosch FA, Cicchetti D. Dimensions of child maltreatment and children's adjustment: Contributions of developmental timing and subtype. *Development and Psychopathology* 2001;13(4):759-782.
- 3. Malinosky-Rummell R, Hansen DJ. Long-term consequences of childhood physical abuse. Psychological Bulletin 1993;114(1):68-79.
- 4. Trickett PK, McBride-Chang C. The developmental impact of different forms of child abuse and neglect. *Developmental Review* 1995;15(3):311-337.
- 5. Sedlak AJ, Broadhurst DD. The third national incidence study of child abuse and neglect. Washington, DC: US Department of Health and Human Services; 1996.
- Trocmé N, Wolfe D. Child maltreatment in Canada: Selected results from the Canadian Incidence Study of Reported Child Abuse and Neglect. Otta<sub>0</sub>wa, Ontario: Minister of Public Works and Government Services Canada; 2001. Available at: <a href="http://www.phac-aspc.gc.ca/ncfv-cnivf/familyviolence/pdfs/nfnts-cmic\_e.pdf">http://www.phac-aspc.gc.ca/ncfv-cnivf/familyviolence/pdfs/nfnts-cmic\_e.pdf</a>. Accessed October 25, 2007.
- Trocmé N, MacLaurin B, Fallon B, Daciuk J, Billingsley D, Tourigny M, Mayer M, Wright J, Barter K, Burford G, Hornick J, Sullivan R, McKenzie N. Canadian incidence study of reported child abuse and neglect: Final report. Ottawa, Ontario: Minister of Public Works and Government Services Canada; 2001. Available at: http://www.phac-aspc.gc.ca/publicat/cisfr-ecirf/pdf/cis\_e.pdf. Accessed October 25, 2007.
- Cicchetti D, Barnett D. Toward the development of a scientific nosology of child maltreatment. In: Cicchetti D, Grove WM, eds. *Thinking clearly about psychology: Essays in honor of Paul E. Meehl, Vol. 1: Matters of public interest; Vol. 2: Personality and psychopathology.* Minneapolis, Minn: University of Minnesota Press; 1991:346-377.
- 9. Cicchetti D, Rizley R. Developmental perspectives on the etiology, intergenerational transmission, and sequelae of child maltreatment. *New Directions for Child Development* 1981;11:31-55.
- 10. Olds DL, Henderson CR Jr., Chamberlin R, Tatelbaum R. Preventing child abuse and neglect: a randomized trial of nurse home visitation. *Pediatrics* 1986;78(1):65-78.
- Olds DL, Eckenrode J, Henderson CR Jr., Kitzman H, Powers J, Cole R, Sidora K, Morris P, Pettitt LM, Luckey D. Long-term effects of home visitation on maternal life course and child abuse and neglect. Fifteen-year follow-up of a randomized trial. JAMA - Journal of the American Medical Association 1997;278(8):637-643.
- 12. Widom CS, Maxfield MG. A prospective examination of risk for violence among abused and neglected children. *Annals of the New York Academy of Sciences* 1996;794:224-237.
- 13. Chaffin M, Kelleher K, Hollenberg J. Onset of physical abuse and neglect: psychiatric, substance abuse, and social risk factors from prospective community data. *Child Abuse & Neglect* 1996;20(3):191-203.
- 14. Clark DB, Lesnick L, Hegedus AM. Traumas and other adverse life events in adolescents with alcohol abuse and dependence. *Journal of the American Academy of Child & Adolescent Psychiatry* 1997;36(12):1744-1751.
- Caldwell RA. The costs of child abuse vs. child abuse prevention: Michigan's experience; 1992. Available at: http://www.msu.edu/user/bob/cost.html. Accessed October 29, 2004.
- 16. Veltman MWM, Browne KD. Three decades of child maltreatment research: Implications for the school years. *Trauma Violence & Abuse* 2001;2(3):215-239.
- 17. Cicchetti D, Toth SL. Developmental processes in maltreated children. In: Hansen DJ, ed. *Nebraska Symposium on Motivation Vol. 46,* 1998: Motivation and child maltreatment. Lincoln, Neb: University of Nebraska Press; 2000:85-160.
- Cicchetti D. Fractures in the crystal: Developmental psychopathology and the emergence of the self. Developmental Review 1991;11(3):271-287.
- 19. Toth SL, Cicchetti D, Macfie J, Emde RN. Representations of self and other in the narratives of neglected, physically abused, and sexually abused preschoolers. *Development & Psychopathology* 1997;9(4):781-796.
- 20. Bolger KE, Patterson CJ. Developmental pathways from child maltreatment to peer rejection. Child Development 2001;72(2):549-568.
- 21. Rogosch FA, Cicchetti D. Illustrating the interface of family and peer relations through the study of child maltreatment. Social Development 1994;3(3):291-308.
- Shields A, Ryan RM, Cicchetti, D. Narrative representations of caregivers and emotion dysregulation as predictors of maltreated children's rejection by peers. *Developmental Psychology* 2001;37(3):321-337.
- 23. Shonk SM, Cicchetti, D. Maltreatment, competency deficits, and risk for academic and behavioural maladjustment. *Developmental Psychology* 2001;37(1):3-17.
- 24. Eckenrode J, Laird M, Doris J. School performance and disciplinary problems among abused and neglected children. *Developmental Psychology* 1993;29(1):53-62.

- 25. Toth SL, Cicchetti D. The impact of relatedness with mother on school functioning in maltreated children. *Journal of School Psychology* 1996;34(3):247-266.
- 26. Cicchetti D, Toth SL. Child maltreatment in the early years of life. In: Osofsky JD, Fitzgerald HE, eds. *Infant mental health in groups at high risk.* New York, NY: John Wiley & Sons; 2000:255-294. WAIMH Handbook of infant mental health; vol 4.
- Dodge KA, Pettit GS, Bates JE. How the experience of early physical abuse leads children to become chronically aggressive. In: Cicchetti D, Toth SL., eds. Developmental perspectives on trauma: Theory, research, and intervention Rochester, NY: University of Rochester Press; 1997:263-288. Rochester symposium on developmental psychology, vol 8.
- 28. Cicchetti D, Rogosch FA, Maughan A, Toth SL, Bruce J. False belief understanding in maltreated children. *Development and Psychopathology* 2003;15(4):1067-1091.
- 29. Pears KC, Fisher PA. Emotion understanding and theory of mind among maltreated children in foster care: Evidence and deficits. *Development and Psychopathology*. In press.
- 30. Miller T, Cohen M, Wiersema B. Victim costs and consequences: A New Look. The National Institute of Justice: Research Report1996. Washington, DC: U.S. Department of Health and Human Services.
- 31. Fromm S. Total estimated cost of child abuse and neglect in the United States. Statistical evidence. *Prevent Child Abuse America*; 2001. Available at: http://www.preventchildabusenj.org/documents/index/cost\_analysis.pdf Accessed October 25, 2007.