Introduction

The maltreatment of children is a horrific phenomenon in which young infants and children do not receive the protection, care, nurturance and interactions that are typical of how humans (and many other species) care for their young. It has been well documented that children who experience maltreatment are at very high risk for the emergence of behavioural, emotional and social problems later in life. However, the precise mechanisms linking the experience of maltreatment with the development of these problems are largely unknown. A critical developmental question remains: How is it that adversity or trauma early in life can lead to a range of problems, including depression, aggression, substance abuse, health problems and general unhappiness, years after maltreatment has ended? Asking this question in mechanistic terms, rather than just describing the kinds of problems observed in maltreated children, is likely to help uncover the most effective interventions for these children. The emotional and social
development of maltreated children provides a compelling clue to where to begin looking for answers to these questions.

**Subject**

Child maltreatment is a significant public health problem. Every year, approximately 13 per 1,000 children in the United States and 10 per 1,000 children in Canada are verified victims of some form of maltreatment. Many more children will experience maltreatment in forms that are more difficult to confirm, such as emotional abuse or neglect. These forms of maltreatment are harder to detect and measure, but also cause tremendous harm.

**Problems**

Child maltreatment is a disruption in relationships that are supposed to provide protection and nurturance for children. Families are the primary contexts in which young children learn what kinds of social behaviours to expect from others as well as how to interpret and send emotional signals to others. In abusive families, children are exposed to maladaptive forms of emotional communication and behaviour and receive poor models of adaptive self-regulation.

**Research Context**

Because child maltreatment is not only a mental-health but also a socio-legal problem, families may not be motivated to participate in studies. Therefore, care must be taken to ensure that representative samples of maltreated children are included in research studies, but this must be done in a way that is not coercive. It is also important that child maltreatment be studied as distinct from poverty. For example, some parents may not have the resources to provide their children with certain kinds of nourishment, educational experiences or medical care. In such cases, child maltreatment would be indicated if parents did not do all they could to take advantage of whatever community resources were available to them (e.g. applying for food stamps, using an emergency room). Finally, it is difficult to define child maltreatment, and definitions vary across studies. Some studies may include all children who experienced any kind of traumatic or harmful experience or poor parenting, whereas other studies may focus specifically on children who experienced sexual abuse, physical abuse or neglect, or who witness domestic violence. It is likely that each of these kinds of experiences will have different effects on the developing child. Research projects may also differ on how maltreatment is determined. Some research teams directly ask children and parents about maltreatment, others use police or court
records, and still others follow guidelines established by local child-welfare agencies.

**Key Research Questions**

Central questions in the study of child maltreatment concern the underlying mechanisms linking early experience with later problems. What is being changed in the individual child as a result of their experience? What exactly about the abusive environment or the experience is responsible for the change? How do the frequency with which maltreatment occurred, the severity of the maltreatment, the specific type of maltreatment and the child’s developmental stage at the time of maltreatment relate to different behavioural outcomes? Why is child maltreatment associated with so many different kinds of problems? And most importantly, what can be done to correct and prevent these problems?

**Recent Research Results**

Children’s developing ability to recognize and respond appropriately to emotions is an especially important social skill. However, maltreated children often show unusual patterns of emotional development. These children perform poorly on tasks that measure how well they recognize and express emotions. Physically abused children, in particular, often display both withdrawal and aggression, readily attend to and remember cues related to aggression and tend to attribute hostility to others. As might be expected, such constellations of behaviours often lead to interpersonal difficulties for these children.

One proposed mechanism underlying the development of behaviour problems in maltreated children is that traumatic experiences, such as maltreatment, selectively increase children’s sensitivity to certain salient emotional cues, especially anger, at the cost of their learning how to read other emotions. For example, physically abused children tend to perceive angry faces as highly salient relative to other emotions; in contrast, neglected children tend to have difficulty differentiating facial expressions of emotion. Recent studies have suggested that physically abused children display relative increases in brain electrical activity when attending specifically to angry faces.

The extreme stress associated with child maltreatment can also lead to problems in stress and emotion regulation, including depression and substance abuse, which likely reflects attempts to help regulate emotional states. As adults, victims of maltreatment have high rates of anxiety, eating disorders and post-traumatic stress disorder. An area of current interest is the effect of
elevated stress hormones, such as cortisol, on the development of brain regions associated with memory storage and retrieval.\textsuperscript{24,25} Although most child victims of maltreatment do not grow up to be criminals, about 30\% of these children will engage in criminal behaviours.\textsuperscript{26,27}

Conclusions and Implications

Child maltreatment disrupts the normal course of children’s emotional development. Maltreated children are at risk for a wide range of mental health-related problems, including depression, anxiety, substance abuse, criminality and other forms of poorly regulated emotional behaviour. Promising new studies are suggesting insights into how maltreatment affects emotional development by focusing on attention and stress systems in the brain. In the meantime, more work is needed to develop effective interventions for these children.

Although child maltreatment occurs across socioeconomic strata, poverty and environmental stress increase the likelihood that maltreatment will occur. Adults living in poverty often experience high levels of stress and social instability, emotional problems and high levels of substance abuse and/or depression—all of which undermine the ability to parent effectively. Poverty cannot explain all of child maltreatment, however. Maltreating families often lack social connections, including friends, extended family and neighbourhood communities. While such a lack of social connections may reflect the parents’ interpersonal difficulties, the net result for children is a limited range of adults who can model prosocial behaviours and fewer opportunities to establish connections with stable adults. This is critical because abusive parents have often had little exposure to good parent role models and lack knowledge about child development, child-rearing strategies, social problem-solving and methods to cope with anger and stress. Research on treatment services for maltreated children and their families has been hindered by our current lack of understanding about what specific processes should be targeted for remediation. New research on neurobiological mechanisms is now underway. Because most current interventions lack compelling empirical data about effectiveness, prevention of child maltreatment holds considerable promise.

References


