



**RESEARCH BRIEF:
Interventions to Prevent Child Maltreatment**

March 2014

What We Know

- Child maltreatment (CM) is defined as the physical and emotional mistreatment, sexual abuse, neglect and negligent treatment of children, as well as their commercial or other exploitation (WHO, 2006). It is a major public health problem associated with a broad range of negative health outcomes across the lifespan. There are five types of CM: physical abuse, sexual abuse, emotional (or psychological) abuse, exposure to intimate partner violence (IPV), and neglect (Gilbert et al., 2009). There are no universally accepted definitions for any types of maltreatment. Most information about CM is based on studies conducted in high-income countries.

Incidence and prevalence

- Official statistics seriously underestimate the occurrence of CM; self-reports are considered more accurate, but are still likely low. In Canada, the Canadian Incidence Study of Reported Child Abuse and Neglect (CIS) has provided information about the estimated number of maltreatment-related investigations every 5 years since 1998. Findings from the most recent cycle (2008) indicate that the incidence was 39.16 per 1,000 children; the incidence for substantiated maltreatment was 14.19 per 1,000 children (Public Health Agency of Canada, 2010). The primary categories of substantiated maltreatment based on CIS-2008 data were as follows: physical abuse (20%), sexual abuse (3%), neglect (34%), emotional maltreatment (9%) and exposure to IPV (34%).
- Recent meta-analyses indicate self-reported prevalence estimates of CM: physical abuse (22.6%; no gender differences) (Stoltenborgh et al., 2013b), neglect (physical: 16.3% and emotional: 18.4%; no gender differences) (Stoltenborgh et al., 2013a); sexual abuse (18.0% (girls) and 7.6% (boys) (Stoltenborgh et al., 2011) and emotional abuse (36.3%; no gender differences) (Stoltenborgh et al., 2012).

Risk indicators

- Risk indicators show an association with CM, but are not necessarily causally related. Much more is known about risk indicators for physical and sexual abuse; risk indicators for neglect and exposure to IPV are similar to those for physical abuse (WHO, 2006). Less is known about risk indicators for emotional abuse (Hibbard et al., 2012).

Physical abuse

- Poverty
- Unemployment
- Parental exposure to child maltreatment
- Parental mental health problems
- Parental substance abuse
- IPV

Sexual abuse

- Female gender
- Living in family without natural parent
- Poor relationships between parents
- Presence of a stepfather
- Poor child-parent relations
- Young maternal age
- Parental death

Effects of child maltreatment

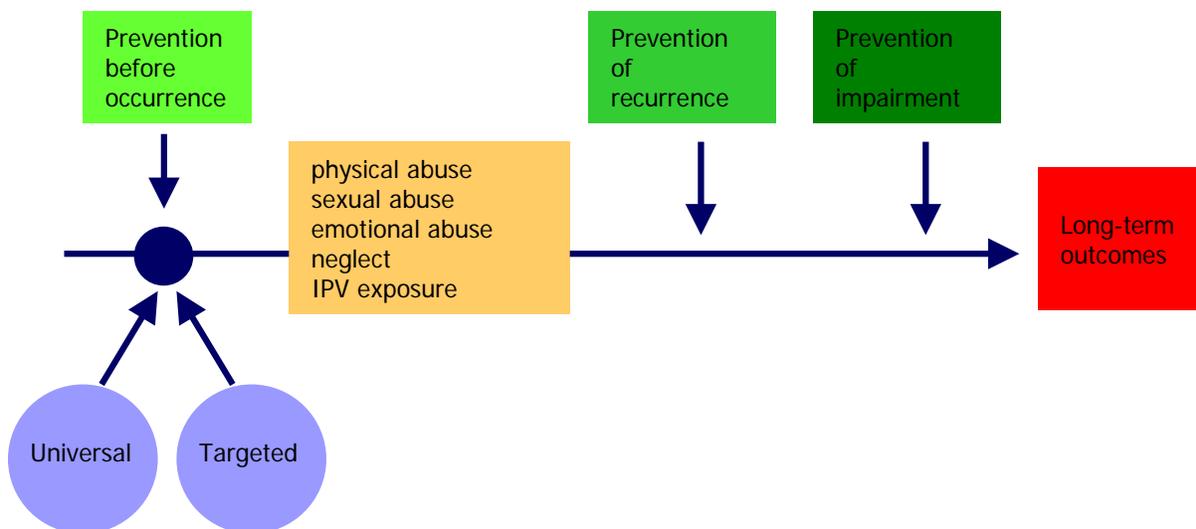
- Child maltreatment may not be directly causal, but it has been associated with the following types of impairment (Andrews et al., 2004; Miller et al., 2011; McCrory et al, 2012; Norman et al., 2012; Naughton et al., 2013):

Injury	Anxiety disorders and PTSD	Conduct disorder	Personality disorders
Affect regulation	Mood disorders	Alcohol abuse	Relationship problems
Attachment	Disruptive behaviour disorders (e.g. ADHD)	Drug abuse	Maltreatment of one's own offspring
Growth delay	Academic failure	Other risk-taking behaviours	Chronic disease including heart disease, cancer
Developmental delay	Poor peer relations	Recurrent victimization	
Neurobiological impairment			
Infancy	Childhood	Adolescence	Adulthood

- Neuroendocrine studies and brain imaging research shows evidence of an association between CM and atypical development of the hypothalamic-pituitary-adrenal (HPA) axis response to stress and structural differences in the brain (McCrory et al, 2012).

Prevention Framework (MacMillan et al., 2009)

- It is important to consider interventions aimed at reducing CM and related impairment across the spectrum: before it occurs, recurrence, and associated impairment, including long-term outcomes. The majority of studies examining the effectiveness of interventions aimed at reducing CM and its impacts have been conducted in high-income countries: 99% of the published studies as of 2009 (Mikton & Butchart, 2009). A recent systematic review (SR) of parenting intervention studies conducted in low- and middle-income countries (LMICs) showed that it is possible to conduct RCTs that include CM-related outcomes in LMICs (SR) (Knerr et al., 2011).



Types of evidence: in the following sections, we include evidence of intervention effectiveness obtained through high-quality studies of appropriate design, primarily randomized controlled trials (RCTs), Systematic Reviews (SR) or Meta-Analyses (MA), which synthesize multiple studies that meet quality criteria, and provide the best level of evidence.

Preventing child maltreatment before it happens

Physical abuse and neglect

- Home visiting programs are not uniformly effective in reducing child physical abuse and neglect (MacMillan et al., 2009; Selph et al., 2013).
 - The Nurse-Family Partnership, a program of nurse home visits to first-time, disadvantaged mothers, is effective in reducing child physical abuse and neglect, as measured by official child protection reports, and related outcomes like injuries in two randomized controlled trials (RCTs) (Olds et al., 1986, Kitzman et al., 1997, Olds et al., 1997; Olds et al., 2007; Zielinski et al., 2009).
 - Early Start, a program of home visits provided by nurses or social workers to at-risk families reduced associated outcomes such as injuries and hospital admissions for child abuse and neglect, but did not lead to differences in rates of child protection reports (RCT) (Fergusson et al., 2005; 2013).
 - The Child First (Child and Family Interagency, Resource, Support, and Training) Program, a home-based, psychotherapeutic, parent-child intervention provided to multi-risk mothers and children showed less involvement in protective services (RCT) (Lowell et al., 2011).
 - Para-professional home visitation (including the Hawaii Healthy Start Program and Healthy Families America) have not been shown effective in reducing official reports of physical abuse and neglect; RCTs have shown conflicting evidence regarding child abuse reported by mothers (Olds et al., 2007; Guterman et al., 2013; Avellar & Supplee, 2013).
- The Triple P Parenting Program (RCT) showed positive effects on child protection reports, out-of-home placements, and hospital and emergency reports of injuries; however, rates of maltreatment rose in both groups. This program needs further study (Prinz et al., 2009).
- One study (historical cohort) suggests that hospital-based educational programs can reduce abusive head injuries (abusive head trauma; previously called shaken baby syndrome) (Dias et al., 2005). Further evaluations of this program, as well as of a second public health educational program that has shown mixed results across three RCTs in proxy behavioural outcomes considered important for preventing abusive head trauma are currently underway (Barr et al., 2009a; 2009b; Fujiwara et al., 2012).
- One RCT showed promise for the effectiveness of Enhanced Pediatric Care, where physicians identify and help families to decrease risk factors for CM (Dubowitz et al., 2009; Selph et al., 2013). A second RCT in a sample of lower risk families had less promising results (Dubowitz et al., 2012).

Sexual abuse, psychological abuse and exposure to IPV

- Whether educational programs reduce occurrence of child sexual abuse is unknown. There is evidence that they improve children's knowledge and a few studies have shown increases in protective behaviours (SR) (Zwi et al., 2007). Although not measured in most, some studies reported negative outcomes.
- There is no evidence to indicate if interventions can prevent sexual abuse of children by adults considering at high risk of offending (SR) (Långstrom et al., 2013).
- Attachment-based interventions might improve insensitive parenting and infant attachment insecurity (SR) (Bakermans-Kranenburg et al., 2003), but there is no direct evidence that these interventions prevent emotional abuse.
- There is no evidence for existing programs that prevent the occurrence of IPV against women, and by extension, children, although there is emerging evidence that specific types of counseling can reduce women's experiences of IPV, which may prevent children's exposure (Wathen & MacMillan, 2014).



Preventing re-exposure and impairment

Physical abuse and neglect

- There is limited evidence to support the use of most parent training programs to reduce the recurrence of physical abuse (SR) (Barlow et al., 2006), other than PCIT and SafeCare (see below).
- Parent-child interaction therapy (PCIT) reduced recidivism of physical abuse, but not neglect in one laboratory study (RCT) (Chaffin et al., 2004); a second trial in a field agency showed a trend toward reduction of subsequent child welfare reports (Chaffin et al., 2011). Combining PCIT with a motivational orientation program appears to be important in improving outcomes for maltreating parents (Chaffin et al., 2009; 2011).
- Some programs (e.g., Webster-Stratton Incredible Years Program) might be effective in improving some outcomes associated with physically abusive parenting (SR) (Barlow et al., 2006).
- The SafeCare (SC) model for child neglect, a home-based behavioural skills training program reduced recidivism among a child protection services sample (scaled-up RCT) (Chaffin et al., 2012).
- Project Support, a program of child management education and support for mothers shows promise in reducing recidivism of maltreatment (RCT) (Jouriles et al., 2010); further evaluation is needed.
- A program of multisystemic therapy for child abuse and neglect (MST-CAN) shows promise in improving mental health outcomes and out-of-home placements among physically-abused youth (RCT) (Swenson et al., 2010); further evaluation is needed.
- A program of intensive nurse home visitation was not effective in preventing recurrence of physical abuse or neglect (RCT) (MacMillan et al., 2005).
- There is preliminary evidence that an attachment-based home visitation program for maltreating families can improve maternal sensitivity and child outcomes; further evaluation is needed (RCT) (Moss et al., 2011).
- There is limited evidence from small studies that resilient-peer training, imaginative play training, therapeutic day training, and multi-systemic therapy improve a neglected child's outcomes (SR); further evaluation is needed (Allin et al., 2005).

Sexual abuse

- Cognitive-behavioural therapy (CBT) can improve specific mental health outcomes for sexually abused children with post-traumatic stress symptoms, including post-traumatic stress disorder (PTSD), anxiety, and depression; there is conflicting evidence about reducing child behavioural problems (SR) (Stallard, 2006; Macdonald et al., 2012).
- Increasingly, there is evidence that trauma-focused cognitive-behavioral therapy (TF-CBT) is effective for children with PTSD symptoms associated with exposure to one or more types of child maltreatment (SR) (Leenarts et al., 2013) (see also exposure to IPV below).
- There is evidence for the effectiveness of psychological therapies in general, especially CBT, in treating children with PTSD symptoms, however to date, RCTs have included samples of children where the type of CM related to PTSD was sexual abuse and IPV (SR) (Gilles et al., 2013).
- There is no evidence for the use of psychoanalytic/psychodynamic psychotherapy for children and adolescents who have been sexually abused (SR) (Parker et al., 2013).

Programs for child molesters

- There is weak evidence for medical and psychological treatments to reduce recidivism among identified sexual abusers (SR) (Långstrom et al., 2013). There is some evidence that multisystemic therapy can reduce reoffence by adolescents (RCT) (Borduin et al., 2009); further evaluation is needed.



Emotional abuse and exposure to IPV*

- There is limited evidence of the effectiveness of interventions specifically designed for parents or caregivers who emotionally abuse their children (Barlow & Schrader-McMillan, 2010).
- Group-based cognitive-behavioural therapy might be effective with some parents (Sanders et al., 2004).
- There is some evidence for mother-child therapy in reducing children's internalizing and externalizing behaviour problems and symptoms in families where children are exposed to IPV (RCT) (Lieberman et al., 2005, 2006).
- There is some evidence for community-provided TF-CBT in improving children's IPV-related PTSD and anxiety symptoms (RCT) (Cohen et al., 2011).

**For information regarding preventing recurrence of IPV, please refer to PreVAiL's [IPV Research Brief](#).*

Global interventions: Foster care and family preservation programs*

**For additional programs that show promise in improving child health and welfare outcomes among those involved in the foster care system, please refer to Goldman et al., 2013 (SRs).*

- Placement in foster care and not reunifying with biological parents can lead to benefits for maltreated children (cohort study) (Taussig et al., 2001).
- Enhanced foster care can lead to better mental-health outcomes for children than can traditional foster care (MacMillan et al., 2009), but the evidence is mixed (RCT) (Green et al., 2013).
- There is no evidence that family preservation programs are effective in reducing impairment or recurrence (Dagenais et al., 2004).
- There is evidence for a brief foster parent training program (Keeping Foster Parents Trained and Supported (KEEP)) in reducing child behaviour problems (RCT) (Chamberlain et al., 2008; Price et al., 2008).
- There is evidence for a mentoring and skills group program in improving child outcomes among maltreated children in foster care (Taussig & Culhane, 2010; Taussig et al., 2012)
- It is unclear whether the implementation of child protection polices in developed countries over the last 40 years is associated with reduction in child maltreatment (Gilbert et al., 2012).

Practice & Policy Implications of Current Best Evidence

- Based on currently available evidence, health care providers and settings should:
 - implement those programs where there is evidence of effectiveness and ensure that any "new" interventions undergo rigorous evaluation before widespread implementation;
 - be alert to the signs and symptoms associated with child maltreatment;
 - ensure that children exposed to maltreatment are assessed to determine ways to prevent recurrence as well as approaches to reducing impairment associated with maltreatment depending on their presenting signs and symptoms (such as CBT for children with PTSD symptoms).
- Education of health care providers and settings about the importance of child maltreatment is a public health problem priority; it should not only be a concern of child welfare professionals.
- Those caring for children should be aware of the significant mental health co-morbidities associated with current and past maltreatment exposures.



What We Don't Know – Research Gaps

There is an urgent need for rigorous intervention research (Wathen et al., 2012). According to a recent US Agency for Healthcare Research and Quality (AHRQ) Review (SRs) (Goldman et al., 2013), the strength of evidence is low for the majority of interventions for children exposed to maltreatment. The following evidence-based knowledge is required:

- universally acceptable definitions of physical abuse, sexual abuse, neglect, emotional abuse and exposure to IPV;
- adequate instruments to measure all types of maltreatment, but especially neglect and emotional abuse;
- national estimates for the prevalence of, and delineation of causal risk factors for, all forms of child maltreatment;
- determination of protective factors that prevent a maltreated child from experiencing negative outcomes in childhood, adolescence or adulthood;
- knowledge of how risk and protective factors, including resilience factors, work to produce consequences;
- development, implementation and rigorous evaluation of:
 - prevention strategies for each type of maltreatment, but especially neglect and emotional abuse;
 - treatment strategies including interventions for maltreating parents and for abused and neglected children, as well as for services offered by the child welfare, justice and mental health systems;
- further evaluation of the relationship between exposure to CM and other forms of violence across the lifespan and of the role of social determinants of health, such as income, in the causes and consequences of, and interventions for, child maltreatment.

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