

ANXIETY AND DEPRESSION

Posttraumatic Stress Disorder in Young Children

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Introduction

Posttraumatic stress disorder (PTSD) is one of the more serious and debilitating mental disorders that can occur following trauma. Research indicates that consistent with older children and adolescents, young children also typically manifest with the traditional three PTSD symptom clusters of re-experiencing the event (e.g., through nightmares, posttraumatic play), avoidance of reminders of the event and physiological hyperarousal (e.g., irritability, sleep disturbance, exaggerated startle).¹ However, research has shown that the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV- TR)² PTSD criteria does not adequately capture the symptom manifestation experienced by infants and preschool children and underestimates the number of children experiencing posttraumatic distress and impairment.³ A growing number of research studies have since provided support for including an age-related subtype of PTSD for preschool children in the DSM-V.^{4,5}

Prevalence, course and consequences of trauma reactions

Studies with young children that have adopted developmentally sensitive PTSD criteria have reported prevalence rates of 6.5%-29% for acute stress reactions within the first month following a motor vehicle accident (MVA)⁶ or burn injury⁷ and PTSD rates that vary from 14.3%-25% within 2 months following a variety of injury types (e.g., burns, gun shots, MVA, sporting),^{8,9} 10% 6 months post MVA or burn^{6,8} and 13.2% on average 15 months after burn injury.¹⁰ Following physical or sexual abuse rates of developmentally sensitive PTSD have been reported of between 26 and 60%.^{1,3,11} Our research has shown that young children also develop depression, separation anxiety disorder (SAD), oppositional defiant disorder (ODD) and specific phobias following burn injury⁸ and these disorders are highly comorbid with PTSD.

Research with children of all ages has shown that untreated PTSD can follow a chronic and debilitating

trajectory.^{8,12,13} These findings are concerning given that young children's neurophysiological systems, including the stress modulation and emotional regulation systems, are still in the process of rapid development.¹⁴ Additionally, trauma during childhood has been associated with permanent structural¹⁵ and functional¹⁶ brain impairment as well as the onset of psychiatric disorders,¹⁷ health risk behaviours and physical health conditions in adulthood.¹⁸ Therefore trauma that occurs during early childhood may have even greater ramifications for developmental trajectories than traumas that occur at a later stage of development.

The role of parents

When working with traumatised children it is also important to be aware that the child's trauma and the child's response to the trauma can also be traumatic for parents and can be a source of chronic stress. Research indicates that approximately 25% of parents will experience clinically elevated levels of acute stress, PTSD, anxiety, depression and stress within the first 6 months of their child's trauma.¹⁹⁻²¹ While the majority of parents are likely to be resilient or improve to below clinical levels over time, parental distress during the acute phase has been shown to contribute to the development and maintenance of trauma symptomatology in injured children.^{19,20,22}

It is widely recognised that the quality of the parent-child attachment, parental mental health and parenting behaviours are crucial factors that influence a child's adjustment following trauma.^{14,23,24} For young children, the parent-child relationship is particularly important as they lack the coping capacities to regulate strong emotion and are therefore dependent on a sensitive and emotionally available caregiver to assist with affect regulation during times of distress.^{14,23} Additionally, young children are particularly reliant on their parents' reactions to determine how to interpret or respond to an event and may therefore model their parent's fear responses and maladaptive coping responses.²⁵ Parents may also directly influence their child's exposure to traumatic reminders (e.g., allowing avoidance of conversations), and thereby impede their child's habituation to the event.²⁵

The impact of adverse parental psychological responses on the quality of the parent-child relationship and the development of children's trauma symptoms, combined with parental distress in its own right, represent important reasons to also attend to the needs of parents to both reduce parents' own distress and to promote parents' ability to assist their children. Interventions that target child distress, parent distress and the parent-child relationship are likely to be beneficial in reducing the subsequent development of parent and child posttraumatic stress reactions. However there is only preliminary evidence to support these types of interventions in the acute stage, and more research is needed.

Prevention and early intervention

Unfortunately, the majority of children and parents who experience psychological difficulties after trauma are not identified or provided with appropriate support. Given that trauma is common and that early childhood may represent a "sensitive period" of brain development, there is an urgent need for effective interventions that decrease the risk of children and parents developing chronic posttraumatic stress reactions. There is considerable potential for intervention in high risk settings such as hospitals to reduce the risk or prevent the onset of traumatic stress reactions through screening and indicated prevention or early intervention programs.²⁶ Early identification and intervention with 'high-risk' families, when symptoms first present, can prevent problems from becoming entrenched or at least minimise the impact of these problems on the child, family and society.

However, the challenge is to be able to differentiate between individuals who experience transient distress and those that are at risk of developing chronic PTSD¹³ so as not to over-burden the resources of busy hospitals. There are no validated screening methods that are available for very young children, and this is a significant gap in the field.

To date the majority of research has been on treatment of chronic PTSD rather than early intervention and many unanswered questions remain in both the adult and child literature regarding who should receive early intervention and what the optimal time-frame, content and length of early intervention should be.²⁷ To date, systematic reviews provide the strongest support for multi-session trauma-focused cognitive behavioural therapy (CBT) interventions provided to 'high-risk' individuals within the first 3 months of trauma exposure.²⁷

Research with children has found that information-based prevention interventions within 2 weeks post accidental traumatic injury were associated with reduced child anxiety symptoms, at 1 month²⁸ and 6 months post injury.²⁹ Additionally, Landolt and colleagues have found support for a single-session early intervention at reducing depressive symptoms and behavioural problems, in a sub-sample of preadolescent children (7-11 years) involved in road traffic accidents.³⁰ Berkowitz and colleagues,³¹ have conducted the only indicated prevention program (4-session child-caregiver intervention consisting of assessment, psychoeducation and coping skills) for children (aged 7-17 years) that has been effective at reducing child PTSD diagnoses and symptoms following a range of traumatic events.

In contrast, for young children (< 6 years), there are currently no known published studies examining the effectiveness of preventive psychological interventions following trauma. However, Scheeringa has shown that a 12-session cognitive behavioural therapy for PTSD protocol conducted with 3-6 year old children exposed to a variety of traumatic events was feasible and effective in reducing established posttraumatic stress symptoms.³²

Few studies have included an intervention component that also targets parent distress following a child's trauma. Kenardy and colleagues found that psychoeducation provided to parents within 72 hours of their child's accident was effective at reducing parental posttraumatic symptoms at the 6-month follow-up.²⁸ Melnyk et al³³ have examined the effectiveness of an early intervention program for parents of children (2-7 years) who were admitted to a paediatric intensive care unit. They found that parents in the intervention group had significantly lower stress, depression and PTSD symptoms and their children exhibited fewer internalising and externalising difficulties post discharge.

Research is urgently needed before evidence-based clinical recommendations for the prevention of PTSD with young children can be made. However, based on results from a recent meta-analysis, Landolt and colleagues have recommended that early interventions target children screened as 'high-risk' and include multiple sessions that involve psychoeducation, individual coping skills, parental involvement and some form of trauma exposure.³⁴

Implications for Parents, Services and Policy

Posttraumatic stress in young children is under-recognised. Health services need to become better skilled at detection of posttraumatic stress in young children. This will involve in-service and post professional training. Routine screening may be the ideal but in terms of cost, identification within a high-risk subset may be preferable. Also any screening program will need to be linked into a clinical service with the capacity to deliver

appropriate care. Parental distress is a significant contributing factor in post trauma responses in children. However it is likely to be under-recognised in clinical settings. This may be because the distress is not of a clinical severity or because the focus is on the child's needs rather than the family.²² Services need to become more aware of the broader impact of trauma on the family system.

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