

Caring for adolescents who have been exposed to trauma

Traumatic stress in adolescents is becoming an increasingly prevalent problem.

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The high level of traumatic stress exposure in adolescents is of increasing concern to primary care practitioners and mental health practitioners alike. Primary care providers are often the first point of contact for traumatised youth and can, therefore, play a critical role in helping parents recognise and address pathological responses in the aftermath of a traumatic event, and in ensuring appropriate care and assistance.¹ Traumatic life experiences challenge an adolescent's normal coping efforts. Some adolescents adapt and recover remarkably well, but a significant proportion develop emotional and behavioural difficulties that have a significant impact on their functioning.²

Every adolescent brings his/her own life story, experiences, cultural perspectives, and support system, intertwined with his/her individual social, emotional and cognitive developmental level into understanding a traumatic event. These factors also contribute to the particular coping strategies that the person employs in an attempt to manage the traumatic experience. The nature of and proximity to the traumatic event, as well as individual factors (including developmental, temperamental, and cultural aspects), may influence the type of coping strategy used. Coping strategies refer to cognitive and behavioural ways of dealing with external and internal demands that burden or exceed resources.

Two commonly used coping classification systems have been described:

- problem-solving versus emotion-focused coping
- approach versus avoidance coping.

Problem-solving coping attempts to reduce stress using behavioural or environmental changes, while emotion-focused coping aims to reduce emotional distress through expressing emotion, avoidance, detachment, and withdrawal. Approach coping entails active problem solving while avoidance coping involves denial and withdrawal. Approach coping/problem-focused coping tends to be associated with lower levels of adolescent health problems as well as higher appraisals of control in chronically ill adolescents.¹

Traumatic experiences range from witnessing a violent death to witnessing natural disasters, community violence or war, and experiencing physical and sexual abuse. Traumatic events may have an abrupt onset, be single or repeated, and be acute or chronic.³ The risk of re-injury is high and the effects are often substantial and enduring. Physical and sexual abuse in early childhood, in particular, are known to be risk factors for the development of psychopathology in adolescence (Table I). Exposure to violent trauma is associated with risk of externalising behaviours such as aggression, conduct disorder, high-risk sexual behaviour, and internalising problems, which include post-traumatic stress disorder (PTSD), anxiety, depression, dissociation and self-destructive and suicidal behaviours.^{1,4} Secondary problems frequently include substance abuse, reduced school involvement and increased antisocial behaviour, which in turn lead to revictimisation. Unfortunately, as few childhood and adolescent sexual assault cases are reported, the majority do not receive necessary health care. Ongoing trauma can have a profound effect on the developing brain and personality of children and adolescents⁵ and much attention has been paid to the deleterious influence of trauma on the hypothalamic-pituitary-adrenal (HPA) axis of children and adolescents.

PTSD arises after directly experiencing, witnessing or hearing about an extremely traumatic event that causes the person to react

Table I. Predisposing vulnerability factors in PTSD

- Greater trauma severity and proximity
- Female gender
- Past traumatic events and childhood trauma
- Genetic vulnerability to psychiatric illness
- High parental distress in the aftermath of the event
- Inadequate parental, family or peer support system

Traumatic life experiences challenge an adolescent's normal coping efforts.

with feelings of intense fear, helplessness or horror. For an event to qualify as traumatic in the context of PTSD, it must involve actual or threatened death, or serious injury or threat to the physical integrity of self or significant other.⁶ PTSD is characterised by continuously re-experiencing the event in thoughts, dreams and flashbacks, avoidance of reminders of the event, and symptoms of autonomic hyperarousal (e.g. irritability, exaggerated startle response to loud noise, excessive vigilance). Older adolescents may incorporate aspects of the traumatic event

into their daily routine (re-enactment) and may fantasise about how to intervene or take revenge. They may, therefore, be at risk of impulsive acting-out behaviours in response to these anger or revenge fantasies. PTSD may develop months or years after the traumatic experience. Associated symptoms include feelings of humiliation, guilt, rejection, difficulty trusting others and poor self-esteem. A diagnosis of PTSD can only be made if symptoms are present for longer than a month after the traumatic event and if symptoms interfere

significantly with important areas of daily life (e.g. school and family functioning) (Table II). The *DSM-IV-TR* also defines acute stress disorder, which is similar to PTSD, but occurs earlier (within 4 weeks of the event) and resolves earlier (within 2 days - 4 weeks) (Table III).³

Assessment

Experiencing a traumatic event is, in itself, not sufficient to cause an adolescent to develop PTSD. Risk factors include interpersonal types of trauma (rape and assault are more likely to give rise to PTSD than other types of trauma), direct exposure to the trauma versus hearing

Table II. Diagnostic criteria for PTSD (adapted from *DSM-IV-TR*)⁶

- A. The person has been exposed to a traumatic event in which both of the following were present:
- The person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others
 - The person's response involved intense fear, helplessness, or horror. *Note:* In children, this may be expressed instead by disorganised or agitated behaviour
- B. The traumatic event is persistently re-experienced in one (or more) of the following ways:
- Recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions. *Note:* In young children, repetitive play may occur in which themes or aspects of the trauma are expressed
 - Recurrent distressing dreams of the event. *Note:* In children, there may be frightening dreams without recognisable content
 - Acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated). *Note:* In young children, trauma-specific re-enactment may occur
 - Intense psychological distress at exposure to internal or external cues that symbolise or resemble an aspect of the traumatic event
 - Physiological reactivity on exposure to internal or external cues that symbolise or resemble an aspect of the traumatic event
- C. Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by 3 (or more) of the following:
- Efforts to avoid thoughts, feelings, or conversations associated with the trauma
 - Efforts to avoid activities, places, or people that arouse recollections of the trauma
 - Inability to recall an important aspect of the trauma
 - Markedly diminished interest or participation in significant activities
 - Feeling of detachment or estrangement from others
 - Restricted range of affect
 - Sense of a foreshortened future
- D. Persistent symptoms of increased arousal (not present before the trauma), as indicated by 2 (or more) of the following:
- Difficulty falling or staying asleep
 - Irritability or outbursts of anger
 - Difficulty concentrating
 - Hypervigilance
 - Exaggerated startle response
- E. Duration of the disturbance (symptoms in criteria B, C, and D) is more than 1 month.
- F. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning

Specify if: *Acute* – duration of symptoms less than 3 months; *chronic* – duration of symptoms 3 months or more; *with delayed onset* – onset of symptoms at least 6 months after the stressor

Table III. DSM-IV-TR diagnostic criteria for acute stress disorder

- A. The person has been exposed to a traumatic event in which both of the following were present:
 - The person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or other
 - The person's response involved intense fear, helplessness, or horror
- B. Either while experiencing or after experiencing the distressing event, the individual has 3 (or more) of the following dissociative symptoms:
 - A subjective sense of numbing, detachment, or absence of emotional responsiveness
 - A reduction in awareness of his or her surroundings (e.g. 'being in a daze')
 - Derealisation
 - Depersonalisation
 - Dissociative amnesia (i.e. inability to recall an important aspect of the trauma)
- C. The traumatic event is persistently re-experienced in at least one of the following ways: recurrent images, thoughts, dreams, illusions, flashback episodes, or a sense of reliving the experience; or distress on exposure to reminders of the traumatic event
- D. Marked avoidance of stimuli that arouse recollections of the trauma (e.g. thoughts, feelings, conversations, activities, places, people)
- E. Marked symptoms of anxiety or increased arousal (e.g. difficulty sleeping, irritability, poor concentration, hypervigilance, exaggerated startle response, motor restlessness)
- F. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning or impairs the individual's ability to pursue some necessary task, such as obtaining necessary assistance or mobilising personal resources by telling family members about the traumatic experience
- G. The disturbance lasts for a minimum of 2 days and a maximum of 4 weeks and occurs within 4 weeks of the traumatic event
- H. The disturbance is not due to the direct physiological effects of a substance (e.g. a drug of abuse, a medication) or a general medical condition, is not better accounted for by brief psychotic disorder, and is not merely an exacerbation of a pre-existing axis I or axis II disorder

about it later, female gender, younger age, greater physical proximity to the trauma, previous exposure to a traumatic event, marked parental distress in the aftermath of the event, and lack of social support (from family members, friends, peers, community members) (Table I). In the immediate aftermath of a traumatic event, it is normal for an adolescent to display preoccupation with the event, anxiety, sleep disturbance, irritability and hypervigilance. These symptoms usually subside within a few weeks. However, adolescents who report persistent symptoms of PTSD, namely re-experiencing the trauma through play, nightmares or flashbacks, or show signs of anxiety or hyperarousal, should be referred to a mental health care professional as soon as possible.⁵ Left untreated, a significant number of adolescents continue to exhibit symptoms of PTSD.

The following are important aspects of assessment:

- Ask the adolescent directly and separately about the traumatic experience and about symptoms of PTSD and depression.
- Enquire about substance use, delinquency or social withdrawal and whether the adolescent exhibits acting-

out behaviours such as anger, aggression or sexual acting out.⁶ Be aware that adolescents, particularly older males, have a tendency to deny general thoughts, emotions, and behaviours and may underreport symptoms. This may be a defensive strategy to avoid the aversive qualities associated with their emotional distress.⁴

- Briefly describe the possible symptoms of PTSD, its course and treatment to the adolescent and his/her parents.
- Let the adolescent know that it is normal to feel upset or afraid in the first days and weeks after a traumatic experience.
- Provide the adolescent/parents with basic information on how to cope in light of the traumatic experience. Encourage both the adolescent and parents to talk openly about the former's response to the traumatic experience and the coping styles he/she employs.

- Encourage the adolescent to return to a normal routine as soon as possible.
- Serve as a consistent member of the adolescent's support system and facilitate connections with other support systems, such as social services.
- Initiate regular follow-up to assess the physical, emotional, social, and academic functioning of the adolescent and refer appropriately if indicated.
- Consider the age, understanding and specific circumstances of the adolescent and modify management accordingly. Younger adolescents will benefit from restoration of a familiar environment. Older adolescents, in addition to restoration of familiarity, will benefit from expressing and sharing their experiences and making sense of what has happened. It can be very comforting for a traumatised adolescent to go back to the routine of a normal schoolday.¹⁵

For an event to qualify as traumatic in the context of PTSD, it must involve actual or threatened death, or serious injury or threat to the physical integrity of self or significant other.

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Management

Management of adolescents should be based on evidence-based information about the disorder and its treatment (pharmacological and psychotherapeutic) and should also take into account the adolescent's needs and preferences.³ If symptoms are mild and have been present for fewer than 4 weeks after the trauma, then 'watchful waiting' should be considered and follow-up within 1 month should be arranged.

No conclusive randomised controlled trials on pharmacological treatment for youths with PTSD are yet available. Currently, the selective serotonin reuptake inhibitors are commonly used in clinical practice for adolescents with moderate to severe PTSD symptoms. There are few controlled treatment studies of psychotherapeutic treatments for children and adolescents with PTSD.⁷ However, psycho-education about the condition and exposure to internal and external cues that elicit anxiety should be incorporated into psychotherapeutic treatment protocols.^{7,8} Trauma-focused cognitive behavioural therapies (CBTs) adapted appropriately to suit the adolescent's age, circumstances and level of development that address the traumatic event very directly, are most effective. Trauma-focused CBTs also incorporate correction of inaccurate and distorted thoughts related to the trauma and anxiety management techniques, such as relaxation and assertiveness training. A single debriefing session is not recommended⁹ as it has not been shown to improve outcomes and reduce subsequent distress significantly.¹⁰ Open and honest communication, such as conversations that allow victims to express their concerns, make sense of what has happened, and boost their sense of safety and self-efficacy, seems to be helpful. Short conversations will help them to absorb information gradually and questions should be answered as honestly as possible, avoiding abstract or metaphorical explanations. The adolescent must be prepared for situations such as participating in a funeral if a parent or close family member died, and helped with ways of coping with everyday life. It may be necessary to liaise with schoolteachers or the headmaster for the child to receive appropriate support at school.⁵

Long-term goals of psychological intervention should be to:

- recall the traumatic event without becoming overwhelmed with negative emotions
- have normal interaction with friends/family without irrational fears or intrusive thoughts that control behaviour
- return to pre-trauma level of functioning without avoiding people, places, thoughts, or feelings associated with the traumatic event
- display a full range of emotions without experiencing loss of control.⁸

The MRC Research Unit on Anxiety and Stress Disorders has a Mental Health Information Centre. For further information on PTSD or any other anxiety disorder, please contact the Centre, tel. (021) 938-9161.

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In a nutshell

- Children and adolescents are more vulnerable to the effects of traumatic experiences than adults and are thus at an increased risk of developing adverse psychological reactions to such events.
- Adolescents experience a range of traumatic situations and employ a variety of coping strategies in their attempts to manage stress.
- Health care providers can play a vital role in assisting adolescents to cope with traumatic situations by assessing how adolescents deal with stressful situations and by providing them and their parents with information about coping with trauma.
- Be aware that adolescents, particularly older males, have a tendency to deny general thoughts, emotions, and behaviours and tend to under-report symptoms.
- An adolescent who shows signs of re-experiencing the trauma, has nightmares or flashbacks, or shows signs of anxiety or hyperarousal, should be referred to a local mental health care professional urgently.
- The main features of PTSD are painful reliving of the event, avoidance, emotional numbing, and hyperarousal.
- Management of adolescents with PTSD should include education about the disorder and its treatment (pharmacological and psychotherapeutic) and providing assistance with acquiring additional support from local support groups and/or social services.
- Controlled treatment research with traumatised children and adolescents has lagged behind other treatment research on child psychopathology.
- Ideally, all traumatised adolescents should have access to primary health care facilities where their physical and psychological needs can be addressed in the early aftermath of a traumatic experience.