Treatment of PTSD in Children and Adolescents

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By the end of the session, you should:
• Be familiar with and understand the cognitive model of PTSD
• Understand what is involved in Trauma-Focussed Cognitive Behavioural Therapy (TF-CBT) taking into account developmental and systemic factors
• Be aware of other approaches to the treatment of PTSD in children and young People
• Be familiar with the evidence supporting TF-CBT for children and young people with PTSD

Using the scale below, please self-rate your experience of working with traumatised children:
5 I have recently published an RCT
4 I have lots of experience of working with traumatised children
3 I have some experience of working with traumatised children
2 What is trauma?
1 What is a child?

Things you can do to help the day go well:
• Confidentiality
• Participation
• Mutual Respect
  — Other views are available!
• Timekeeping
• Mobile Phones
• Look after yourself

Discussion — “Relevant and real”
(5 minutes in pairs)
• Bring to mind one young person who has experienced a traumatic event
  — What was it about that event that made it “traumatic”?
  — How has the event affected the person psychologically (e.g. behaviour, feelings, thoughts and beliefs)
• How will you know if this session were useful? What would you notice that is different in a week, a month, a year?

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Outcomes

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Theory</th>
<th>Models</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clients</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Confidence
- Formulation
- New skills
- Change practice

Emotion

Physiological

Thoughts

Behaviour

Practitioners

- Resilience

Clients

- Increase functioning
- Decrease distress
- Increase understanding

Cognitive Model of PTSD in Children and Young People

(Ehlers & Clark 2000)

Brewin et al (2010)

<table>
<thead>
<tr>
<th>Symptom of PTSD</th>
<th>Risk factors for PTSD</th>
<th>What seems to help</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Cognitive Model of PTSD in Children and Young People</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Maintenance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Normal event memories</th>
<th>Traumatic event memories</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contextualised representations (C-reps)</strong></td>
<td><strong>Sensory-bound representations (S-reps)</strong></td>
</tr>
<tr>
<td>Memory store</td>
<td>Little conceptual framework to contain the perceptual information</td>
</tr>
<tr>
<td>Unconscious</td>
<td>Vivid sensory information</td>
</tr>
<tr>
<td>Normal event</td>
<td>Static and frozen</td>
</tr>
<tr>
<td>Fluid and updateable</td>
<td>Isolated from other memories</td>
</tr>
<tr>
<td>Linked to other memories</td>
<td></td>
</tr>
<tr>
<td>Historical context – there and then</td>
<td>No historical context – here and now</td>
</tr>
<tr>
<td>Organised into a coherent narrative</td>
<td>Disorganised, incoherent, fragmented</td>
</tr>
<tr>
<td>Largely under conscious control</td>
<td>Uncontrollable, easily triggered</td>
</tr>
</tbody>
</table>

Trauma Memory Quality Questionnaire

(TMQQ; Meiser-Stedman et al., 2007)

- Assesses the number of aspects of a memory that are characteristic of traumatic memories rather than other memories
- Related to severity of PTSD symptoms
- Related to PTSD diagnosis
**Trauma Memory Quality Questionnaire** (TMQQ; Meiser-Stedman et al., 2007)

1. My memories of the frightening event are mostly pictures or images
2. I can't seem to put the frightening event into words
3. When I have memories of what happened I sometimes hear things in my head that I heard during the frightening event
4. When I remember the frightening event I feel like it is happening right now
5. When I think about the frightening event I can sometimes smell things that I smelt when the frightening event happened
6. I can talk about what happened very easily [Reversed]

7. I remember the frightening event as a few moments, and each moment is a picture in my mind
8. My memories of the frightening event are like a film that plays over and over
9. My memories of the frightening event are very clear and detailed
10. Remembering what happened during the frightening event is just like looking at photographs of it in my mind
11. When memories come to mind of what happened, I feel my body is in the same position as when the frightening event occurred

**Traumatic event memories**

*Sensory-bound representations (S-reps)*

- Memory store
- Unconscious
- Conscious
- Traumatic event
- Normal event

**Maintenance cycle of avoidance**

- Memory not processed
- Memory or thought suppressed and avoided
- Intrusions (e.g., memories, images, dreams, thoughts)
- Original fear, horror, helplessness

**Janet (1898, 1906)**

- "Fixed ideas" of traumatic events, not proper memories
- "Unable to make the recital which we call narrative memory, and yet they remain confronted by (the) difficult situation"
- Continues to make efforts at adaptation

**Meaning**

- System
- Beliefs
- Perception
- Normal event
- Perceived event
Meaning: Traumatic events literally break the rules

Child Post-Traumatic Cognitions Inventory (CPTCI; Meiser-Stedman et al., 2009)

- Two subscales:
  - Fragile person in a scary world
  - Permanent and disturbing change
- Related to severity of PTSD symptoms
- Related to PTSD diagnosis

“Vulnerable person in a scary world”

1. Anyone could hurt me
2. Everyone lets me down
3. I am a coward
4. I don't trust people
5. I am no good
6. Small things upset me
7. I can't cope when things get tough
8. I have to watch out for danger all the time
9. Bad things always happen.
10. Life is not fair.
11. I have to be really careful because something bad could happen.

“Disturbing and permanent change” - 1

4. My reactions since the frightening event mean I have changed for the worse
6. My reactions since the frightening event mean something is seriously wrong with me
8. Not being able to get over all my fears means that I am a failure
13. My reactions since the frightening event mean I will never get over it
14. I used to be a happy person but now I am always sad
16. I will never be able to have normal feelings again

“Disturbing and permanent change” - 2

17. I’m scared that I’ll get so angry that I’ll break something or hurt someone
19. My life has been destroyed by the frightening event
20. I feel like I am a different person since the frightening event
21. My reactions since the frightening event show that I must be going crazy
22. Nothing good can happen to me anymore
23. Something terrible will happen if I do not try to control my thoughts about the frightening event
24. The frightening event has changed me forever

Belief – Threat – Avoidance
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Belief – Threat – Hypervigilence

Emotion
Fear

Thoughts
I must be on
my guard

Physiological
Hypervigilence

Behaviour
Look for (and see) potential danger

Beliefs
The world is dangerous
Other people are harmful

Interpretation of PTSD Symptoms

Vivid intrusive flashback

Emotion
Fear, sadness

Thoughts
It's going mad

Physiological
Various symptoms

Behaviour
Avoid memories, avoid accessing help

Belief – Guilt – Avoidance

Emotion
Anger, sadness

Thoughts
It was my fault, I deserved it

Physiological
Various symptoms

Behaviour
Avoid thinking it through and correcting misperceptions

Beliefs
The world is ordered and just
I am a bad person

Reminders
The world is dangerous and I am a target

Cycle of vicarious avoidance

ADULTS:
Talking about it might upset him and may even make him worse

CHILD:
Not mentioned

ADULTS:
Not mentioned

CHILD:
Maybe they can't bear to have a conversation about it

Beliefs, behaviours & maintenance

<table>
<thead>
<tr>
<th>Belief</th>
<th>Behaviour</th>
<th>Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>World is dangerous, I'm vulnerable</td>
<td>Avoid the world</td>
<td>Beliefs strengthened rather than challenged</td>
</tr>
<tr>
<td>Particular places (e.g. crash site, or roads in general) are particularly dangerous</td>
<td>Avoid particular places</td>
<td>Denied opportunities to understand what happened</td>
</tr>
<tr>
<td>My symptoms (e.g. flashbacks, nightmares) mean I'm going mad</td>
<td>Avoid thinking about it</td>
<td>Memories not processed</td>
</tr>
<tr>
<td>I'm going mad</td>
<td>Avoid telling anyone about symptoms</td>
<td>Memories not processed</td>
</tr>
<tr>
<td>Other people are harmful</td>
<td>Avoid thinking it through</td>
<td>Others don't mention it because victim is not talking about it</td>
</tr>
<tr>
<td>They can't bear to talk about it</td>
<td>Avoid talking about it</td>
<td>Memory not processed</td>
</tr>
</tbody>
</table>

Complex and/or chronic trauma

- The model is particularly helpful for conceptualising a single discrete event that shatters pre-existing helpful beliefs
- But it also (in my opinion) has much to offer even if:
  - The child never had “pre-existing helpful beliefs”
  - The trauma is chronic
  - A series of events lead to gradual development of beliefs
Over to you

• Any questions, thoughts, observations?

Discussion – Helpful?
(10 minutes in pairs)

• Memory

• Meaning

• Does this model help to understand the person that you brought to mind earlier?
• Which aspects fit well?
• Which aspects do not fit well?

Difference and diversity

• Does this model fit universally?
• What difference does it make if the client is from a minority or disempowered group (e.g. ethnicity, sexuality)

Diagnostic Criteria PTSD (DSM-5, 2013)

A. Exposure

B. Intrusions (1 of 5)
C. Avoidance (1 of 2)
D. Changes in cognitions and mood (2 of 7)
E. Arousal & reactivity (2 of 6)

F. Duration
G. Distress
H. Due to event, and not substance or medical condition

Recovery following accidental injury
(Le Brocque et al 2010)

Recovery following natural disaster
(LaGreca et al 2010)
Other reactions

- Depression, sadness
- Anxiety
- Obsessive Compulsive Disorder
- New fears
- Dissociation
- Self-harm
- Chronic Fatigue Syndrome
- Use of drugs
- Attachment problems (e.g. clingingness, rejection)
- Omen formation
- Sleep problems
- Regression
- Memory problems
- School problems
- Ripple effects

PTSD Symptoms overlap with other disorders

<table>
<thead>
<tr>
<th></th>
<th>Anxiety</th>
<th>ADHD</th>
<th>Phobia</th>
<th>Depression</th>
<th>Conduct</th>
<th>Psychosis</th>
<th>GAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypervigilance (or “attending to the wrong thing”)</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problems with concentration</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exaggerated negative beliefs about self, others or world</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irritable, aggressive</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exaggerated startle response</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidance of specific stimuli</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dissociative reactions (e.g. flashbacks) in which the individual feels or acts as if the traumatic event(s) were recurring</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Systemic reactions

(e.g. Families, schools, organisations)

- Very protective / Very controlling
- Overwhelmed / numb
- Avoidant
- Pre-occupied
- Breakdown in usual functioning
- Psychological problems of others around the child

Key components of TF-CBT (Smith et al. 2010)

Creating the context for TF-CBT (Trickey, 2013)

- Reducing avoidant coping
- Narrative exposure
- Cognitive restructuring

Developing individual resources (including emotion regulation)

Therapeutic context

Safety & Stability

Systemic work

- Therapeutic potential of care-giving relationship
- Parent education (about expected reactions and model)
- If possible, use the pre-existing relationships within family to enable processing by:
  - Making trauma talkable about
  - Help re-appraisals & correct mis-perceptions
  - Provide support to avoid avoidance
- Explore family member’s resistance to talking about it (e.g. protection, guilt)
- Other family members may need individual treatment in their own right
- Family endorsement of the child’s therapy

Stabilisation

- Ensure basic needs are met (including food, shelter, sleep)
- Safe environment
- Social support
- Normalisation of reactions and education of the model which explains them
- Families and schools can play a crucial role in making the child feel safe
Therapeutic context

- Starts at assessment
- Make therapy safe (boundaries, possibly ritualised beginnings and endings etc)
- Establish trust
- Collaborative and respectful – therapy is different to other interactions with adults
- Give child as much control as possible
- Timing
- Consent
- Rationale

Informing consent

- Explanation of the model
  - Chocolate factory
  - Wardrobe
  - Waste paper bin

Developing individual resources

- Emotion identification, expression and regulation:
  - Relaxation
  - Imagery
  - Grounding
  - Problem solving

Reducing avoidant coping

- Avoid avoidance between sessions (e.g. persons, places and things)
- “Reclaiming their life” (Smith et al. 2010)
- In-vivo exposure may be necessary to “cement” the cognitive work

Brainstorm

- What methods might you use to enable children to process the memory of their trauma?
- How are you going to help them to tell the story of what happened to them?

Narrative exposure

- Whole memory needs to be activated, within a safe context (such as therapy)
- May spontaneously disrupt the maintenance cycles outside of the session
- Duration & repeated
- Graded
- Identify and target hotspots
- Have the young person feedback their level of distress
- Use relaxation, but not as avoidance
- Use whatever method exposure fits with you and the child (e.g. Play, video-analogy, drawings, reliving, story book, media coverage)
Treatment of PTSD in Children and Adolescents

Cognitive restructuring

- May happen spontaneously with narrative exposure
- May need to be done within exposure/reliving
- Collaborative empiricism – challenging their thinking too directly may make them defend it and cling to their thoughts, when in fact you are trying to achieve the opposite
- Parents can be useful co-therapists who support work between sessions

Managing negative thoughts

- Demonstrate link between thoughts, feelings, physiology, behaviour
- Cognitive restructuring
  - Thought catching - identify negative, unrealistic or unhelpful thoughts
  - Evaluate impact
  - Evaluate expectations – what would actually happen if...
  - Evaluate evidence for and against
  - Generate more positive, realistic or helpful thoughts based on the evidence
    - How do others see it?
    - Do you ever see it differently?
- Behavioural experiments
  - Testing validity of predictions
    - Not Just Do It (that’s exposure)
    - But what could you do to test that theory – the one that’s causing you so much distress?
- Self-talk
  - Replacing thoughts with more helpful ones
- Positive imagery
  - Replacing negative images
- Thought stopping
- Thought acceptance
  - No challenging of thought, but changing relationship with it

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Formulation, formulation, formulation

- Most children referred for therapy will have complex problems or comorbid diagnoses
- These are unlikely to respond to simple manualised treatments
- They may require sophisticated formulations which lead to multi-faceted interventions
- Sharing the formulation with the client is almost always a good idea:
  - Allows them to feedback, correct and improve
  - Likely to increase motivation
- If something like PTSD is part of the problem; then something like CBT is likely to be part of the solution

Evidence for TF-CBT

- Single case designs (e.g. Saigh 1986-89)
- Various uncontrolled experimental designs (e.g. Feeny et al. 2004)
- 16+ Randomised controlled trials (RCTs)

Reviews consistently conclude that TF-CBT is effective for PTSD

- Dalgleish et al. 2005:
  - … well established efficacy in treating a range of post-traumatic stress responses following sexual abuse, with preliminary evidence in favour of this form of intervention following other types of trauma
- Wolpert et al. 2006:
  - Level 1b = Evidence from at least one RCT
- Cohen et al. 2009:
  - TF-CBT is superior to comparison conditions for improving a variety of child symptoms including PTSD, depression, internalizing symptoms, general behavioral symptoms, and shame
- Gillies et al. 2012 (Cochrane review):
  - There is evidence for the effectiveness of psychological therapies, particularly CBT, for treating PTSD in children and adolescents for up to a month following treatment.

Complex enough?

<table>
<thead>
<tr>
<th>Feathers &amp; Ronan, 2006</th>
<th>Multiple, repeated abuse (emotional, physical abuse, D.V.)</th>
<th>Multiple baseline Not RCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahrens &amp; Rexford, 2002</td>
<td>Detained young people</td>
<td></td>
</tr>
<tr>
<td>Kataoka et al., 2003</td>
<td>Ethnic minority (Latino immigrants)</td>
<td></td>
</tr>
<tr>
<td>Najavits et al., 2006</td>
<td>Comorbid substance misuse disorder</td>
<td></td>
</tr>
<tr>
<td>McFadden et al., 2013; Erlt et al., 2013</td>
<td>Child soldiers</td>
<td></td>
</tr>
<tr>
<td>Runyon et al., 2009</td>
<td>Physically abused, living with the abuser</td>
<td>Not RCT, child/ adult treatment</td>
</tr>
<tr>
<td>O’Callaghan et al., 2013</td>
<td>Sexually exploited Congolese girls rejected by families</td>
<td></td>
</tr>
<tr>
<td>Ford et al., 2013</td>
<td>Delinquent girls</td>
<td>Many aspects of TF-CBT</td>
</tr>
</tbody>
</table>

EMDR

- Patient identifies:
  - Distressing memory
  - Related imagery
  - Physical sensations
  - Subjective units of distress
  - Related negative self-cognitions
  - Positive self-cognitions and how much they believe them
- Sets of eye movements (or other stimulus) are induced
- Patient reports any thoughts, images, feelings, and sensations
- Continues until SUDs = 0 or 1
- Reprocessing: patient focuses on positive cognitions regarding the memory during further sets of eye movements
**Evidence for EMDR**

- Studies where EMDR is one component of the treatment (Fernandez, 2003; Jarero et al., 2006; Oras et al., 2004)
- Single case studies (Cocco & Sharpe, 1993; Russell & O’Connor, 2002)
- 5 RCTs (Puffer et al., 1997; Chemtob et al., 2002; Jabergahdari et al., 2004; Roos et al., 2011; Kemp et al., 2010; Ahmad et al. 2007)

**Other treatments**

- Medication (NICE 2005)
  - No RCTs demonstrating effectiveness of medication for PTSD symptoms in children and young people
  - May still have a role in symptom management (Donnelly 2009)
- Psychodynamic psychotherapy
  - Better than group therapy for sexually abused girls (Trowell et al. 2002)
  - Child-Parent Psychotherapy better than TAU for 3-5 year olds who had witnessed domestic violence (Lieberman et al. 2005)
- Family therapy, art therapy, play therapy, drama therapy
  - No good evidence at present (Chapman et al. 2001, showed Art therapy made no difference)
  - But TF-CBT may involve family
  - And TF-CBT should be adapted to make it age-appropriate, so may make use of art, play and drama. However TF-CBT is not “non-directive”

**NICE Practice Recommendations (9.9.3)**

- TF-CBT for older children with severe post-traumatic symptoms or PTSD in the first month. C
- TF-CBT adapted appropriately for age, circumstances and level of development for children and young people with PTSD. B
- Involve families where appropriate, but parents-only treatment unlikely to be of use. C
- Treatment duration 8–12 sessions (single event). C
- Longer sessions usually necessary (e.g. 90 min). C
- Regular, continuous, same therapist. C
- Drug treatments should not be routinely prescribed for children and young people with PTSD. C
- Treatment should be regular and continuous (usually at least once a week) and should be delivered by the same person. C

**Contra-indicators**

- No evidence of contra-indicators
- But TF-CBT unlikely to be very helpful if:
  - On going significant threat
  - Child not signed up to exposure
  - Family not supportive

**Legal aspects**

- Critical Incident
  - May also be a crime
  - Priorities of decision-making (and budget holding) agencies are gathering evidence and preservation of life, rather than psychological well-being
  - Cross-agency communication may conflict with confidentiality
- Evidence
  - May be asked if victims are fit to give evidence, and how can that be done with the least harm?
  - Professional witness is different to Expert Witness
  - Useful to ask about legal processes as a part of the assessment

**Pre-trial therapy may affect the outcome of the trial**

- Therapy may decrease distress, which may decrease the impact of evidence
- Developing narrative in therapy may be used to claim that account was convincing due to “rehearsal” in therapy
- Inconsistencies that come to light in therapy may be used to cast doubt upon veracity of account
- Benefits of pre-trial therapy should be weighed against possible risk to trial
  - (See Provisions of Therapy for Child Witnesses Prior to a Criminal Trial available at www.cps.gov.org)