Trauma and PTSD

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Overview

- **Trauma**
- **Impacts of Trauma**
- **Trauma exposure**
- **What is PTSD?**
- **Treatments**
- **Secondary traumatic stress**
- **Managing secondary traumatic stress**

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Topic Requests

- Define trauma and PTSD
- Try to link trauma and PTSD to BPD and their carers
- What is the difference between trauma and PTSD?
- Are there medications for PTSD?
- What therapies are used to deal with PTSD and what techniques are used?
- Can carers do anything to self manage trauma &/or PTSD?
- Does the body suffer as well under PTSD?

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TRAUMA AND ITS IMPACTS

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What is Trauma?

- *Individual trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being.*

SAMHSA

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What is Trauma?

- Trauma exposure (Criterion A Stressor):
  - actual or threatened death/injury/sexual violence
  - direct experience, witnessing in person, learning that traumatic event occurred to close family member or friend
  - repeated (e.g., childhood abuse) or extreme exposure (e.g., first responders)

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What is Trauma?

Traumatic events associated with the development of PTSD:

- serious accidents
- physical and sexual assault
- abuse, including childhood or domestic abuse
- work-related exposure to trauma, including remote exposure
- trauma related to serious health problems or childbirth experiences (for example, intensive care admission or neonatal death)
- war and conflict
- torture

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Responses to Trauma

- State of high arousal in which normal coping mechanisms are overwhelmed in response to the perception of threat (Cozolino, 2002: 270)
- Mobilisation of innate biological survival responses:
  - fight/flight/freeze/dissociative responses
- This is not a cognitive choice:
  - these survival responses are initiated at the level of the brain stem.
- Survival responses can become sensitised leading to chronic hyperarousal states
  - sense of threat easily triggered by environment

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Trauma exposure - prevalence

- Lifetime prevalence (in US) of trauma exposure to one or more traumatic events (DSM-IV criterion) was 89.6%
- Australian estimates of lifetime prevalence of exposure to at least one traumatic event were 64.4% for men and 49.5 % of women.
- In Australia, the kinds of trauma most frequently experienced included:
  - witnessing someone being badly or fatally injured (37.8% men, 16.1% women)
  - being involved in a life-threatening accident (28.3% men, 13.6% women)
  - being involved in a natural disaster (19.9% men, 12.7% women).

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Trauma exposure and PTSD

- Not all people exposed to trauma will go on to develop PTSD
  - around 10 - 20% of people will go on to develop PTSD
- Rate of exposure to traumatic events exceeds the prevalence of PTSD .

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Trauma exposure and PTSD

- Traumas that were most likely to lead to PTSD:
  - assaultive violence was associated with the highest risk of developing PTSD.
- Traumatic events that were most often associated with PTSD differed between men and women:
  - For men: rape, combat exposure, childhood neglect, and childhood physical abuse were associated with PTSD
  - For women: rape, sexual molestation, physical attack, being threatened with a weapon, and childhood physical abuse .
- For both men and women in Australia, the traumatic events most likely to be associated with PTSD were rape and sexual molestation.

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PTSD Prevalence

- Estimated lifetime prevalence of PTSD ranges from about 7 to 14%
- High prevalence disorder
- Women (10.4%) were found to be twice as likely as men (5%) to experience PTSD in their lifetimes.

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WHAT IS PTSD?

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PTSD Symptoms

Range of symptoms including:

- Re-experiencing
- Avoidance
- Hyperarousal (including hypervigilance, anger and irritability)
- Negative alterations in mood and thinking
- Emotional numbing
- Dissociation
- Emotional dysregulation
- Interpersonal difficulties or problems in relationships
- Negative self-perception (including feeling diminished, defeated or worthless)

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PTSD Symptoms

- Re-experiencing symptoms:
  - recurrent intrusive distressing memories (images, thoughts or perceptions)
  - recurrent distressing dreams (nightmares) related to the event
  - dissociative reactions (e.g., flashbacks) in which individual may act or feel as if the traumatic event were happening again
  - intense psychological distress and marked physiological reactivity to reminders of the trauma

American Psychiatric Association (2013), DSM-5.

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PTSD Symptoms

- Avoidance symptoms
  - avoidance of memories, thoughts, feelings about or closely associated with the traumatic event
  - avoidance of external reminders (people, places, activities, objects, situations) of the trauma

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PTSD Symptoms

- Hyperarousal symptoms
  - irritability or outbursts of anger
  - reckless or self-destructive behaviour
  - hypervigilance
  - exaggerated startle response
  - problems with concentration
  - sleep disturbance (difficulty falling or staying alseep)

American Psychiatric Association (2013), DSM-5.

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PTSD Symptoms

- Negative alterations in thinking and mood
  - persistent and exaggerated negative beliefs about oneself, others, the world
  - persistent distorted thoughts about the causes of trauma that lead the person to blame themselves or others
  - persistent negative emotional states (e.g., fear, horror, anger, guilt or shame)
  - markedly diminished interest or participation in significant activities
  - feelings of detachment or estrangement from others
  - persistent inability to experience positive emotions (e.g., unable to experience happiness, satisfaction, or have loving feelings)

American Psychiatric Association (2013), DSM-5.

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Complex PTSD (ICD-11)

- All diagnostic requirements for PTSD must be met:
- Plus complex PTSD is characterized by severe and persistent:
  - problems in affect regulation;
  - beliefs about oneself as diminished, defeated or worthless, accompanied by feelings of shame, guilt or failure related to the traumatic event;
  - difficulties in sustaining relationships and in feeling close to others.
- These symptoms cause significant impairment in personal, family, social, educational, occupational or other important areas of functioning.

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Relationship between BPD & PTSD

- Many people with BPD have a history of trauma exposure
- High rates of trauma have been reported by patients with BPD
  - range from 70 to 80 % trauma history
- However, not all patients diagnosed with BPD report trauma, nor do all people who experience trauma go onto develop BPD (Ball & Links, 2009).

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Relationship between BPD & PTSD

- High comorbidity of BPD with PTSD
  - Mood disorders: 96%
  - Anxiety disorders: 88%
  - Substance use disorders: 64%
  - **PTSD: 47-56%**
  - Anorexia Nervosa: 6-21%
  - Bulimia Nervosa: 13-26%
  - Eating disorder NOS: 22-26%

(McGlashan et al., 2000; Zanarini et al., 1998)

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PTSD – Neurobiological changes

- Neuroendocrine abnormalities:
  - changes to cortisol regulation (HPA Axis function) as primary stress hormone
- Neurotransmitter abnormalities:
  - abnormalities in noradrenergic neurotransmitter function
  - many symptoms of PTSD such as autonomic hyperarousal, insomnia, increased startle response are characteristic of increased noradrenergic function
- Neurobiological abnormalities:
  - ? reduced hippocampal volume (e.g., Bremner et al, 1995) or neuronal density (e.g., Shuff et al., 1997)
  - abnormalities in resting global cerebral blood flow (Clark et al., 2003)
  - changes in functional activity of the brain (Moores et al., 2008)

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TREATMENTS

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Medications

- Evidence provides support for a small or modest improvement for four medications
- Selective Serotonin Re-putake Inhibitors (SSRIs)
  - Sertraline (Zoloft)
  - Fluoxetine (Prozac)
  - Paroxetine (Paxil)
- Serotonin-Noradrenaline Re-uptake Inhibitors (SNRIs)
  - Venlafaxine (Effexor)
- With many medications, residual PTSD symptoms following treatment is the rule rather than the exception
- Some benefit from Prazosin

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Early Intervention?

- Normal trajectory of recovery
  - People will experience symptoms post-trauma, but these will most often resolve by 3-6 months
- Is psychological debriefing effective?
  - Research indicates that psychological debriefing can interfere with the normal recovery process
  - Clients receiving psychological debriefing often fare worse than those left to recover normally (significantly higher rates of PTSD)
- Some evidence for CBT early intervention for Acute Stress Disorder (ASD)

Bryant (2007). *Early Intervention in Psychiatry*, 1,19-26.

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Psychological Therapy

- Evidence-based psychological therapies for PTSD include:
  - Prolonged Exposure (PE)
  - Cognitive Processing Therapy (CPT)
  - Trauma-focused CBT
  - Eye-movement Desensitisation and Reprocessing (EMDR)
  - DBT-PE (Prolonged Exposure Protocol for PTSD)

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Cognitive Model of PTSD

- Ahlers & Clark (2000)
  - Persistent PTSD associated with appraisals that create a sense of current threat (e.g., the world is not safe)
  - Negative appraisals of symptoms (e.g., I am damaged forever)
  - Problem of memory: trauma memory is inadequately integrated into autobiographical memory
  - Maladaptive behavioural/cognitive strategies maintaining PTSD:
    - Avoidance
    - Rumination (if only, what if?, why me?, revenge)
    - Safety behaviours (prevents disconfirmation of beliefs)

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Cognitive Model of PTSD

- Three targets for treatment:
  1. Trauma memory needs to be elaborated and integrated into context of individual's experience to reduce intrusive re-experiencing
  2. Address problematic appraisals of trauma that maintain sense of current threat
  3. Dysfunctional behavioural & cognitive strategies that prevent memory elaboration

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Prolonged Exposure (PE)

- Foa et al., (1994)
  - Exposure based treatment
  - Prolonged imaginal exposure 45-60 mins (audiotaped)
    - Initially reliving trauma memory in past tense with eyes open in as much detail as client feels comfortable with
    - Later reliving in present tense with thoughts, emotions, body sensations (re-tape account)
    - Warn client that they will need to go through it again and again and ask them to listen to tape between sessions
  - Problems with PE
    - High drop-out rate: ~ 20%
    - Clinicians not implementing PE despite the evidence-base

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Cognitive Processing Therapy (CPT)

- Resik et al., (1993)
  - 12 sessions, usually twice per week, manualised treatment
  - PTSD conceptualised as a disorder of non-recovery
  - Stuck points: thoughts and interpretations about the event maintaining distress (typically self blame, guilt, shame)
  - Cognitive therapy on stuck points, daily worksheets
  - Themes addressed explicitly in last 5 sessions:
    - Safety
    - Trust
    - Power/control
    - Esteem
    - Intimacy

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Eye Movement Desensitisation & Reprocessing (EMDR)

- Shapiro (1989)
  - Client asked to focus on trauma-related imagery (including negative thoughts, body sensations) while moving their eyes back and forth, following the movement of the therapist's fingers across their field of vision, for 20–30 seconds or more.
  - mechanism of action unclear – proposed to mimic REM sleep
  - TF-CBT & EMDR share the two key elements:
    (1) exposure to traumatic memory and
    (2) cognitive processing of the meaning or interpretations of the trauma
  - Evidence suggest that these components are the key ingredients to the effectiveness of these interventions

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PTSD Treatment - Neuroimaging

- Felmingham et al., (2007)
  > first study to investigate neural networks before and after trauma-focused CBT (including exposure) treatment for PTSD
- Findings:
  - Significantly greater activation in bilateral rAC after treatment than before treatment
- Correlations with symptom reduction:
  - Significant negative correlation between change in total CAPS score (PTSD severity) and change in right rAC activity from before to after treatment
  - Significant correlation between activation in bilateral amygdala and change in total CAPS score
  - As CAPS scores improved (i.e., reduced), rAC activity increased and amygdala activity decreased during fear processing

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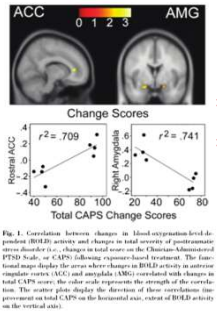
PTSD Treatment - Neuroimaging



> ↓ CAPS = ↑rAC

> ↓ CAPS = ↓ amygdala

- Demonstrates that trauma-focussed CBT treatment for PTSD changes brain function

Felmingham et al, (2007). *Psychological Science*, 18,127-129.

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Complex PTSD Treatment

- Three phases of treatment:
- Phase 1: Safety and Stabilisation
- Phase 2: Rememberance and Mourings
- Phase 3: Integration and Reconnection

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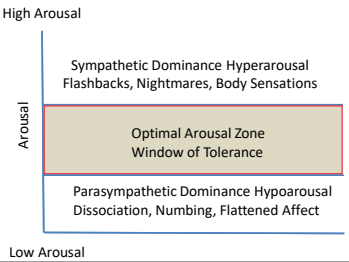
Window of Tolerance

- Clients cannot process traumatic information from the past if they are outside the window of tolerance (Briere & Scott, 2006; Siegel, 1999).
- If client outside the window of tolerance they are re-living past traumatic experiences (abreaction), rather than processing or learning how to master the traumatic experience (Briere, 2002; Briere & Scott, 2006; Siegel, 1999).



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DBT-PE

- Harned et al, (2012) – DBT + Prolonged Exposure (PE)
  - women with BPD and PTSD (CSA, sexual assault)
  - average number of other traumas: 14
- Patients undertook DBT for 1 year
- PE protocol initiated when client deemed ready:
  - Not imminently at risk of suicide, no recent suicide attempt or DSH
  - PTSD is highest priority for client, able to and willing to tolerate thinking about the trauma and related strong emotions
- Dropout: 3 (23%) dropped out of treatment prematurely, 10 (77%) completed one year of DBT
  - 3 dropouts before PE protocol started, 3 started PE but did not complete (1 didn't want to experience strong emotions, 1 not sufficiently controlling DSH, 1 had increase in auditory hallucinations)
- DBT-PE outcomes:
  - 70% of treatment completers no longer had PTSD (60% of intention to treat sample)

Harned et al, (2012). *Behaviour Research and Therapy*, 50,381-386.

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Strategies for Managing PTSD

- Grounding Strategies List
  - Can be helpful to develop a list of grounding strategies
  - Use as a resource at times of flashbacks/dissociation/distress
- Many people have a number of strategies they use to reduce dissociation already
  - idiosyncratic and individualised
  - usefulness of strategies may vary over time
  - some may be fairly reliable for the person (e.g., bare feet on cold floor)
- Grounding Kits
  - brings together all the effective grounding techniques – what works for that person
  - have available as a resource when in dissociative state when least likely to be able to think clearly

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Grounding Techniques - Ideas

- Smelling salts/aromatherapy oils/ fragrances
- Holding ice
- Sucking on strong mints/chewing gum/lollies
- Sucking an ice block or ice chips
- Chilli flakes/wasabi on the tongue
- Warm or cold drink
- Hot or cold shower
- Listening to music
- Touching pets
- Squeezing a stress ball/ tossing a ball
- Swinging
- Pacing/Walking/Jogging
- Focus on 5 senses (smell, sight, taste, touch, hearing)
- Reading
- Colouring/painting
- Puzzles
- Crosswords
- SudokuYoga or movement
- Talking with someone
- Push feet into floor

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Grounding Techniques

- Sensory grounding skills

Sensory awareness grounding skills

Spritz your face (with eyes closed), neck, arms and hands with a fine water mister.

Put your feet firmly on the ground.

Listen to soothing music or familiar music you can sing along to. Dance to it. How does it make your body feel?

Rub your palms; clap your hands. Listen to the sound. Feel the sensation.

Hold something that you find comforting. It may be a stuffed animal, a blanket or a favourite sweater. Notice how it feels in your hands. Is it hard or soft?

Carry something meaningful and tangible in your pocket that reminds you of the present. Touch it to remind yourself that you are an adult.

Try to notice where you are and your surroundings, including the people present.

If you have a pet, touch its fur and speak its name out loud.

Exercise. Ride a bike, stationary or otherwise. Lift weights. Do jumping jacks.

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Grounding Techniques

- Cognitive grounding skills

Cognitive grounding skills

Reorient yourself in place and time by asking yourself some or all of these questions:

- Where am I?
- What is today?
- What is the date?
- How old am I?
- What season is it?
- Who is the country's political leader?
- What is happening now; what is the context?

The following are examples of behaviours to use for reorientation to place and time:

- Pick up a newspaper or pull up the daily newspaper on your browser. Notice the date and read a current article.
- Call a friend and ask the person to talk with you about something you have done together recently.
- Step outside and determine the temperature. Is it warm? Is the sun shining? Is there a cold breeze? What season is it?

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Secondary Traumatic Stress

Signs of secondary traumatic stress - observable reactions to supporting traumatised people, mirrors PTSD:

- Intrusive thoughts
- Chronic fatigue
- Sleep disturbance
- Sadness/Anger/Fearfulness/Shame
- Poor concentration
- Emotional exhaustion
- Difficulty coping
- Second guessing
- Detachment/numbness
- Loss of hope/depresssion

Practice Guide. Centre for Excellence in Therapeutic Care (2019), Australian Childhood Foundation.

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Strategies for Managing Secondary Trauma

- Normal trajectory of recovery after experiencing a traumatic event
  - expect intrusive thoughts/memories/nightmares
  - these will tend to fade over time as the brain processes the situation
- Try not to avoid thoughts/feelings/situations as avoidance a maintaining factor for PTSD
- Importance of self-care, strategies to manage carer burnout, compassion fatigue
- Seek professional support if needed

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