Substance use and mental health consequences of trauma and implications for assessment and treatment

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Department of Psychiatry
About Phoenix Australia

• Not-for-profit organisation

• Our mission:
  – Improved mental health, wellbeing and quality of life for individuals, organisations and communities who experience trauma
  – Through research, policy and service development advice and training
Overview

- Trauma - what do we mean and response trajectories
- Risk factors
- Outcomes following trauma
- Trauma, traumatic stress and substance use
- Framework for management of responses to trauma
- NHMRC Guidelines recommendations
  - Assessment
  - Intervention
Potentially traumatic events (PTEs)

An event involving actual or threatened death, serious injury or sexual violation

- Experienced directly
- Witnessed in person
- Learned about sudden or violent death of close friend or family
- Repeated or extreme exposure to aversive details
  - (e.g., first responders, police and judiciary having repeated exposure to details of violent crime and child abuse)
- Includes participation through an electronic medium where part of occupation
  - (e.g., 000 call centres; viewing objectionable materials)
Trauma and its prevalence

• Events:
  • physical & sexual assault; child abuse; domestic violence, accidental traumatic injury (motor vehicle accidents, workplace accidents); natural and man-made disaster; survivors of torture; war.

• 75% of adult Australians have experienced a PTE (Mills et al. 2007)

• More than 68% of children and adolescents had experienced a PTE by the age of 16 (Copeland et al., 2007)
Mental health response to trauma

• The mental health impact of experiencing a PTE may be:
  • **Valence:** Good, bad, mixed
  • **Severity:** Negligible, mild, moderate, severe
  • **Duration:** Brief, long-lasting, permanent

• The vast majority of people do not develop long term mental health problems
Common trajectories after trauma

Potential for posttraumatic growth alongside all trajectories
Factors that increase the risk of event impact

Pre-incident factors

- Prior trauma or mental health problems

Incident and peri—traumatic response related factors

- Extent of fear for life; duration of exposure; repetition
- Extent of hyperarousal and dissociation
- Predictability & controllability

Post-incident factors

- Social support (or lack of)
- Other stressful life events
Individual risk & protective factors

- Predictors based on two large meta-analyses (Brewin, 2000; Ozer, 2003)
  - Peri-traumatic responses (lots!)
  - Social support posttrauma (.40)
  - Other life stress posttrauma (.32)
  - Trauma severity (.23)
  - Previous trauma history including childhood trauma (.19)

- Consistent with data from Black Sat bushfires (Bryant, Waters, Gibbs…Forbes., 2014; Forbes, Gibbs…Bryant., 2016 ANZJP)
How does trauma affect people?

- Impacts for single episodes (e.g., accident, assault) tend to be less severe than repeated/chronic trauma (e.g., CSA, domestic & intimate partner violence, torture, war)

- Early childhood abuse can be particularly damaging and have lifelong impacts
Disorder Prevalence at 12 Months
(Bryant et al., 2012  JAMA Psychiatry)
PTSD symptoms in DSM-5 (20 Sx)

1. Intrusion symptoms (memory keeps coming back)
   - sudden clear thoughts & images; nightmares; feeling “back there” (flashbacks) & distress on seeing reminders

2. Avoidance symptoms (try to avoid or stay away)
   - push away thoughts & feelings; avoid places or people which remind

3. Negative alterations in cognitions and mood (persisting negative feelings or thoughts related to the event)
   - feel anxious, angry, sad & depressed, guilt, or emotionally “shut down”

4. Alterations in arousal and reactivity (keyed up and on edge)
   - hypervigilance; sleep & concentration problems; irritable & angry; easy startled
How common is PTSD?

Prevalence

- About 4.4% of Australians have PTSD (McEvoy et al., 2011)
- Rates vary by trauma type
  - 5-10% following natural disasters or severe motor vehicle accidents
  - 25-30% following non sexual assault
  - 50% following sexual assault

- Military populations
  - General range 10-20% but higher after particular experiences e.g. kidnapping (78%) killing someone (28%)

- Emergency service personnel
  - Reports are inconsistent
  - Estimated 10%
PTSD: strong comorbidity profile

- **Comorbidities or primary disorders in their own right**
- Guilt; Depression; Anxiety; Anger
- **Substance use problems**
  - Most commonly alcohol; facilitate sleep, dampen nightmares, anxiety & memories
- **Relationship problems**
  - family: withdrawn, irritable & angry; numbing
  - friends: often hard to feel understood; withdraw
- **Chronic pain**
  - Where associated with injury
- **Impact on work functioning**
  - Concentration and attention; anger; sustaining stability
PTSD and SUD comorbidity (Roberts et al., 2015 CPR)

- In individuals with SUD, lifetime PTSD ranges from 26% to 52%, with current PTSD ranging from 15% to 42%
- In PTSD diagnosed samples, co-morbid SUD (excluding alcohol use disorder) ranges from 19% to 35%
- Alcohol use disorder consistently the most commonly co-occurring SUD co-morbidity, rates ranging from 36% - 52%
- Prevalence rates for both alcohol and drug abuse appear to be higher for men with PTSD than women
- Estimates of comorbidity have been even higher in some populations, such as combat veterans (75%)
- Lifetime trauma was associated with greater odds of lifetime cannabis use while PTSD was associated with greater odds of CUD (Kevorkian et al., 2015)
Understanding the relationship

- **Self medication hypothesis:**
  - trauma survivors may misuse drugs or alcohol to manage symptoms such as hyperarousal or distressing memories or flashbacks.

- **Withdrawal symptoms may mimic hyperarousal symptoms of PTSD**
  - trauma survivor then uses increasing amounts of drugs or alcohol in attempts to cope

- **Substance abuse may also promote and reinforce maladaptive avoidant coping strategies, may be pre-existing and risk for both**

- **Substance using populations also exposed to elevated risk of trauma through victimisation or accidental traumatic injury**

- **May have common neurobiological pathways**
Transition within and across classes over time (Forbes et al., J Clin Psychiatry, 2015)

3 months

- No disorder N=812
- PTSD/Dep N=134
- Alcohol N=19
- Alc/Dep N=22

12 months

- No disorder N=769
- PTSD/Dep N=150
- Alcohol N=48
- Alc/Dep N=20

72 months

- No disorder N=810
- PTSD/Dep N=131
- Alcohol N=34
- Alc/Dep N=12
So what do we do.........
# Stepped care approach: A 3 level response

<table>
<thead>
<tr>
<th>Level</th>
<th>Intervention</th>
<th>Target group</th>
<th>Delivered by</th>
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<tbody>
<tr>
<td>Level 1</td>
<td>Psychological First Aid</td>
<td>Universal: Everyone exposed to trauma</td>
<td>Peers, primary health</td>
</tr>
<tr>
<td>Level 2</td>
<td>Simple intervention strategies</td>
<td>Significant subclinical re-adjustment problems: Those who don’t “bounce back”</td>
<td>Primary health, general mental health</td>
</tr>
<tr>
<td>Level 3</td>
<td>Evidence based treatment</td>
<td>Those who develop a mental health problem</td>
<td>Mental health specialist</td>
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Developed in consultation with experts and people affected by PTSD

Supported by the Australian Government and approved by peak health research body

Endorsed by professional associations: RANZCP; RACGP & APS
Key recommendations

• Recommendations consistent with international guidelines (Forbes et al., 2010 J Tr Stress – Guide to Guidelines)

• New edition of Australian to be developed in the coming 18 months

• New edition of international guidelines also underway (ISTSS) – due for completion July 2018
Key recommendations

Screening

- For people presenting to primary care services with repeated non-specific physical health problems, it is recommended that the primary care practitioner consider screening for psychological causes, including asking whether the person has experienced a traumatic event and describe some examples of such events. **GPP1**

- Service planning should consider the application of screening (case finding) of individuals at high risk for PTSD after major disasters or incidents, as well as those in high risk occupations. **GPP2**

- Relevance also for those who are presenting with problems commonly associated with trauma, such as SUD (Roberts et al., 2015)
Asking the question about exposures ……

• There are times in our practice where we suspect an underlying traumatic experience/s but unsure how to broach it.

• Often this is in the case of repeated non specific physical health concerns, substance misuse or other risk related or self harming behaviour.

• A simple good opening question

• “Have you ever experienced a particularly frightening, horrible or upsetting event?”
Primary care PTSD screen (PC-PTSD, Prins et al., 2003)

In your life, have you ever had any experience that was so frightening, horrible, or upsetting that, in the past month, you:

• 1. have had nightmares about it or thought about it when you did not want to?

• 2. tried hard not to think about it or went out of your way to avoid situations that reminded you of it?

• 3. were constantly on guard, watchful, or easily startled?

• 4. felt numb or detached from others, activities, or your surroundings?

If a person says “yes” to two or more of these questions, further assessment is recommended.
Guiding safe disclosure

You can:

• help people decide if disclosure is right for them
• guide the level of disclosure

Disclose

Not disclose

I have enough time to talk
I will see you again

It’s not a private setting
I’m unlikely to see this person again
I’ve got no time
A decision table for disclosure

<table>
<thead>
<tr>
<th>Service user’s desire to disclose trauma</th>
<th>Psycho-social stability</th>
<th>Environmental safety</th>
<th>Context of intervention (brief to involved)</th>
<th>Worker experience with trauma</th>
<th>Organisational capacity to support trauma work</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Action 1</strong></td>
<td><strong>Low</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Action 2</strong></td>
<td><strong>Medium</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Action 3</strong></td>
<td><strong>High</strong></td>
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**Action 1**
Provide information and attempt to contain disclosure, (i.e., support categorical disclosure), advise about potential consequences of disclosure without support, reinforce the general impact of trauma, and importance of working towards recovery gently.

**Action 2**
Support limited disclosure, carefully assessing the impact of disclosure. Provide opportunity for some discussion to help make sense of the trauma, and provide general psychoeducation about linkages between recovery and trauma.

**Action 3**
Allow as much disclosure and discussion as the person wishes, help them to make meaning (sense?) of the trauma, and discuss how planning for the future may mean more focussed work on responding to their trauma experiences.
Intervention
Does depend on where in the course following exposure you are seeing them
Key recommendations for intervention

Post-incident interventions for all

Routine structured psychological debriefing is not recommended *Grade B*

Post-incident interventions for all (GPP)

- Provide practical and emotional support, access social supports, promote positive expectations, guidance re risks of coping through substance use
- Support people to talk about it if they choose to but don’t insist
- Monitor and step up the level of support if needed
5 Principles of recovery

- Safety
- Calm
- Individual and community efficacy
- Connectedness
- Hope

- Hobfoll et al 2007
Overlap of core intervention skills

- Skills for stabilising the impacts of trauma are often useful building blocks of substance use treatment

- Brief trauma-recovery skills include:
  - Problem-solving & planning for difficult situations
  - Managing emotions and calming skills
  - Developing helpful thinking skills
  - Developing connections (including social support, and managing barriers to accessing services)
Key recommendations

Treatment of PTSD

– Trauma-focused cognitive behavioural therapy or eye movement desensitisation and reprocessing (EMDR) (Grade A)

– Drug treatments for PTSD should not be preferentially used as a routine first treatment for adults, over trauma-focussed cognitive behavioural therapy or EMDR. (Grade B)

– Where medication is considered for the treatment of PTSD in adults, selective serotonin reuptake inhibitor antidepressants should be considered the first choice. (Grade C)
Core elements of TFCBT

Over 70 high quality RCTs: 2 most published TFCBT Rxs are prolonged exposure and cognitive processing therapy

Core elements:

– *In vivo* – confronting trauma-related situations that are avoided or generate distress – in graded hierarchical manner

– Imaginal – confronting the memory of the traumatic experiences in a controlled and safe environment

– Processing of trauma related beliefs about self, others and the world that are interfering with recovery
Pharmacological interventions

• Also consider medication when the person:
  – is unwilling to engage in trauma-focussed psychological treatment
  – is not sufficiently stable for trauma-focussed therapy
  – has not gained significant benefit from trauma-focussed therapy
  – has high levels of dissociative symptoms likely to be exacerbated by trauma-focussed therapy
Pharmacological interventions

Benzodiazepines

• No evidence of benefit on PTSD symptoms
• No evidence they prevent PTSD

But…

• No evidence they increase subsequent rates of PTSD
• Evidence of benefit for sleep and generalised anxiety
PTSD and SUD

• The focus of considerable debate

• Practitioners should consider integrated treatment of both conditions (CP6).

• The trauma-focussed component of PTSD treatment should not commence until the person has demonstrated a capacity to manage distress without recourse to substance misuse and to attend sessions without being drug or alcohol affected (CP7)

• “There is evidence that individual trauma-focused psychological intervention delivered alongside SUD intervention can reduce PTSD severity, and drug/alcohol use” (Roberts et al., 2015, CPR)
But first.. trauma – informed practice

- Recognising the influence of traumatic experience
- Also may not have the service or mandate to treat PTSD
- An opportunity to develop links between trauma impacts, reminders and triggers and reasons for substance use and risk behaviour
- Using a Trauma informed approach:
  - Education about trauma impacts and symptoms
  - Normalise responses to trauma, reminders and triggers
  - Core management skills
  - Manage immediate impacts via skills, hope for long term recovery via trauma specific treatments
Combined PTSD and SUD treatment

- Trauma focused exposure based models
- Trauma focused Concurrent Treatment of PTSD and Substance Use Disorders Using Prolonged Exposure (COPE) (Mills et al., 2012)
- Motivational enhancement and CBT for substance use
- Psychoeducation relating to both disorders and their interaction
- In vivo exposure, imaginal exposure, and cognitive therapy for PTSD.
PTSD and SUD treatment

• Concurrent trauma focused non exposure based treatment ie., CBT or coping skill training, without an exposure-based trauma-focused component.

• Most attention is for ‘Seeking Safety’ (Najavits, 2002)
  – a number of randomised and non-randomised evaluative studies.

• Structured cognitive behavioural treatment with both safety/trauma and substance use components integrated into each session.

• Its primary goal is to reduce both PTSD and SUD by focusing on safe coping skills addressed through cognitive, behavioural, interpersonal, and case management domains.
BUT how effective are these treatments?

• One third, dramatic improvement, no longer meeting the criteria for a diagnosis
• One third large reductions, although still with moderate symptoms
• One third, little if any meaningful change
• And in those who improve:
  – Moderate improvements in associated problems like depression and anxiety
  – Moderate improvements in relationships and quality of life
Level 2- emerging International collaboration promoting adjustment and resilience (interPAR)

- Roundtable (Nov 2015) in Sydney with Aust, US, UK, Canadian colleagues

- Refinement of a level 2 intervention which could be consistently delivered and evaluated.

- Primary care and coach delivered:

- Addressing evidence informed key factors influencing trajectory
  - Managing strong emotions
  - Facilitating emotional processing of the trauma experience
  - Engaging in activities to promote mental health
  - Managing unhelpful ways of thinking (partic worry and rumination)
  - Social relationships
  - Promoting healthy living (sleep; substance use etc)
Psychosocial recovery following community disasters: An international collaboration

David Forbes¹, Meaghan O'Donnell¹ and Richard A Bryant²

Ample evidence demonstrates that disasters of both natural (e.g. floods, bushfires, earthquakes) and human origin (e.g. interpersonal violence, terrorism, major life-threatening accidents) can result in adverse mental health outcomes among those directly or indirectly exposed (North and Pfefferbaum, 2013). While the majority of disaster with a view to (1) preventing disorder where possible, (2) intervening early for those who develop initial symptoms and (3) facilitating access to treatment for those with diagnosable conditions. Multiple challenges arise in attempting to deliver this type of response in the context of a complex and chaotic post-disaster setting, and only because psychological dysfunction at this level causes significant distress, economic loss and functional impairment but also because these adjustment problems pose a risk for escalation into serious psychiatric disorders if not effectively addressed. Moreover, in the aftermath of disaster, there can be substantial numbers of
# Trauma in substance use treatment

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| **1.** Trauma and the impacts are over-represented in substance use treatment seeking populations | **2.** Substance use, risk and other comorbidities are often rightly the priority, some services lack a mandate to treat trauma directly | **3.** Trauma management tools parallel AOD tools  
- Problem-solving and planning  
- Managing emotions  
- Helpful thinking  
- Developing social connections |

| **4.** Engagement, managing barriers to care, and careful management of and timing of trauma disclosure are critical | **5.** Important to provide accurate and hopeful information about effective trauma treatment |   |
Thank you