

# Trauma, PTSD and substance use

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# Trauma & substance use

- The nature of trauma (including post-traumatic stress disorder) and its effects
- The link between trauma and the use of alcohol and other drugs
- Approaches to managing and treating trauma symptoms

# The nature of trauma and PTSD



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# What is trauma exposure?

- An event where a person is exposed to:
  - death, threatened death
  - actual or threatened serious injury
  - actual or threatened sexual violence
- The event may be experienced via:
  - direct exposure
  - witnessing, in person
  - indirectly (i.e., learning that a close relative or close friend was exposed to trauma)
  - repeated or extreme indirect exposure to aversive details of events (usually in the course of professional duties)
- May be prolonged or one-off event



# Consequences of trauma exposure

- Traumatic events are often defining, life-changing moments, regardless of whether a person goes on to develop PTSD or any other trauma-related disorder.
- Whether it be a one-off event or more prolonged, trauma can shape or redefine a person's views about:
  - themselves (e.g. I am weak, bad, worthless)
  - the world around them (e.g. the world is not safe)
  - how they relate to it (e.g. people cannot be trusted)



Mills, KL (2015). The importance of providing trauma-informed care in alcohol and other drug services. *Drug and Alcohol Review*, 34(3), 231-233.

Mills KL et al. (2012). Integrated Exposure-Based Therapy for Co-occurring Posttraumatic Stress Disorder and Substance Dependence: A Randomized Controlled Trial. *JAMA*; 308(7): 690-699.

# Consequences of trauma exposure

- The earlier the trauma, the greater the risk for these problems
- Those exposed to multiple traumas are at increased risk for cumulative impairment



# Consequences of trauma exposure

Canada:  
Child abuse  
↓  
all DSM-IV disorders  
(Afifi et al., 2014)

USA:  
Child physical abuse  
↓  
PTSD, bipolar,  
ADHD  
(Sugaya et al., 2010)

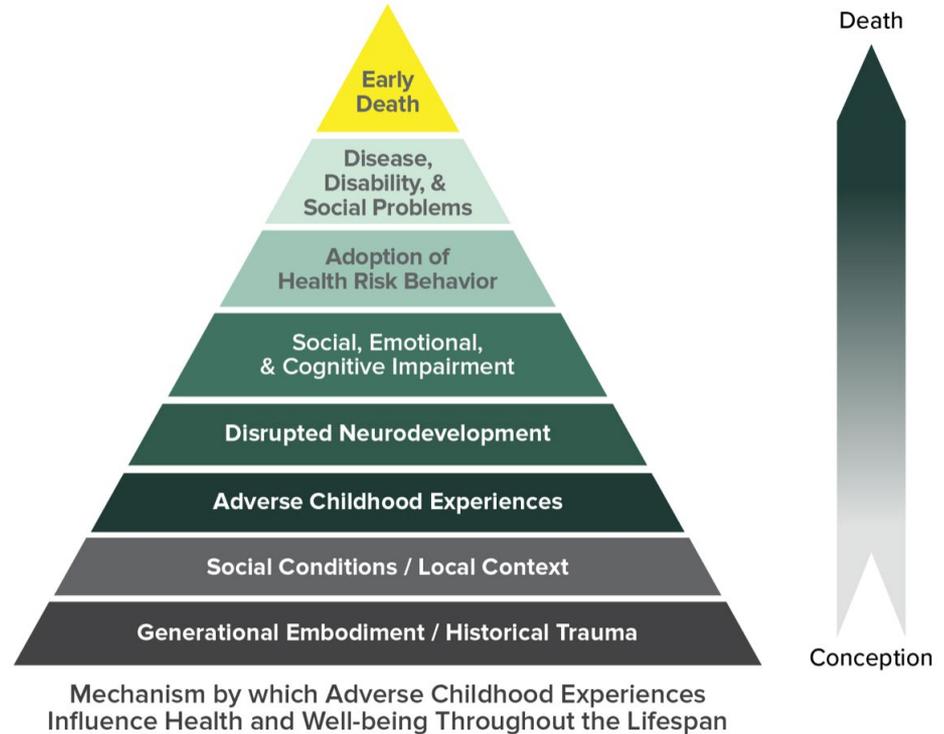


UK:  
Child sexual abuse  
↓  
PTSD, GAD, eating  
disorders  
(Chou et al., 2012)

WMH Surveys:  
Child adversity  
↓  
elevated risk of all DSM-IV disorders, consistent across country groups  
(Kessler et al., 2010)

# US Adverse Childhood Experiences (ACEs) Study

- ACEs associated with:
  - increased rates of alcohol abuse and illicit drug use,
  - earlier age of onset of illicit drug use,
  - poorer mental health and attempted suicide
- Risk of occurrence and severity of each outcome increased with the number of adverse events experienced (e.g., for each additional event experienced, the odds of developing an illicit drug problem increase by 30- 40%)



Dube SR, Anda RF, Felitti VJ, et al. (2002) Adverse childhood experiences and personal alcohol abuse as an adult. *Addictive Behaviors* 27: 713-725.

Dube SR, Felitti VJ, Dong M, et al. (2003) Childhood abuse, neglect, and household dysfunction and the risk of illicit drug use: 1 adverse childhood experiences study. *Pediatrics* 111: 564-572.

Dube SR, Miller JW, Brown DW, et al. (2006) Adverse childhood experiences and the association with ever using alcohol and initiating alcohol use during adolescence. *Journal of Adolescent Health* 38(4): 444.e1-10.

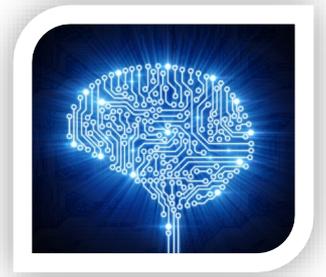
<https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/about.html>

## 2007 Australian National Survey of Mental Health and Wellbeing

- 1/3 of adults who reported exposure to childhood trauma developed an AOD use disorder (predominantly alcohol and cannabis)
- 3x that of adults who had never experienced trauma (13%)
- 1.3x that of people who had only experienced trauma in adulthood (23%)



# What is PTSD?



- The most common psychiatric disorder to occur after a traumatic event
  - **Intrusion/re-experiencing:** intrusive memories, nightmares, flashbacks, physiologic reactivity when exposed to reminders (increased HR, sweating, shaking)
  - **Avoidance:** trauma-related thoughts/feelings, people/places/activities that serve as reminders
  - **Negative alterations in cognitions and mood:** negative thoughts about self and world, self blame, decreased interest in activities and decreased positive affect
  - **Alterations in arousal and reactivity:** irritability/aggression, hypervigilance, exaggerated startle response, difficulty concentrating or sleeping

# Complex PTSD

- High levels of comorbidity (depression, anxiety, borderline personality traits)
- Complex PTSD = PTSD +
  1. difficulties associated with affect regulation
  2. persistent negative beliefs about oneself
  3. disturbances in interpersonal relationships



# Who develops PTSD?

- Most people do not...

**Table 3.** Projected lifetime risk of DSM-IV post-traumatic stress disorder (PTSD) and age at selected age-of-onset percentiles

	Projected lifetime risk at age 85 years		Age at selected age-of-onset percentiles (years)							
	%	S.E.	5	10	25	50	75	90	95	99
Males	6.2	0.7	6	7	15	24	41	62	69	70
Females	12.9	1.0	4	7	15	26	42	57	72	76
Total	9.7	0.6	5	7	15	26	42	60	70	76

S.E., Standard error.

## Pre-trauma risk factors



- Multiple traumas
- Personal or family history of psychiatric disorders
- Female sex
- Low social support

## Peri-traumatic risk factors

- Level of distress/threat during the trauma
- Peri-traumatic dissociation
- Violent intent/interpersonal



## Post-trauma risk factors

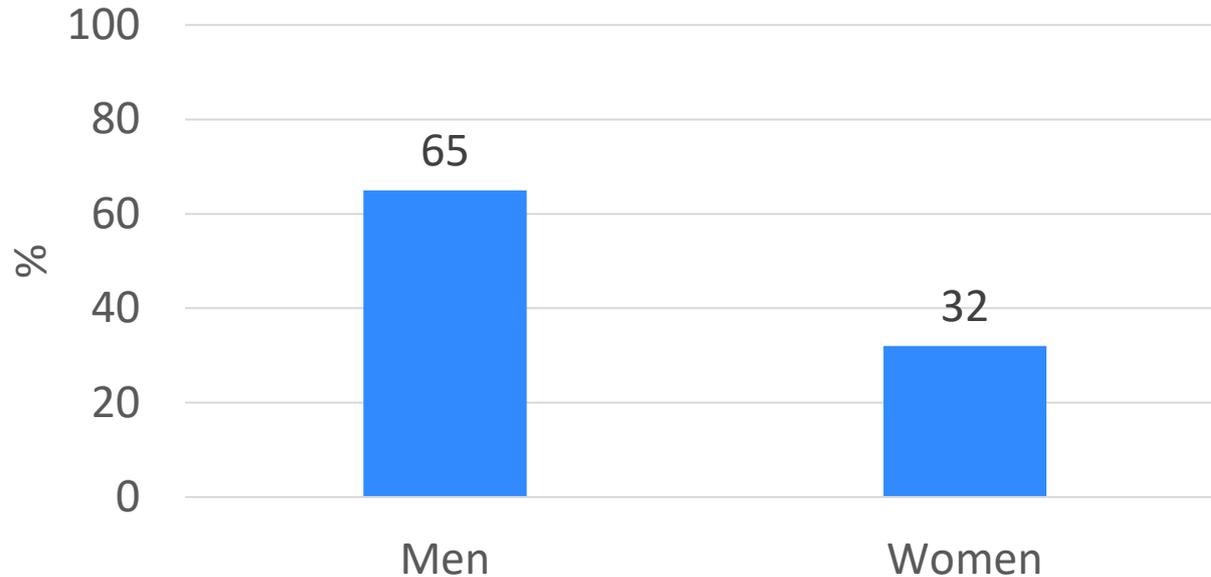
- Social support
- Symptom severity from 1-2 weeks post-trauma
- Acute dissociative symptoms
- Negative interpretations/rumination about the trauma and its effects
- Ongoing physical complications
- Avoidance \*



# The link between trauma, PTSD and substance use



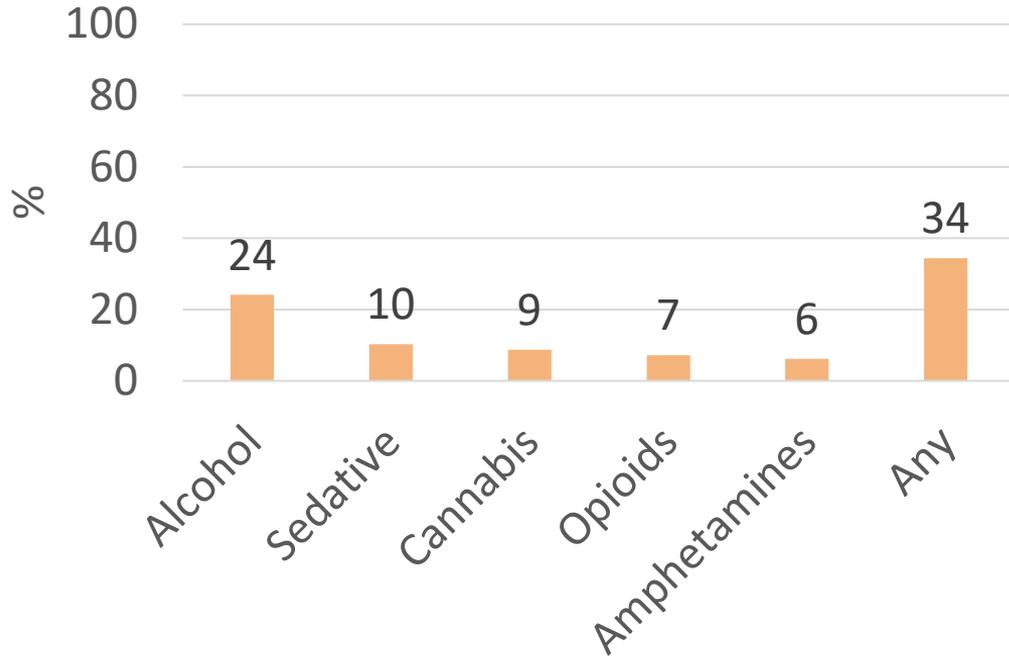
# Population estimates: SUD among people with PTSD



*Chapman et al. (2012). Remission from post-traumatic stress disorder in the general population. Psychological Medicine, 42, 1695-1703.*

*Marel et al. (2019) Conditional probabilities of substance use disorders and associated risk factors: Progression from first use to use disorder on alcohol, cannabis, stimulants, sedatives and opioids. Drug and Alcohol Dependence. 194: 136-142*

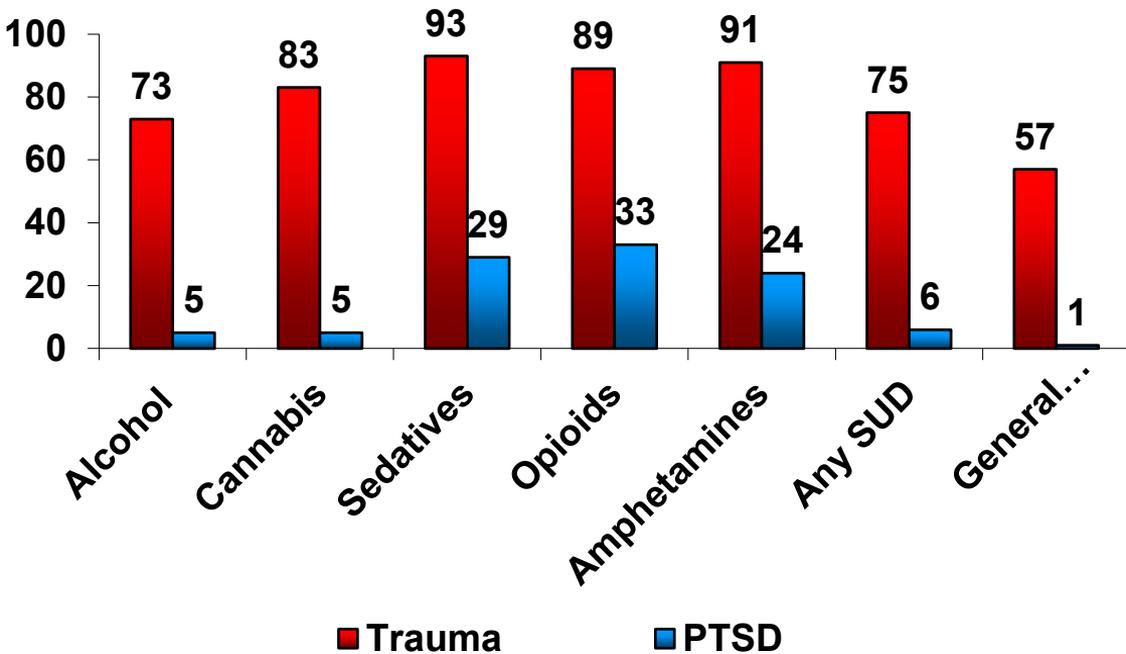
# Population estimates: SUD among people with PTSD



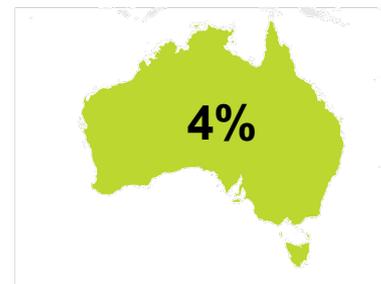
Substance	OR (95%CI)
Alcohol	5.2 (3.5 – 7.7)
Cannabis	4.0 (2.2 – 7.2)
Sedative	24.1 (12.9 – 44.8)
Opioid	23.5 (10.5 – 52.8)
Amphetamine	17.1 (7.2 – 40.4)
Any	6.5 (4.6 – 9.4)

Mills et al. (2006). Trauma, post traumatic stress disorder and substance use disorders: Findings from the Australian National Survey of Mental Health and Well being. *American Journal of Psychiatry*, 163: 651-658.

## Population estimates: Trauma & PTSD among people with SUD



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# Trauma exposure among clients of AOD services

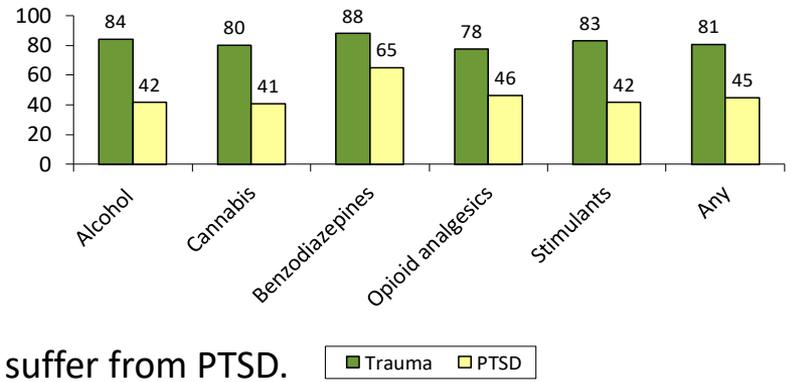
In Australia, >80% of entrants to treatment report having experienced a traumatic event in their lifetime



*Dore et al. Posttraumatic stress disorder, depression and suicidality in inpatients with substance use disorders. [Drug Alcohol Rev](#) 2012;31:294–302.*  
*Mills et al. Posttraumatic stress disorder among people with heroin dependence in the Australian treatment outcome study (ATOS): prevalence and correlates. [Drug Alcohol Depend](#) 2005;77:243–9.*

# Trauma exposure among clients of AOD services

- Most commonly:
  - witnessing serious injury or death,
  - threatened with a weapon, held captive or kidnapped
  - physical or sexual assault
- The vast majority have experienced multiple traumas
- **Up to two-thirds** of AOD clients have also been found to suffer from PTSD.
- High rates of childhood trauma

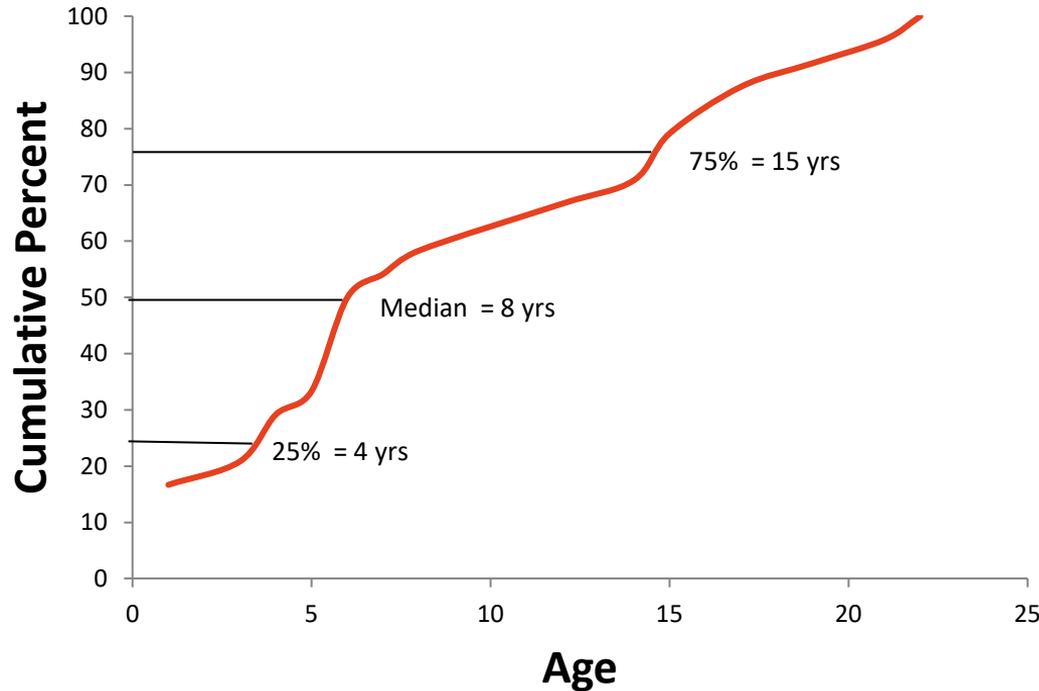


Dore et al. Posttraumatic stress disorder, depression and suicidality in inpatients with substance use disorders. *Drug Alcohol Rev* 2012;31:294–302.

Mills et al. Posttraumatic stress disorder among people with heroin dependence in the Australian treatment outcome study (ATOS): prevalence and correlates. *Drug Alcohol Depend* 2005;77:243–9.

Kingston et al. A systematic review of the prevalence of comorbid mental health disorders in people presenting for substance use treatment in Australia. *Drug Alcohol Rev*. 2017; 36, 527-539.

# Trauma exposure among clients of AOD services



- Chronic
- Severe
- Few access PTSD treatment

Mills, KL (2015). The importance of providing trauma-informed care in alcohol and other drug services. *Drug and Alcohol Review*, 34(3), 231-233.

Mills KL et al. (2012). Integrated Exposure-Based Therapy for Co-occurring Posttraumatic Stress Disorder and Substance Dependence: A Randomized Controlled Trial. *JAMA*; 308(7): 690-699.

# Why do SUD+PTSD co-occur?

- Theories to explain the relationship:
  - **Self-medication hypothesis**
    - Self-medication of PTSD symptoms plays a significant role in the development and maintenance of AOD use disorders.
    - The onset of trauma exposure and the development of PTSD symptoms predates the onset of an AOD use disorders in at least half of cases.



# Population estimates: Order of onset

**Table 2.** Co-morbid disorders among those with lifetime post-traumatic stress disorder (PTSD) (n=664)

	Males						Females					
	PTSD primary		PTSD same year		PTSD secondary		PTSD primary		PTSD same year		PTSD secondary	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Any affective disorder	45.8	7.6	21.0	6.3	33.2	6.9	40.9	4.5	25.5	3.0	33.6	3.7
Any anxiety disorder	35.4	7.3	8.6	3.6	56.1	7.1	32.6	4.2	19.4	3.4	48.0	4.2
Any substance use disorder	63.6	7.0	4.4	2.0	32.0	6.4	52.0	4.9	11.1	2.9	37.0	4.8
Any mental disorder	41.6	6.6	10.7	3.8	47.7	5.9	33.4	3.4	15.3	2.1	51.2	3.3

S.E., Standard error.



Article

## Alcohol, Other Drugs Use and Mental Health among African Migrant Youths in South Australia

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**Abstract:** This paper was part of a large study that explored suicide among African youths in South Australia. The paper reports perspectives about alcohol and other drugs (AOD) use and mental health among African migrant and refugee youths in South Australia. The study employed a qualitative inquiry, conducting 23 individual interviews and one focus group discussion with eight participants. An acculturative stress model informed data analysis, interpretation and the discussion of the findings that form the current paper. African migrant and refugee youths revealed challenging stressors, including related to cultural, socioeconomic, living conditions, and pre- and post-migration factors that contributed to mental health problems and the use of AOD in their new country. The traumatic loss of family members and social disruption experienced in their countries of origin were expressed as part of factors leading to migration to Australia. While in Australia, African migrant and refugee youths experienced substantial stressors related to inadequate socioeconomic and cultural support, discrimination, poverty, and unemployment. Participants believed that differences in cultural perspectives about AOD use that existed in Africa and Australia also shaped the experiences of social stressors. Additionally, participants believed that these cultural differences and the identified stressors determined AOD use and mental health problems. The findings highlight the need to understand these social and cultural contexts to improve mental health services and help reduce the use of AOD, which, when problematic, can influence the health and integration experiences of these populations.

**Keywords:** African migrant and refugee youths; mental health; alcohol and other drugs; integration; South Australia

## Heavy alcohol consumption among marginalised African refugee young people in Melbourne, Australia: motivations for drinking, experiences of alcohol-related problems and strategies for managing drinking

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<sup>a</sup>Centre for Population Health, Burnet Institute, 85 Commercial Rd, Melbourne, VIC 3004, Australia; <sup>b</sup>School of Public Health and Preventive Medicine, Monash University, 99 Commercial Rd, Melbourne, VIC 3004, Australia; <sup>c</sup>National Drug Research Institute (Melbourne Office), Curtin University, Suite 6, 19–35 Gertrude Street, Fitzroy, VIC 3065, Australia; <sup>d</sup>Centre for Culture, Ethnicity and Health, 23 Lennox St, Richmond, VIC 3121, Australia

### ABSTRACT

**Objective.** Little is known about substance use among resettled refugee populations. This study aimed to describe motivations for drinking, experiences of alcohol-related problems and strategies for managing drinking among marginalised African refugee young people in Melbourne, Australia.

**Design.** Face-to-face interviews were conducted with 16 self-identified African refugees recruited from street-based settings in 2012–2013. Interview transcripts were analysed inductively to identify key themes.

**Results.** Participants gathered in public spaces to consume alcohol on a daily or near-daily basis. Three key motivations for heavy alcohol consumption were identified: drinking to cope with trauma, drinking to cope with boredom and frustration and drinking as a social experience. Participants reported experiencing a range of health and social consequences of their alcohol consumption, including breakdown of family relationships, homelessness, interpersonal violence, contact with the justice system and poor health. Strategies for managing drinking included attending counselling or residential detoxification programmes, self-imposed physical isolation and intentionally committing crime in order to be incarcerated.

**Conclusion.** These findings highlight the urgent need for targeted harm reduction education for African young people who consume alcohol. Given the importance of social relationships within this community, use of peer-based strategies are likely to be particularly effective. Development and implementation of programmes that address the underlying health and psychosocial causes and consequences of heavy alcohol use are also needed.

### ARTICLE HISTORY

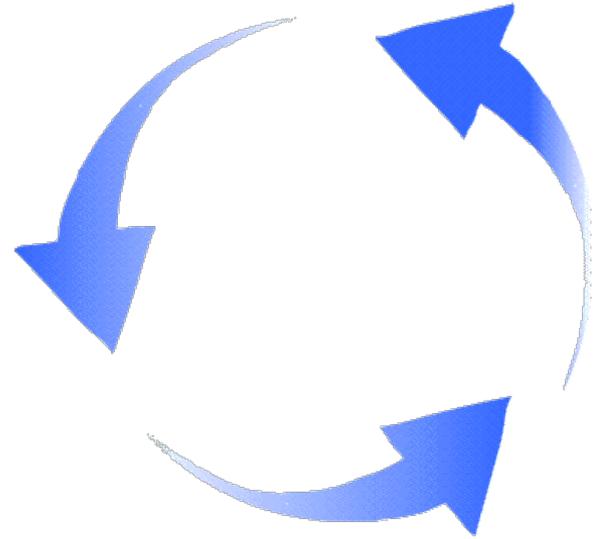
Received 3 February 2015  
Accepted 11 May 2015

### KEYWORDS

Alcohol; culturally and linguistically diverse communities; refugee health; Africa; young people; qualitative research

# Why do SUD+PTSD co-occur?

- Theories to explain the relationship:
  - Self-medication hypothesis
  - High-risk hypothesis
  - Susceptibility hypothesis
  - Common factors hypothesis



***Regardless, once have both disorders  
each serves to maintain/exacerbate the other***

# Trauma, PTSD, and AOD use are integrally related



- Improvements in PTSD lead to improvements in substance use but reciprocal relationship not observed - PTSD symptoms do not remit following improvements in substance use.
- On the contrary, PTSD symptoms may worsen in the absence of substance use, making it difficult for people to sustain abstinence and increasing their risk of relapse to AOD use
- Highlights the centrality of PTSD improvement in the treatment of SUD+PTSD clients.



*Back et al. Cocaine dependence and PTSD: A pilot study of symptom interplay and treatment preferences. Addict Behav 2006;31:351–4.*

*Hien et al. Do treatment improvements in PTSD severity affect substance use outcomes? A secondary analysis from a randomized clinical trial in NIDA's clinical trials network. Am J Psychiatry 2010;167:95–101.*

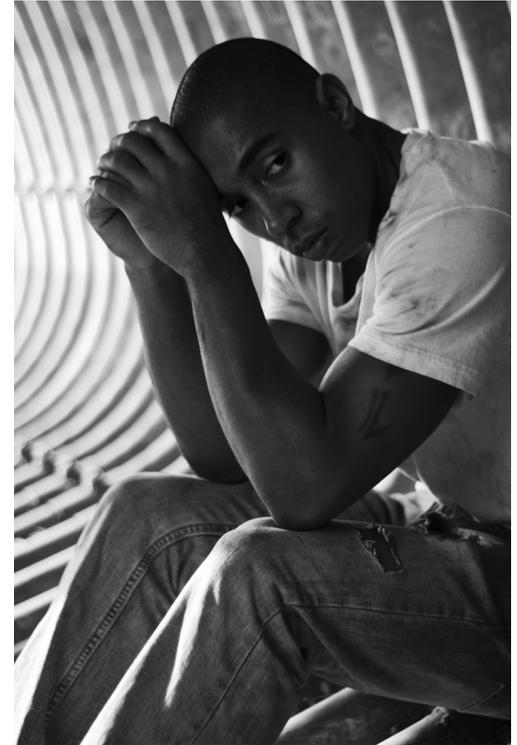
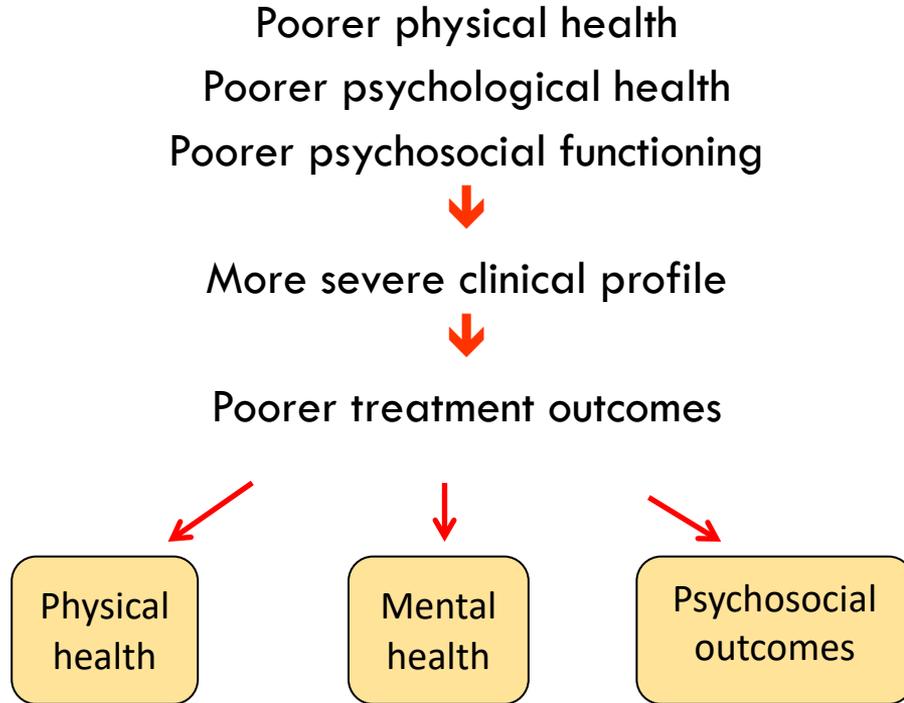
*Read et al. Substance use and PTSD: symptom interplay and effects on outcome. Addict Behav 2004;29:1665–72.*

*Mirryck & Brady. Current review of the comorbidity of affective, anxiety and substance use disorders. Curr Opin Psychiatry 2003;16:261–70.*

*Sharkansky et al. Substance abuse patients with PTSD: identifying specific triggers of substance use and their associations with PTSD symptoms. Psychol Addict Behav 1999;13:89–97.*

*Dansky et al Untreated symptoms of PTSD among cocaine-dependent individuals. Changes over time. J Subst Abuse Treat 1998;15:499–504.*

# Harms associated with PTSD+SUD



Mills et al. (2005). Post traumatic stress disorder among people with heroin dependence in the Australian Treatment Outcome Study (ATOS): Prevalence and correlates. *Drug and Alcohol Dependence*, 77(3): 243-249.

Mills et al. (2007). The impact of PTSD on treatment outcomes for heroin dependence. *Addiction*, 102: 447-454.

## Treatment Challenges Associated with Comorbid Substance Use and Posttraumatic Stress Disorder: Clinicians' Perspectives

Sudie E. Back, PhD, Angela E. Waldrop, PhD, Kathleen T. Brady, MD, PhD

Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina, Charleston, South Carolina

*A significant proportion of individuals with substance use disorders (SUDs) meet criteria for comorbid posttraumatic stress disorder (PTSD). This comorbidity confers a more complicated clinical presentation that carries with it formidable treatment challenges for practitioners. The current study examined sources of difficulty and gratification among clinicians (N = 423) from four national organizations who completed an anonymous questionnaire. As expected, the findings revealed that comorbid SUD/PTSD was rated as significantly more difficult to treat than either disorder alone. The most common challenges associated with treating SUD/PTSD patients included knowing how to best prioritize and integrate treatment components, patient self-destructiveness and severe symptomatology, and helping patients abstain from substance use. The findings increase understanding of SUD/PTSD treatment challenges, and may be useful for enhancing therapist training programs, supervision effectiveness, and designing optimal SUD/PTSD interventions. (Am J Addict 2009;18:15–20)*

## Service provider perspectives on treating adolescents with co-occurring PTSD and substance use: challenges and rewards

Emma Louise Barrett, Zachary W. Adams, Erin V. Kelly, Natalie Peach, Rachel Hopkins, Bronwyn Milne, Sudie E. Back and Katherine L. Mills

### Abstract

**Purpose** – Post-traumatic stress disorder (PTSD) and substance use disorder (SUD) frequently co-occur (PTSD+SUD). The onset of these disorders often occurs during adolescence. There is limited understanding of the perspectives of service providers working with this population. The purpose of this paper is to identify the practices, attitudes, experiences and training needs of Australian service providers treating adolescents with PTSD+SUD.

**Design/methodology/approach** – Service providers in Australia were invited to complete an anonymous online survey regarding their experiences working with adolescents who have PTSD+SUD. Ninety participants completed the 48-item survey that comprised multiple choice and open-ended questions.

**Findings** – Service providers estimated that up to 60 per cent of their adolescent clients with PTSD also have SUD. They identified case management, engaging with caregivers and difficult client emotions as specific challenges associated with working with this population. Despite this, providers rated treating PTSD+SUD as highly gratifying for reasons such as teaching new coping skills, developing expertise and assisting clients to achieve their goals. There were mixed perspectives on how to best treat adolescents with PTSD+SUD, and all participants identified a need for evidence-based resources specific to this population.

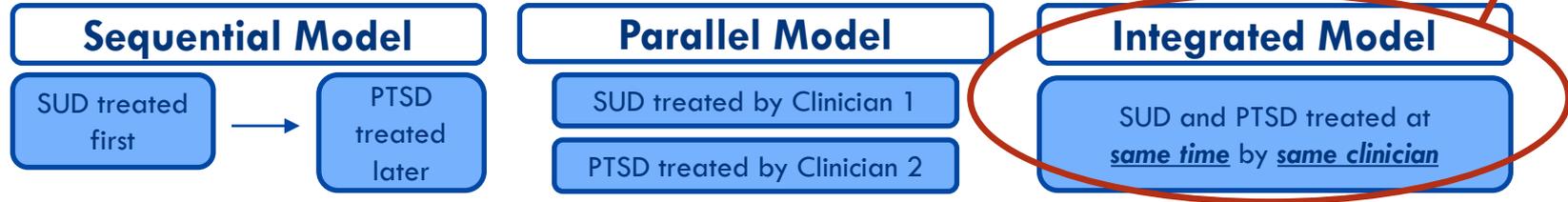
**Originality/value** – This is the first survey of Australian service providers working with adolescents who experience PTSD+SUD. The findings improve our understanding of the challenges and rewards associated with working with this population, and provide valuable information that can enhance clinical training and guide the development of new treatment approaches for this common and debilitating comorbidity.

# Approaches to managing and treating traumatic stress + substance use



# Treatment models

- Some reluctance to address PTSD among AOD clients – too vulnerable, need to address AOD use first, or abstinence is necessary before PTSD diagnosis and management
  - Clients prefer this
  - More efficient



- Ongoing AOD use may impede therapy, but it is not necessary to achieve abstinence before the commencement of PTSD treatment – improvements can be obtained even with continued AOD use

# Evidence-based integrated psychotherapies

- Existing approaches have been divided into two types:
  1. Present centred/non-trauma-focused therapies (e.g., Seeking Safety [www.seekingsafety.org/](http://www.seekingsafety.org/))
  2. Past/trauma-focused therapies
- A 2015 Cochrane review concluded
  - there is little evidence to support present-focused therapies
  - individual **past-focused therapies** delivered with AOD treatment can reduce PTSD severity and AOD use

# Past-focused therapies

- Typically delivered individually, and include the use of exposure techniques in which the client is exposed to reminders of the trauma (e.g., feared objects or situations; traumatic memories)
- Exposure-based treatments have long been considered a ‘gold standard’ treatment for PTSD
- In-vivo exposure
  - To people, places, situations that have been avoided (that are not dangerous)
  - Common examples are a crowded supermarket, driving in traffic, watching or reading the news
- Imaginal exposure
  - Repeated and prolonged revisiting of the trauma memory, leads to fear extinction
  - Learn to discriminate between past and present
  - Trauma memories are more organised and maladaptive beliefs are addressed

# Past-focused therapies

- Traditionally, exposure-based therapies for PTSD were considered inappropriate for people with SUD based on beliefs that the emotions experienced may be overwhelming and could lead to more substance use
- Evidence suggests that this is not the case; exposure therapy does not lead to an exacerbation of AOD use or increase the severity of the SUD
- On the contrary, exposure therapy has been shown to be protective with regards to relapse among people with alcohol use disorders 6-months post-treatment

*Foa et al. (2013). Concurrent naltrexone and prolonged exposure therapy for patients with comorbid alcohol dependence and PTSD: A randomized clinical trial. Journal of the American Medical Association, 310(5), 488-495*

*Roberts et al. (2016). Psychological therapies for post-traumatic stress disorder and comorbid substance use disorder. Cochrane Database of Systematic Reviews, Issue 4. Art. No.: CD010204*

# Exposure-based integrated psychotherapies

- Support for these programs is growing, with an increasing number of studies providing evidence for their safety and efficacy
- Two large RCTs conducted in Australia

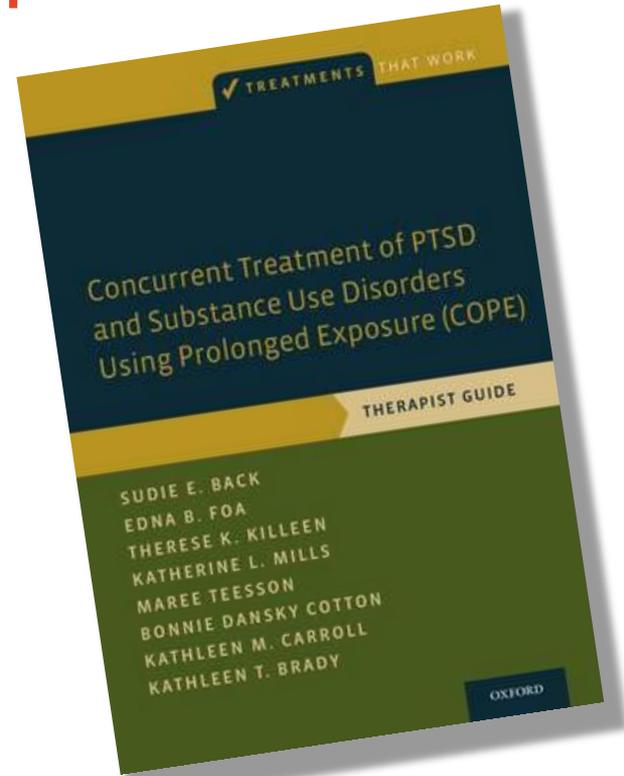


*Mills et al. Integrated exposure-based therapy for co-occurring posttraumatic stress disorder and substance dependence: A randomized controlled trial. Journal of the American Medical Association, 2012; 308, 690-699.*

*Sannibale et al. Randomized controlled trial of cognitive behaviour therapy for comorbid post-traumatic stress disorder and alcohol use disorders. Addiction, 2013; 108, 1397-1410.*

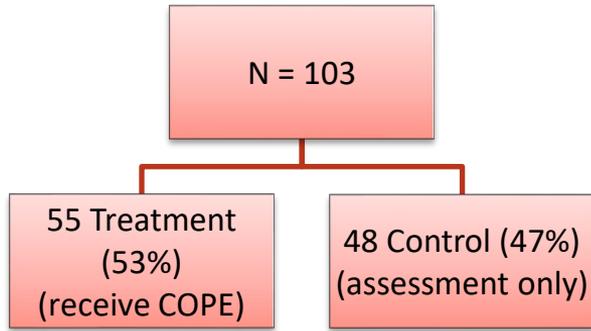
# Exposure-based integrated psychotherapies

- Sannibale et al (2013) compared the efficacy of integrated CBT for PTSD and alcohol use with supportive counselling for alcohol use (12 session; n=62). Participants who had received one or more sessions of exposure therapy exhibited a twofold greater rate of clinically significant change in PTSD severity compared to those who receive supportive counselling
- Mills et al (2012) examined the efficacy of an 13 session integrated therapy called **Concurrent Treatment of PTSD and Substance Use Disorders Using Prolonged Exposure (COPE)** among individuals with a range of SUDs (combines CBT for SUD and PTSD, including prolonged exposure), relative to TAU for SUD (n=103).

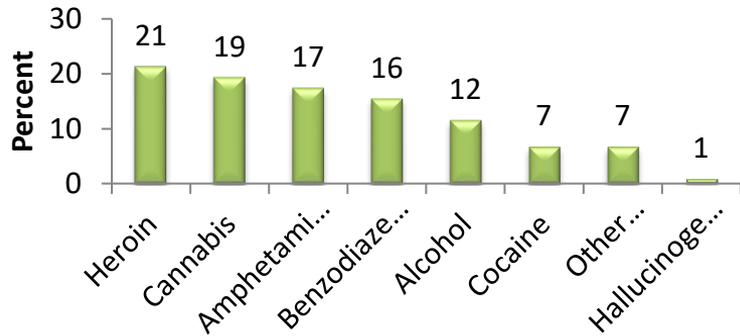


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### Main drug of concern



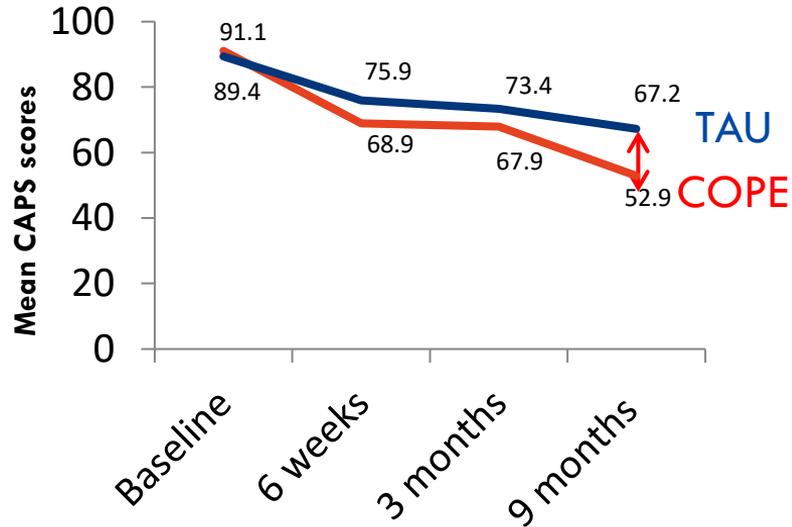
- 100% substance dependent
- Median number of drug classes used = 4.0
- 80% injecting drug users

	Total (n=103)
% Childhood trauma (pre 16 years)	75%
Median age of first trauma (IQR)	8yrs (5 – 15yrs)
% CSA	55
% Current PTSD	100
Median duration (range)	10yrs (1mth – 40yrs)
% Severe depression	69
% Screen +ve for BPD	73
% Attempted suicide	
- Lifetime	53
- 12 month	10

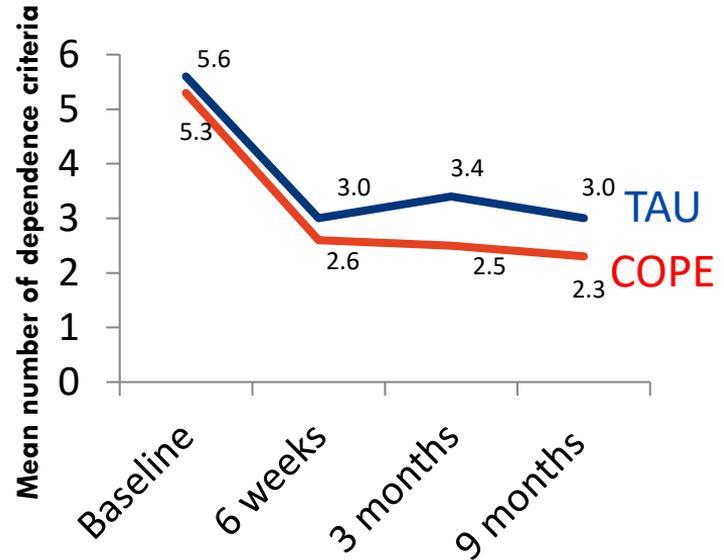
Mills et al. Integrated exposure-based therapy for co-occurring posttraumatic stress disorder and substance dependence: A randomized controlled trial. *Journal of the American Medical Association*, 2012; 308, 690-699.

# Integrated treatment for PTSD and substance use

PTSD symptom severity

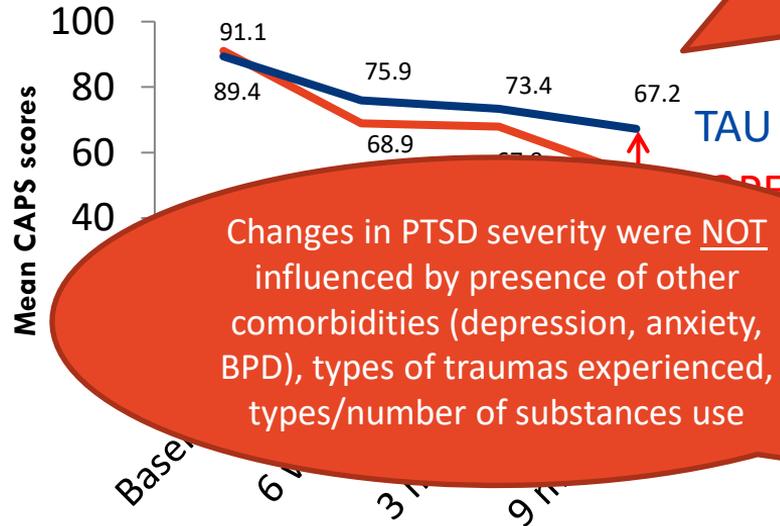


Severity of SUD



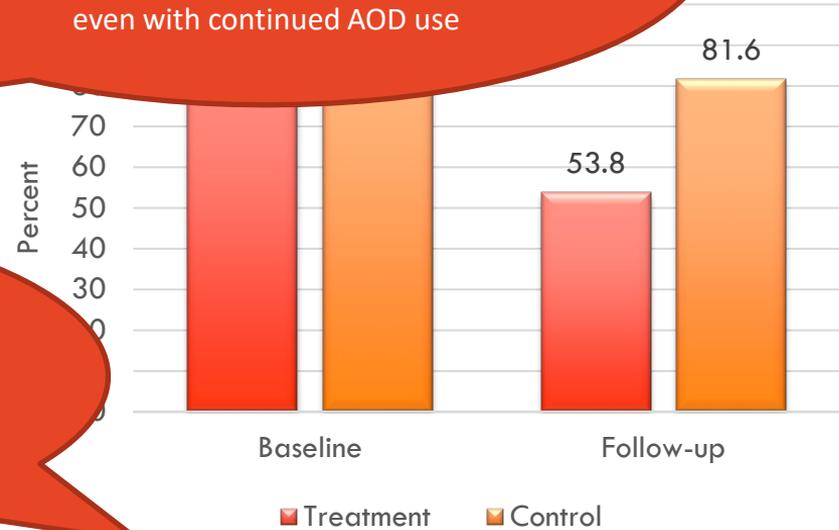
# Integrated treatment for PTSD and substance use

## PTSD symptom severity



Ongoing AOD use may impede therapy, but it is not necessary to achieve abstinence before the commencement of PTSD treatment – improvements can be obtained even with continued AOD use

Changes in PTSD severity were NOT influenced by presence of other comorbidities (depression, anxiety, BPD), types of traumas experienced, types/number of substances use



# Participant feedback

***“The best thing I have done for myself in years.***

*I hadn't ever spoken about this stuff so it was really helpful”*

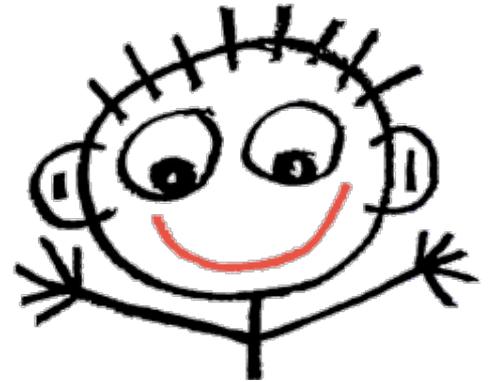
***“It helped me realise how much my addiction is linked to the trauma.***

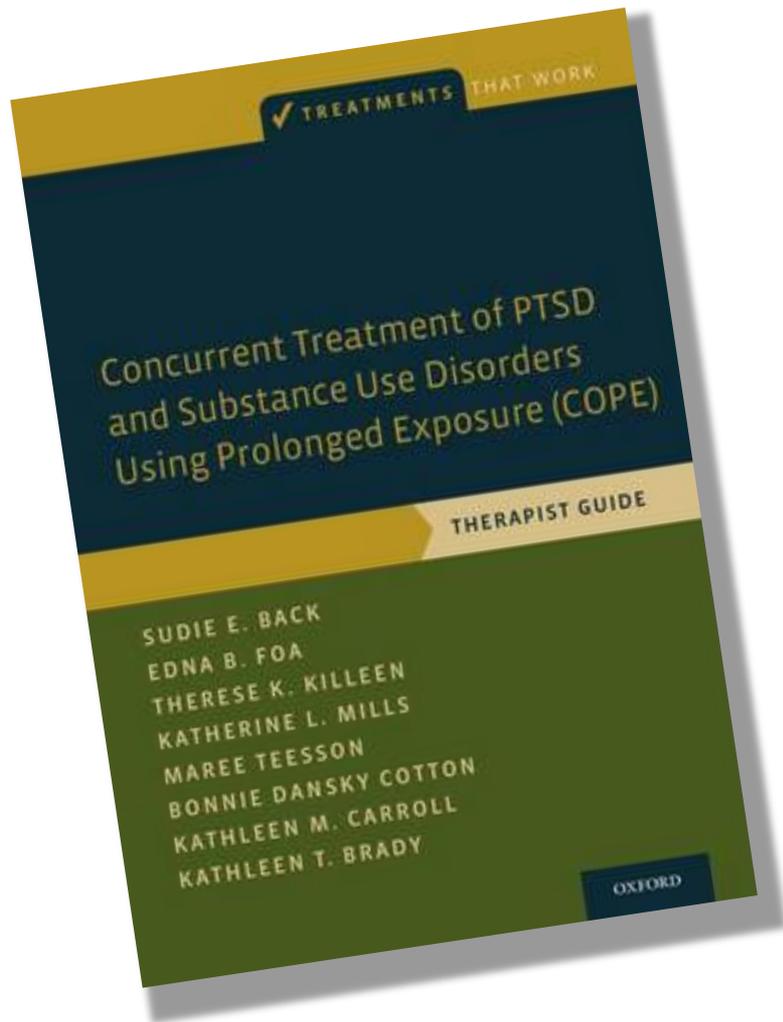
*I can now talk about the incident without freaking out”*

***“No one had ever talked to me about my trauma before.***

*It was good to put a name to my symptoms”*

***“The imaginal exposure was the hardest part but also the most useful.”***





The COPE Treatment manual is published in the Oxford University Press *'Treatments that Work'* series and available online

*Back, SE, Foa, EB, Killeen, TK, Mills, KL, Teesson, M, Cotton, BD, . . . Brady, KT, Concurrent treatment of PTSD and substance use disorders using prolonged exposure (COPE): Therapist guide. 2014, New York, NY: Oxford University Press.*

# Further research (COPE)

- Persson et al (2017) conducted a pilot study of COPE among 22 women in Sweden. Significant reductions in all efficacy-related outcomes, including PTSD and depression symptom severity, alcohol use, craving, and dependence severity.
- Ruglass et al (2017) compared the efficacy of COPE and Relapse Prevention Therapy (RPT) for substance use relative to an active monitoring control group (n=110). Both groups demonstrated significantly greater reductions in PTSD and SUD compared to active monitoring. Participants with full PTSD (vs subthreshold) demonstrated significantly greater reductions with COPE relative to RPT.
- Back et al (2019) compared the efficacy of COPE to Relapse Prevention among military veterans (n=81). COPE, resulted in significantly greater reductions in PTSD symptom severity, PTSD diagnostic status. Both groups evidenced significant and comparable reductions in SUD severity during treatment. At 6-months follow-up, participants in COPE evidenced significantly fewer drinks per drinking day than participants in RP
- Norman et al (2019) compared the efficacy of COPE vs coping skills therapy (Seeking Safety) (n=119). COPE reduced PTSD symptoms significantly more than coping skills therapy (Seeking Safety) after treatment and at 3- and 6-month follow-ups. Participants in both arms had reductions in heavy drinking days over time.
- Mills et al (underway) RCT comparing a modified version of the COPE program for adolescents (COPE-A) and young adults (aged 12-25yrs) compared to supportive counselling. Further information: <http://www.copea.org.au/>

*Persson, A., Back, S. E., Killeen, T. K., Brady, K. T., Schwandt, M. L., Heilig, M., & Magnusson, A. (2017). Concurrent Treatment of PTSD and Substance Use Disorders Using Prolonged Exposure (COPE): A Pilot Study in Alcohol-dependent Women. Journal of addiction medicine, 11(2), 119-125.*

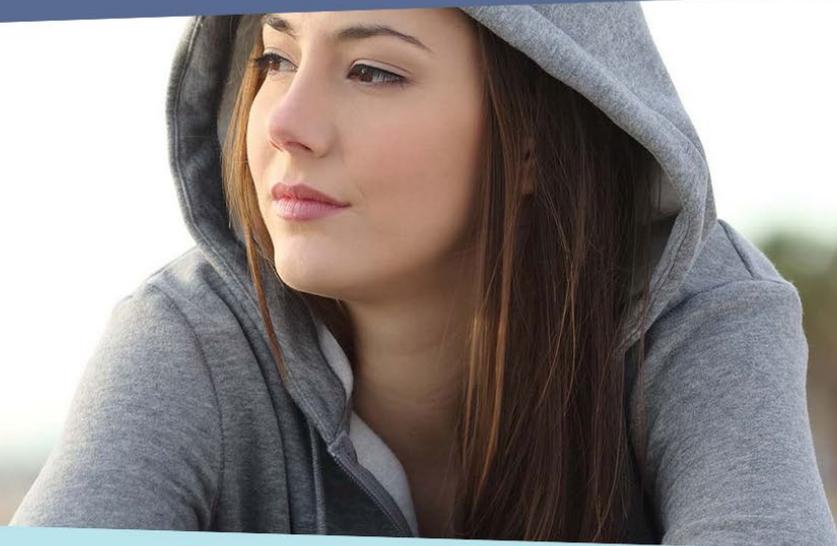
*Ruglass, L. M., Lopez-Castro, T., Papini, S., Killeen, T., Back, S. E., & Hien, D. A. (2017). Concurrent treatment with prolonged exposure for co-occurring full or subthreshold posttraumatic stress disorder and substance use disorders: A randomized clinical trial. Psychotherapy and psychosomatics, 86(3), 150-161.*

*Back, S. E., Killeen, T., Badour, C. L., Flanagan, J. C., Allan, N. P., Santa Ana, E., ... & Brady, K. T. (2019). Concurrent treatment of substance use disorders and PTSD using prolonged exposure: a randomized clinical trial in military veterans. Addictive behaviors, 90, 369-377.*

*Norman et al (2019). Efficacy of integrated exposure therapy vs integrated coping skills therapy for comorbid posttraumatic stress disorder and alcohol use disorder: A randomized clinical trial. JAMA psychiatry, 76, 791-799.*



Treating substance use and trauma among adolescents



The University of Sydney is conducting a study to find out what psychological treatments work best for young people aged 12-25 years who are using alcohol or other drugs and are having a tough time coping after something stressful or traumatic has happened to them.

The research is funded by the National Health and Medical Research Council (NHMRC) and is recruiting young people now. This study has been approved by the Sydney Children's Hospital Network Human Research Ethics Committee.

For further information, call or text us on 0432 950 878, or register your interest below!

<https://www.copea.org.au>

Further information: <http://www.copea.org.au/> Contact: Dr Natalie Peach [natalie.peach@sydney.edu.au](mailto:natalie.peach@sydney.edu.au)

# Other trauma-focused therapies

- Coffey et al (2016) compared the efficacy of a modified version of prolonged exposure (mPE), mPE + trauma-focused motivational enhancement session (mPE+MET-PTSD), to a health information-based control condition (HLS) (n=126). All participants received residential substance abuse treatment-as-usual. Both the mPE and mPE+MET-PTSD conditions achieved significantly better PTSD outcome than the control condition. 75.8 % of mPE participants, and 60.0% of the mPE+MET-PTSD participants experienced clinically significant improvement
- Carletto et al (2018) compared integrated EMDR for trauma and SUD + TAU (EMDR+TAU) to TAU for substance use alone (n=40). Significantly greater improvements for EMDR+TAU than TAU in relation to symptoms of PTSD, dissociation and anxiety.
- Markus et al (2015) comparing EMDR for trauma and SUD + TAU (EMDR+TAU) to TAU for substance use alone (target n=100)... Underway
- Tapia et al (2017) conducted a pilot study of schema therapy + EMDR for PTSD and SUD (n=15) found reductions in PTSD symptoms, the number of early maladaptive schemas, addiction severity and depressive symptoms.
- Vujanovic et al (2018) pilot RCT to evaluate the feasibility and preliminary efficacy of a novel, CPT+CBT approach for PTSD/SUD (Treatment of Integrated Posttraumatic Stress and Substance Use; TIPSS), as compared to standard CBT for SUD. Both treatment conditions are comprised of 12, 60-minute individual psychotherapy sessions, delivered twice-weekly over six weeks.

Coffey, S. F., Schumacher, J. A., Nosen, E., Littlefield, A. K., Henslee, A. M., Lappen, A., & Stasiewicz, P. R. (2016). Trauma-focused exposure therapy for chronic posttraumatic stress disorder in alcohol and drug dependent patients: A randomized controlled trial. *Psychology of Addictive Behaviors*, 30(7), 778.

Carletto, S., Oliva, F., Barnato, M., Antonelli, T., Cardia, A., Mazzaferro, P., ... & Pagani, M. (2017). EMDR as Add-on Treatment for Psychiatric and Traumatic Symptoms in Patients with Substance Use Disorder. *Frontiers in Psychology*, 8, 2333.

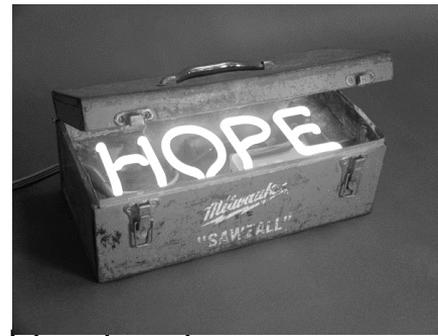
Markus, W., de Weert-van Oene, G. H., Becker, E. S., & DeJong, C. A. (2015). A multi-site randomized study to compare the effects of Eye Movement Desensitization and Reprocessing (EMDR) added to TAU versus TAU to reduce craving and drinking behavior in alcohol dependent outpatients: study protocol. *BMC psychiatry*, 15(1),

Tapia, et al (2017). Treating addiction with schema therapy and EMDR in women with co-occurring SUD and PTSD: A pilot study. *Journal of Substance Use*, 1-7. 51.

Vujanovic et al (2018). Development of a novel, integrated CBT for co-occurring posttraumatic stress and substance use disorders: A pilot randomized clinical trial. *Contemporary clinical trials*, 65, 123-129.

# Summary

- Trauma exposure and PTSD + AOD are common and associated with significant harm and poorer treatment outcomes in some domains BUT... there is hope
- Growing evidence demonstrating the safety and efficacy of trauma-focused treatments
- Participants in these studies did not demonstrate a worsening of symptoms or high rates of relapse; on the contrary, they demonstrated improvements in relation to both AOD use and PTSD outcomes.
- Challenges and gaps:
  - How do we build resilience among young people and adaptive coping strategies for adverse events?
  - How do we support people to seek help when needed? How do we intervene early?
  - How do we incorporate evidence based treatments into practice? Trauma informed → trauma focused?
  - Knowledge and practice gap with respect to high-risk populations



# Thank you

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<https://sydney.edu.au/research/centres/matilda-centre.html>

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 <https://vimeo.com/comorbidity>

