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

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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.*

Keywords *Alcohol, Adolescents, Substance use disorders, PTSD, Trauma, Drugs*

Paper type *Research paper*

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Introduction

The common co-occurrence of post-traumatic stress disorder (PTSD) and substance use disorders (SUD) has been consistently highlighted in epidemiological studies (Goldstein *et al.*, 2016; Kilpatrick *et al.*, 2000; Mills *et al.*, 2006) and studies of clinical samples around the world (Back *et al.*, 2006; Brady *et al.*, 2004; Dore *et al.*, 2012; Ouimette *et al.*, 2010). These debilitating disorders tend to have their onset during adolescence (Ford *et al.*, 2009; Nooner *et al.*, 2012). It is estimated that up to 50 per cent of adolescents with PTSD have co-occurring SUD (Nooner *et al.*, 2012), and among those with SUD, 70 per cent have experienced trauma and 35 per cent have PTSD (Deykin and Buka, 1997; Giaconia *et al.*, 2000; Kilpatrick *et al.*, 2003; Lubman *et al.*, 2007).

The common co-occurrence of PTSD and SUD (PTSD+SUD) is of significant concern, given that these disorders are associated with poor clinical and developmental outcomes, including significant functional and structural brain abnormalities during adolescence (Brady and Back, 2012; Hall *et al.*, 2016; Marusak *et al.*, 2015). Adolescents who develop PTSD and/or SUDs exhibit significantly greater internalising and externalising problems including academic and vocational impairment, anxiety, depression, suicidality, poorer physical health, family and social

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dysfunction, aggression and criminal behaviour (De Bellis, 2005; Marusak *et al.*, 2015; Suarez *et al.*, 2012). As such, these young people present to a range of service settings including general and youth health services, menta health and drug and alcohol services. They are often difficult to engage and experience treatment complications including increased risk of relapse, increased suicide risk and other mental health comorbidities (Danielson *et al.*, 2012; Farrugia *et al.*, 2011; Najavits *et al.*, 2006; Nooner *et al.*, 2012; Suarez *et al.*, 2012).

Research reviews have reported the beneficial effects of integrating PTSD and SUD treatment approaches for the treatment of co-occurring PTSD+SUD (Simpson *et al.*, 2017; Roberts *et al.*, 2016), and there is growing evidence for the safety and efficacy of integrated treatment models for adolescent PTSD+SUD. These include risk reduction through family therapy (Danielson *et al.*, 2010; Danielson *et al.*, 2012), seeking safety (Najavits *et al.*, 2006) and mindfulness-based cognitive therapy (Fortuna *et al.*, 2018). Pilot studies testing these cognitive behavioural therapy-based approaches have shown promising results (Danielson *et al.*, 2012; Fortuna *et al.*, 2018; Najavits *et al.*, 2006). As the evidence base for integrated treatment for adolescent PTSD+SUD is building, it is critical to understand the current practices, perspectives and training needs of service providers working with this population to inform implementation of new evidence-based approaches (Killeen *et al.*, 2015). Studies examining the perspectives of service providers treating adults with PTSD+SUD have identified common clinical challenges, including clients' self-destructive behaviours, case management and not knowing how to best prioritise treatment components (Back *et al.*, 2009; Najavits, 2002). However, to date, only one study has examined the perspectives and practices among providers working with adolescents with PTSD+SUD (Adams *et al.*, 2016). Based in the USA, service providers in this study ($n = 138$) rated treatment of PTSD+SUD as significantly more difficult to treat than PTSD alone, depression, self-harm and risky sexual behaviours. Service providers were also less likely to be using integrated approaches to treat PTSD+SUD vs separate treatments for each disorder (Adams *et al.*, 2016). The most frequently reported clinical challenges were addressing the functional relationship between PTSD and SUD (20.8 per cent), accessing and coordinating resources/case management (16.8 per cent), engaging with parents and caregivers (14.9 per cent) and addressing clients' motivation for treatment (14.9 per cent). However, many service providers reported high levels of satisfaction working with this population, describing development of expertise and the teaching of new coping skills as highly gratifying. This study provides valuable information for the development of training and treatment programs to improve practice in the mental health and substance use treatment settings. However, mental health service providers were over-represented in this study, therefore examination of service providers' perspectives from a more balanced sample of mental health and substance use providers would be beneficial.

The aim of the present study is to build on this previous work by examining the practices, attitudes, challenges, rewards and training needs of Australian mental health and substance use treatment providers working with adolescents who have PTSD+SUD. A greater understanding of service providers' perspectives can enhance clinical training and support the development, evaluation and effective implementation of new, evidence-based integrated treatments, ultimately reducing the substantial harm associated with PTSD+SUD.

Method

Procedure

An invitation to participate in a brief online survey was sent to Australian mental health and drug and alcohol services and organisations via e-mail and member listservs in February 2015. Service providers were asked to complete an anonymous survey on working with adolescents (aged 12–17 years) who have PTSD and substance use problems. While there is debate around the age range for adolescence (Sawyer *et al.*, 2018), 12–17 years is consistent with the range reported by the Australian Institute of Health and Welfare. Participation was voluntary, and all participants were informed of the chance to win a AU$100 gift voucher, contingent on completion of the survey. The study was approved by the University of New South Wales Human Research Ethics Committee and a total of 97 participants completed the survey. Analyses for the present study were restricted to those who reported having worked with adolescents who have co-occurring PTSD and substance use problems ($n = 90$).

Survey

The survey comprised 48 items and was based on the Clinician Survey on PTSD and Substance Abuse (Najavits, 2002) implemented previously to examine service provider perspectives on treating adults and adolescents with this comorbidity (Adams *et al.*, 2016; Back *et al.*, 2009; Najavits, 2002). Items enquired about demographics, professional training and experience and current work settings. Participants were asked to rate how challenging and rewarding they perceive different aspects of treating adolescents with PTSD+SUD to be. Items also asked about participants' clinical practices, training needs and general attitudes when treating adolescents with PTSD+SUD, and open-ended questions asked for examples of challenges and rewards of working with this population. The online survey was designed using key survey.

Data analysis

Descriptive analyses were undertaken on categorical variables broken down by groups, and based on frequency tables, cross tabulations, means with their standard deviations and medians for skewed distributions. Friedman tests were used to test associations between ratings of difficulty and reward when treating PTSD and substance use, PTSD alone, SUD alone, depression and risky sexual behaviours. All tests were conducted using IBM SPSS Statistics 25 and used a predetermined α level of 0.05. A thematic analysis of the qualitative data was performed to identify common themes and illustrative examples.

Results

Service provider and work setting characteristics

Table I summarises the demographic and occupational characteristics of service providers. Close to three-quarters (71.0 per cent) of the sample were female and the mean age was 40.9 years (SD = 10.75). The majority of providers (84.4 per cent) held a university degree and psychology/counselling was the primary field for almost half the sample (47.1 per cent). Participants had spent a median of ten years (range 1–34) working in mental health and eight years (range 0–34) working in substance use fields.

Participants were mainly working within non-government (47.8 per cent) or government (40.0 per cent) organisations, with a smaller proportion in private settings (8.9 per cent) or a combination of government and private settings (2.2 per cent). While close to half of participants were located in New South Wales (47.8 per cent), others were located in Queensland (17.8 per cent), the Australian Capital Territory (14.4 per cent), Victoria (7.8 per cent), Western Australia (7.8 per cent), Tasmania (3.3 per cent) and South Australia (1.1 per cent). Most participants worked in services that were located in major urban areas (i.e. population between 100,000 and 1,000,000; 77.5 per cent) as opposed to smaller urban areas (i.e. population between 1,000 and 99,999; 19.1 per cent) or rural areas (i.e. population less than 1,000; 3.3 per cent).

As illustrated by Table I, participants worked in a range of settings including mental health (58.9 per cent), substance use (55.6 per cent), child welfare, schooling/education, juvenile justice and primary health care. The most common occupation was psychologist (36.7 per cent), followed by drug and alcohol worker (16.7 per cent), social worker (13.3 per cent), case worker (12.2 per cent) and counsellor (10.0 per cent). Half the sample (51.1 per cent) indicated that their primary theoretical orientation was cognitive/behavioural, with one-quarter (25.6 per cent) nominating an integrated approach. When responding to mental health or substance-related issues within their service, therapy/counselling (58.9 per cent), assessment (57.8 per cent) and early/brief intervention (33.3 per cent) were common roles of service providers, followed by education/information provision (25.6 per cent), case management (23.3 per cent), referral (21.1 per cent), crisis management (15.6 per cent), screening (10.0 per cent), health promotion/prevention (6.7 per cent) and primary health care (5.6 per cent).

Clinical practices and attitudes

Across all service settings, providers reported that, on average, 70 per cent of their current adolescent caseload have experienced a traumatic event, 60 per cent have substance use problems

Table I Demographic, professional training and occupational characteristics of service providers

Characteristic	*Statistic*
Age (mean, SD)	40.9 (10.75)
Gender (% female)	71.0
Education (highest formal qualification)	
Doctoral degree (%)	4.4
Masters degree (%)	43.3
Graduate diploma/certificate (%)	11.1
Honours degree (%)	8.9
Undergraduate degree (e.g. Bachelors) (%)	16.7
Advanced diploma and associate degree level (%)	3.3
Diploma level (%)	7.8
Certificate III or IV (%)	4.4
Work experience	
Years working in mental health (median, range)	10 (1–34)
Years working in substance use (median, range)	8 (0–34)
Focus of current primary work setting[a]	
Mental health (%)	58.9
Drug and alcohol/Substance abuse (%)	55.6
Child advocacy/Child welfare (%)	15.6
School/Educational (%)	11.1
Juvenile justice (%)	10.0
General Practitioner/Family medicine (%)	3.3
Current occupation	
Psychologist (%)	36.7
Drug and alcohol worker[b] (%)	16.7
Social worker (%)	13.3
Case worker (%)	12.2
Counsellor (%)	10.0
Nurse (%)	7.8
Doctor (%)	2.2
Psychiatrist (%)	1.1
Primary theoretical orientation	
Cognitive/Behavioural (%)	51.1
Integrative (%)	25.6
Psychodynamic/Psychoanalytic (%)	5.6
Pharmacotherapy (%)	1.1
Other[c] (%)	16.7

Notes: $n = 90$. [a]Sum to greater than 100 per cent as participants were instructed to select as many that apply; [b]Drug and alcohol occupations included youth worker, programme manager; [c]Other theoretical orientations included trauma informed care, strengths-based, education/special needs

and 20 per cent have PTSD. Providers also indicated that 20 per cent of their current caseload have co-occurring PTSD and substance use problems. Based on their experience, providers estimated that, on average, 60 per cent of adolescents with PTSD have co-occurring substance use problems and 50 per cent adolescents with substance use problems have co-occurring PTSD.

Among those providers who selected therapy/counselling or early/brief intervention as a main role of their service ($n = 71$), 30.2 per cent indicated that their service would refer clients with PTSD +SUD to another provider. Close to one-quarter (23.9 per cent) of these providers indicated they would provide substance use treatment and connect with another service to provide mental health treatment, and 18.3 per cent indicated they would provide mental health treatment and connect with another service to provide substance use treatment. Just over half (56.3 per cent) of those providing therapy/counselling or early/brief intervention indicated that they provide concurrent treatment for PTSD and substance use. The types of treatment approaches endorsed by those who provide concurrent treatment include trauma focussed-cognitive behavioural

therapy (64.8 per cent), motivational interviewing/motivational enhancement therapy (60.6 per cent), CBT (36.6 per cent), narrative therapy (22.5 per cent), psychodynamic therapy (14.1 per cent), pharmacotherapy (9.9 per cent) or a combination of approaches (8.5 per cent).

Just over half (55.4 per cent) agreed that treatments for SUD alone are insufficient for clients who also have PTSD and 36.8 per cent agreed that treatments for PTSD alone are insufficient for clients with SUD. In total, 38 per cent supported the statement that SUD symptoms must be treated before PTSD treatment can be effective and 35.8 per cent indicated that PTSD symptoms must be treated before SUD treatment can be effective.

Challenges

Participants were asked to rate how difficult it is (from "not at all" (0) to "extremely" (3)) to work with adolescent clients when faced with a range of clinical presentations and challenges. Table II displays responses to these items. A Friedman test revealed a statistically significant difference in

Table II Challenges and rewards working with adolescents who have co-occurring PTSD and substance use disorder

Item	*M*	*SD*
Overall difficulty		
PTSD+SUD ($n = 87$)	1.69	0.94
Self-harm ($n = 89$)	1.29	0.87
PTSD alone ($n = 72$)	1.22	0.81
Risky sexual behaviours ($n = 86$)	1.15	0.89
SUD alone ($n = 87$)	1.07	0.87
Depression ($n = 89$)	0.79	0.78
Specific client-oriented difficulties		
Anger ($n = 89$)	1.34	0.81
Dependency (needing a lot of care) ($n = 90$)	1.32	0.90
Trying to de-escalate ($n = 90$)	1.14	0.80
Self-harm ($n = 90$)	1.11	0.81
Relationship problems ($n = 90$)	1.09	0.90
Listening to details of trauma ($n = 88$)	1.08	0.73
Setting boundaries ($n = 89$)	0.87	0.79
Crying/sadness ($n = 89$)	0.71	0.64
Specific treatment-oriented difficulties		
Working with parents/caregivers ($n = 88$)	1.35	0.85
Case management ($n = 89$)	1.34	1.03
Prioritising treatment goals ($n = 89$)	1.01	0.87
Deciding what kind of approach to use ($n = 89$)	0.98	0.77
Not knowing how to work with them ($n = 89$)	0.90	0.74
Overall reward		
PTSD+SUD ($n = 86$)	2.10	0.75
Depression ($n = 88$)	2.10	0.66
SUD alone ($n = 89$)	2.07	0.79
PTSD alone ($n = 72$)	2.03	0.75
Self-harm ($n = 88$)	1.97	0.72
Risky sexual behaviours ($n = 82$)	1.89	0.77
Specific sources of reward		
Teaching new coping skills ($n = 89$)	2.64	0.55
Developing expertise ($n = 90$)	2.56	0.56
Helping clients achieve substance use goals ($n = 90$)	2.49	0.67
Working with challenging/complex clients ($n = 89$)	2.35	0.71
Obtaining insight about yourself ($n = 88$)	2.03	0.88
Working with parents and families ($n = 89$)	1.89	0.76

Note: Each item rates on a 0–3 scale: 0 = not at all, 1 = somewhat, 2 = moderately, 3 = extremely

difficulty ratings between clinical presentations, $\chi^2(5) = 78.98$, $p = 0.000$, $W = 0.23$. *Post hoc* pairwise comparisons, with a Bonferroni correction applied, demonstrated that co-occurring PTSD and substance use was rated as significantly more difficult to treat than PTSD alone, SUD alone, depression and risky sexual behaviours (p's < 0.05). Over half the sample (58.6 per cent) indicated that treating adolescents with PTSD and substance use was either "moderately" or "extremely" difficult, with 43.1 and 36.8 per cent rating these levels of difficulty for PTSD alone and substance use alone, respectively.

Participants also rated levels of difficulty associated with specific client-oriented and treatment-oriented factors when working with adolescents with PTSD and substance use (Table II). Client-oriented factors that were frequently rated as moderate to extremely difficult included anger (43.8 per cent), dependency (i.e. needing a lot of care; 43.3 per cent), self-harm (27.8 per cent) and listening to details of trauma (26.1 per cent). Treatment oriented factors rated moderately to extremely difficult included working with parents/caregivers (47.7 per cent), case management (43.8 per cent) and prioritising treatment goals (23.6 per cent). Participants also responded to an open-ended question regarding challenges associated with working with this population. Common themes and related comments from participants are reported in "Service providers' comments on challenges associated with treating PTSD and substance use among adolescents". Service-related issues (e.g. siloed services, lack of services to refer to, caseloads/services at capacity), provider-related factors (e.g. not knowing what to treat first, difficult emotions) and client-related factors (e.g. client safety, engagement and motivation for treatment) were discussed.

Service providers' comments on challenges associated with treating PTSD and substance use among adolescents.

Siloed services:

> Working with services that only want to work with one part of the equation and then want to refer to another service because they don't fit into their box.
>
> Seeing as our organisation specialises in Mental Health we try to refer those who need it onto drug/alcohol counselors but the collaboration between the organisations isn't always as it should be.
>
> Finding health services that are willing to work with clients that have both mental health and drug and alcohol use problems. The two issues are so linked, yet often mental health services will not accept clients with a current drug and alcohol problem.
>
> Finding services that will address both mental health & AOD issues together.
>
> Need a coordinated response especially for young offenders as I feel too many agencies are working with adolescents or families in isolation.

Service-related issues:

> A lot of the time it can be difficult to access extra support (other services) due to lack of them in the area or because they are already at capacity.
>
> Lack of appropriate local services, long wait lists, almost no services for remote locations.
>
> At times the feeling of helplessness. The lack of services available to assist these clients and not having ongoing formal supervision is a major factor in that.
>
> Hearing the stories over and over again over the years with no change in how we treat and now with a system that is even more difficult.

Treatment planning – What to treat first?:

> The initial difficulty in supporting the client to use more effective coping strategies in response to their PTSD symptoms. It is often difficult for clients to implement different strategies as the use of D&A has been so reinforcing in managing symptoms. Due to the difficulty in treating D&A use problems in response to PTSD, the dilemma of weather to initially treat trauma or D&A becomes challenging.
>
> Getting the fine balance right when reducing/removing substance use and appropriately managing the emerging symptoms of PTSD.
>
> Managing withdrawal from their identified drug of choice and the subsequent escalation of PTSD symptoms.

Feeling confused and lost in terms of where to start/how to help them.

Difficult emotions:

I need to always be aware of my own hidden biases. I am always preparing myself to be familiar with certain triggers that have the potential to cause emotional discomfort.

Anger towards perpetrators of my clients abuse presents challenges – I need to be careful of overidentifying with my clients anger and hopelessness about change.

Feeling hopelessness for their situation at times, they may be trying very hard but the rest of their environment doesn't always support them.

I do feel very sad for children and young people who have been neglected, traumatised then further traumatised by government departments.

Client safety:

The safety of young people who are withdrawing from substances and who often use substances to cope/manage their feelings of anxiety, sadness, anger, depression and trauma related memories can be a real concern and self-harm can often escalate as other coping mechanisms are removed.

Working with the younger age group and the fact that the coping skills in use maybe illegal and extremely self harming.

Drug/alc use in a reinforcing cycle where it helps manage PTSD symptoms but contributes to further trauma.

Engagement and motivation for treatment:

When clients are engaged in therapy it becomes easier to treat them, the difficulty is helping them engage in treatment, and stay in treatment.

Staying in therapy, other co-morbid problems (e.g. homelessness, conflict with parent/s, currently safety issues, financial issues that lead to dropping out of therapy).

Generating and maintaining motivation for treatment and, more so, for abstinence of drug and alcohol use.

Working with caregivers:

Working with care givers is difficult in a remote area- caregivers themselves are often experiencing trauma and AOD issues.

It is difficult to work with carers who will not engage and always view the child as the problem instead of considering how their care of the child also impacts on the child's symptoms.

Rewards

Table II illustrates participant responses in relation to how rewarding it is (from "not at all" (0) to "extremely" (3)) to work with adolescent clients when faced with a range of clinical presentations and challenges. A Friedman test revealed a statistically significant difference in ratings of reward between clinical presentations, $\chi^2(5) = 13.37$, $p = 0.020$, $W = 0.04$. However, *post hoc* pairwise comparisons, with a Bonferroni correction applied, revealed that providers rated working with adolescents who have PTSD and substance use just as rewarding as working with clients who have PTSD alone, SUD alone, depression, or risky sexual behaviours (p's > 0.05). In total, 80 per cent of providers rated their experiences as moderately or extremely rewarding. Specific factors rated as moderately to extremely rewarding included developing expertise (96.7 per cent), teaching new coping skills (96.6 per cent), helping clients achieve substance use goals (92.2 per cent) and working with challenging/complex clients (88.8 per cent). An open-ended question regarding the rewards associated with working with this adolescent population revealed themes of achieving therapeutic gains and maintaining self-care (see "Service providers' comments on rewards associated with treating PTSD and substance use among adolescents").

Service providers' comments on rewards associated with treating PTSD and substance use among adolescents:

It is always rewarding to see breakthrough for the young person and to have success in treatment. Engagement with the young person and their family is really important and is the first step to treatment success.

> Some days might be a bit tough, but most days are very rewarding. Knowing that you may have said one thing that really makes a difference for a young person and giving them a safe space to be themselves and express what's going on.
>
> Therapeutic gains are so rewarding as they serve as a reminder of why it is I continue to choose to work in this industry.
>
> [My current workplace] is fantastic at providing supervision, balancing caseloads and encouraging us to look after ourselves so that we do not get burnt out by the work we do.
>
> It's a difficult, challenging and supremely rewarding job that requires a sense of humour and a lot of self-care, and maintaining a balanced lifestyle

Training needs

The majority of providers (88.9 per cent) indicated that they currently access up-to-date evidence-based research and resources to assist with their work. They access these resources via workshops, seminars and conferences (86.3 per cent), online modalities (77.5 per cent), supervision (65.0 per cent), journal databases (48.8 per cent), word of mouth (30.0 per cent) and libraries (21.3 per cent). All participants (100.0 per cent) indicated that they would find resources specific to adolescent PTSD+SUD beneficial to their work. These included training in evidence-based treatments (98.8 per cent), clinical supervision (98.7 per cent), access to a treatment manual (95.1 per cent) and guidance on prioritising treatment goals/objectives (94.0 per cent).

Discussion

This is the first study in Australia, and only the second internationally, to examine the perspectives of services providers working with adolescents who have PTSD+SUD. In line with previous research highlighting the common co-occurrence of PTSD and SUD, service providers in this study estimated that 60 per cent of their adolescent clients with PTSD have a co-occurring SUD and 50 per cent with a SUD have co-occurring PTSD. Moreover, providers reported that one in every five adolescent clients they see are experiencing PTSD+SUD. Evidently these adolescents are presenting to a broad range of services, highlighting the critical need for adolescent-specific, tailored trauma informed approaches to be incorporated across all service settings. Indeed, it has been argued that health services, educational settings, child welfare and criminal justice settings should not only incorporate trauma informed care in their practices, but also that systems of care should be coordinated and integrated (Ko *et al.*, 2008; Suarez *et al.*, 2012). This is supported by the findings of the current study, where the providers estimate that up to 70 per cent of their adolescent clients have experienced trauma. Standardised screening of trauma and diagnostic assessment of PTSD needs to occur across all settings where adolescents present, particularly in substance use treatment settings where this may not be routine practice.

Similar to previous research among clinicians in the USA (Adams *et al.*, 2016; Back *et al.*, 2009), PTSD+SUD was rated as significantly more difficult to treat than PTSD alone, SUD alone, depression and risky sexual behaviour. Australian service providers in the current study identified clinical challenges similar to those reported in the US sample, including case management, working with caregivers and prioritising treatment goals. Many respondents also reported challenges associated with services, particularly with regards to unwillingness of services to work with clients who have both mental health and substance use issues. These included difficulties accessing extra support due to lack of services in the area or existing services already at capacity, particularly in rural areas. Increased provision and implementation of evidence-based integrated treatments, telehealth and virtual consultation/tele-mentoring may help to overcome some of these common issues. Research has also indicated that increased clinical supervision for providers could help with challenges associated with secondary traumatic stress, a common factor among service providers working with traumatised clients (Ewer *et al.*, 2015).

The findings of this study indicate a need for further training and support for clinicians and for research aimed at improving treatment approaches for this client population. Lack of adequate training was highlighted by service providers as a challenge and while there appeared to be a high level of accessing training and resources, this training may be insufficient. There were mixed

perspectives on how to best treat adolescents with PTSD+SUD. While half provide integrated/concurrent treatment, one-third reported a belief that it is important that a client is abstinent from substance use before commencing trauma-focussed treatments such as prolonged exposure. One-third also indicated that their service would refer clients to another provider to treat the co-occurring condition. This is not consistent with findings from studies demonstrating the benefits of integrated, sequential treatment for PTSD+SUD (Back *et al.*, 2019; Danielson *et al.*, 2012; Mills *et al.*, 2012; Roberts *et al.*, 2015, 2016) and highlights opportunities for improving treatment and training. Indeed, all participants reported that resources specific to treating PTSD +SUD among adolescents would be beneficial to their work (e.g. training in evidence-based treatments and access to a treatment manual).

Despite the challenges, participants rated treating PTSD+SUD as significantly more rewarding than treating PTSD alone, SUD alone, self-harm, depression and risky behaviour. Common sources of gratification including developing expertise, teaching new coping skills and helping clients achieve treatment goals. These findings reflect the benefits providers gain from working with this population as highlighted in the following comment:

> Some days might be a bit tough, but most days are very rewarding. Knowing that you may have said one thing that really makes a difference for a young person and giving them a safe space to be themselves and express what's going on.

Limitations and conclusions

Given the sample size of this study is relatively small, the findings should be considered with some caution. The sample is unlikely to be representative of all Australian service providers; however, it does include a range of health providers treating adolescents with PTSD and SUD and is diverse with regards to age, education, years of work experience, work setting and occupation. Participants were not randomly selected, and though responses were anonymous, biases associated with self-selection may be present.

It is essential to garner the perspectives of service providers to guide the development of relevant training and treatments and to ultimately improve client outcomes. This study revealed specific challenges and rewards among Australian service providers working with adolescents with PTSD +SUD that can serve to guide improvements in service provision for this population. It also highlighted the common co-occurrence of these disorders among adolescents who are presenting to a range of health services. This underscores the importance of providing relevant, evidence-based, trauma-informed training and support resources to clinicians beyond those typically associated with treatment provision.

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