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Clinician Perspectives on Treating Adolescents with Cooccurring Post-Traumatic Stress Disorder, Substance Use, and Other Problems

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Abstract

Clinicians (n=138) who treat adolescents with co-occurring posttraumatic stress and substance use disorders (PTSD+SUD) were surveyed about their attitudes and practice behaviors. Most providers were trained in PTSD treatment; fewer were trained in SUD or PTSD+SUD treatments. PTSD+SUD treatment was rated more difficult than treatment of other diagnoses. Providers typically addressed symptoms of PTSD and SUD separately and sequentially, rather than with integrated approaches. There was no consensus about which clinical strategies to use with adolescent PTSD+SUD. Continued treatment development, training, and dissemination efforts are needed to equip providers with resources to deliver effective treatments to adolescents with PTSD +SUD.

Posttraumatic stress disorder (PTSD) and substance use disorders (SUD) impact an estimated 5% and 11.4% of U.S. youth under the age of 18, respectively (Merikangas et al., 2010), and often co-occur in adolescence (Ford, Elhai, Ruggiero, & Frueh, 2009; Giaconia et al., 2000; Nooner et al., 2012). For instance, in a large sample of adolescents seeking treatment for substance use problems (n=4,421), 28% had co-occurring traumatic stress disorders (Turner, Muck, Muck, Stephens, & Sukumar, 2004). Clinical and developmental outcomes are often worse for adolescents with co-occurring PTSD and SUD (PTSD+SUD) than for teens with either disorder in isolation (Kilpatrick et al., 2003; Kingston & Raghavan, 2009; Suarez, Belcher, Briggs, & Titus, 2012). Adolescents with PTSD+SUD often present with complicated clinical profiles that may include symptoms of depression, high-risk sexual behavior, and self-harm behaviors (Danielson, Macdonald, et al., 2010; Esposito-Smythers & Spirito, 2004; Lichtenstein et al., 2010), further underscoring these youths' complex needs that may require intervention beyond standard care for PTSD or SUD alone. Not surprisingly, adolescents with PTSD+SUD present for treatment in a variety

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of settings, including mental health clinics and substance abuse treatment facilities (Chan, Godley, Godley, & Dennis, 2009; Lichtenstein, Spirito, & Zimmermann, 2010).

Integrated Treatment Approaches

Over the past decade, there has been growing support for integrated approaches that address both PTSD and SUD concurrently by the same provider (Danielson et al., 2012; Godley, Smith, Passetti, & Subramaniam, 2014; Najavits, Gallop, & Weiss, 2006; Najavits & Hien, 2013). However, the literature base on evidence-based, integrated treatments for PTSD +SUD that also address the unique developmental needs of adolescents remains small (J. A. Cohen, Mannarino, Zhitova, & Capone, 2003; Suarez et al., 2012). Further, the pipeline from development to efficacy evaluation to dissemination and implementation of integrated treatments for this population has traditionally lagged behind the pipeline for interventions targeting single disorders and other comorbidities due to a multitude of clinical, systemic, fiscal, and empirical barriers (Suarez et al., 2012; Torrey et al., 2002).

Knowledge Regarding Clinician Perspectives

Treatment providers are key stakeholders involved in the adoption of new, innovative clinical approaches to intervention. An increased understanding of the challenges and incentives that clinicians experience in practice can inform the development of clinician training programs, as well as dissemination and implementation of new treatment protocols. Previous studies have examined clinicians' perspectives of working with dually diagnosed populations broadly (Grella, Gil-Rivas, & Cooper, 2004), as well as with PTSD+SUD specifically (Back, Waldrop, & Brady, 2009; Najavits, 2002). Najavits surveyed 147 clinician attendees at workshops for PTSD and SUD regarding the difficult and gratifying aspects of working with adults with PTSD+SUD (Najavits, 2002). Commonly identified difficulties in working with this population included management of self-destructive behaviors, case management, and patients' dependency (i.e., needing higher intensity of care), whereas commonly identified sources of gratification included teaching new coping skills, developing professional expertise, and working toward patients' abstinence. Back and colleagues extended these findings in a sample of 423 clinicians recruited from four national professional organizations (Back et al., 2009). In addition to replicating previous findings, clinicians reported experiencing difficulties prioritizing and integrating evidence-based treatment components for PTSD and SUD among adults.

More recently, Lichtenstein and colleagues extended this line of research to include treatment providers who work with adolescents (Lichtenstein et al., 2010). Providers in adolescent-focused substance use and mental health settings were queried regarding their experiences assessing and treating adolescents with substance use and comorbid depression. The findings revealed that the application of formal assessment practices and treatment protocols was uncommon. Additionally, discrepancies in practice behaviors emerged as a function in training. Providers in mental health settings were more likely than those in substance use treatment facilities to assess for depression; however, providers in mental health settings were significantly less likely to assess for and treat substance use. Whereas discrepancies in assessment for depression were partially mediated by training experiences,

setting differences in assessment of substance use were independent of level of training and discipline. Despite the prevalence and associated treatment challenges, this line of research has not yet been extended to include perspectives of treatment providers for adolescents with PTSD+SUD. Little is known about how clinicians view and approach treating this population.

Objectives of the Current Study

Formal assessment of clinicians' conceptualization and management of co-occurring PTSD and SUD, as well as associated health risk behaviors (e.g., self-harm, high-risk sex), in adolescents have not been published in the literature to date. Thus, the current study investigated the clinical practices and attitudes of treatment providers who work with PTSD +SUD diagnosed adolescents. Specifically, we examined providers' (1) training background and experiences germane to treating adolescents with PTSD+SUD and related mental health and health behavior problems; (2) comfort level in treating adolescents with PTSD+SUD; (3) utilization of various treatment modalities; (4) attitudes toward existing treatment approaches; (5) perceived treatment challenges and barriers; and (6) common emotions associated with their work with this population.

Methods

Recruitment and Participants

A two-pronged recruitment strategy was used. First, an invitation to participate in the study was sent to four national organizations via member listservs: College on Problems of Drug Dependence (CPDD), American Professional Society on the Abuse of Children (APSAC), National Child Traumatic Stress Network (NCTSN) Trauma and Substance Abuse work group, and the Association for Behavioral and Cognitive Therapies (ABCT). Second, an invitation was sent to the listservs of centers and clinician training projects focused on regional and national dissemination of evidence-based trauma-focused treatments for youth. These included Project BEST: Bringing Evidence Supported Treatments to South Carolina Children and Families; Program on Adolescent Traumatic Stress (PATS); Arkansas Building Effective Services for Trauma (AR BEST); North Carolina Child Treatment Program (NC CTP); University of Kentucky Child and Adolescent Trauma Treatment Training Institute (CATTTI); Connecticut Center for Effective Practice; and the Harborview Center for Sexual Assault/Traumatic Stress.

Clinicians were invited to participate in a brief, anonymous, online survey regarding their views and experiences related to treating adolescents with PTSD, SUD, PTSD+SUD, and associated problems (e.g., depression, risky sexual behavior). Recruitment occurred from May-September 2013. Participation was voluntary and not compensated. All methods and procedures were approved by the Institutional Review Board.

A total of 195 participants accessed the survey, and 154 of those (79.0%) completed the survey (i.e., accessed every page of the survey). Completers were not required to answer every item, so sample sizes fluctuate slightly by item. Of those who completed the survey, 138 providers endorsed treating clients with PTSD+SUD and were included in the analyses.

Survey

The Clinician Survey on PTSD and Substance Abuse (Najavits, 2002) is a 40-item questionnaire that assesses how challenging and gratifying it is to work with clients with PTSD, SUD, and PTSD+SUD; treatment challenges; and common emotions experienced when working with clients with PTSD+SUD. The survey collects demographic data including: discipline, degree, years and type of training, primary work setting, and theoretical orientation. Participants also were asked whether they had completed formal training in treatment of PTSD, SUD, and related clinical problems. If they responded affirmatively, they were asked to select which training modality they completed (i.e., coursework/practicum; partial-day workshop; full- or multi-day workshop; direct supervision; learning collaborative; other). With regard to treatment approaches, participants were asked the open response question, "What kind(s) of treatment would you most likely use with a patient who meets criteria for both PTSD and SUD?" Participants also responded to a free response question about common emotional reactions they have when working with adolescents with PTSD+SUD. Data were collected and managed using Research Electronic Data Capture (REDCap) tool (Harris et al., 2009).

Data Analysis

Descriptive analyses (means, standard deviations, and frequencies) were conducted where appropriate. Chi-square, independent samples t-tests, and bivariate correlations were used to test associations between variables of interest. Alpha was set at .05 for all analyses.

Results

Provider Characteristics

Provider characteristics are summarized in Table 1. Participants were mostly female (79.7%), with an average age of 42.9 years, and working in a mental health center (63.8%). Most of the participants held a Master's degree (72.5%) with counseling (37.5%) and clinical (22.5%) psychology as their major academic field. The majority of the participants endorsed having a cognitive behavioral theoretical orientation (65.2%); other theoretical orientations endorsed by participants included eclectic (18.1%), systems (6.5%) psychodynamic/analytic (2.9%), 12-step (1.4%) and other (<1% each: reality therapy, multimodal, pharmacotherapy, and person-centered).

Training Experiences

Participants were asked whether they completed formal training in treatment of PTSD, SUD, PTSD+SUD, depression, self-harm behavior, and risky sexual behavior. Responses were collapsed across training modalities due to high rates of overlap (i.e., providers completed multiple training types); participants were counted as positive cases if they endorsed completing one or more types of formal training in treatment of each clinical problem (see Table 1). Providers in mental health treatment settings were more likely than providers in SUD treatment settings to have completed formal training in treatments for PTSD (90.8% vs. 63.2%; $X^2(1) = 9.81$, p = .002) and depression (77.1% vs. 52.6%; $X^2(1) = 4.65$, p = .03). Providers in SUD treatment settings were more likely than providers in mental health

treatment settings to have completed training in treatments for SUD/addictions (84.2% vs. 39.5%; $X^2(1) = 12.45$, p < .001) and treatments for co-occurring PTSD and SUD (63.2% vs. 28.2%; $X^2(1) = 8.37$, p = .004).

Treatment Approaches, Attitudes, and Clinical Practices

Providers were asked what kind(s) of treatment they would be most likely to use with adolescent clients diagnosed with PTSD+SUD. Among providers who responded to that item (n=103), Cognitive Behavioral Therapy (CBT, 36.9%) (Beck, 2011) or Trauma-Focused Cognitive Behavioral Therapy (TF-CBT, 43.7%) (Judith A. Cohen, Mannarino, & Deblinger, 2006), either alone or in combination with motivational interviewing/motivational enhancement therapy (MI/MET, 17.5%) (Naar-King & Suarzes, 2011), were the most commonly endorsed treatment approaches. Less frequently mentioned treatment approaches included Seeking Safety (8.7%) (Najavits et al., 2006), Dialectical Behavior Therapy (DBT, 7.8%) (Miller, Rathus, & Linehan, 2011), mindfulness (4.9%), Prolonged Exposure (PE, 2.9%) (Foa, Hembree, & Rothbaum, 2008), Cognitive Processing Therapy (CPT, 2.9%) (Resick & Schnicke, 1993), family therapy (2.9%), Eye Movement Desensitization and Reprocessing (EMDR, 1.9%) (Greenwald, 1999), medication management (1.9%), and "unspecified treatment" for PTSD+SUD (2.9%). Several providers reported that they would be most likely to use CBT or TF-CBT to treat PTSD symptoms and make a referral for substance use treatment (21.4%), or refer the client for comprehensive treatment elsewhere (5.8%).

Providers rated their degree of agreement with several statements regarding attitudes and clinical practices in treating PTSD, SUD, and PTSD+SUD. As shown in Table 2, most providers indicated that they regularly assess for SUD and PTSD in their practice with adolescents. There was ambivalence with respect to whether patients must be abstinent or whether SUD symptoms must be treated before PTSD treatment can be effective. Over 55% of participants agreed that it is important for clients to be abstinent before starting trauma-focused treatment, and 33% of participants indicated that their agencies tend to refer clients with PTSD+SUD to another provider. Providers were also asked to rate how gratifying it is for them to treat adolescents with a variety of clinical problems and to rate various specific sources of gratification associated with treating adolescents with PTSD+SUD. The findings revealed that treating PTSD+SUD was rated, on average, between moderately and a great deal gratifying. The most strongly endorsed sources of gratification related to treating adolescents with PTSD+SUD included developing expertise in working with these clients and teaching new coping skills. Additional responses are presented in Table 3.

Challenges, Barriers to Treatment, and Common Emotional Reactions

Participants were asked to rate the degree of difficulty experienced [from 'none at all' (0) to a 'great deal' (3)] when faced with an array of specific diagnoses and clinical challenges. Responses are summarized in Table 4. Pairwise comparisons revealed that treatment of PTSD+SUD was rated as significantly more difficult than treatment of any other diagnostic category evaluated (ps < .05), with the exception of SUD only (p = .10). Nearly half (49.2%) of participating providers indicated that treating adolescents with PTSD+SUD was either

"moderately" or "a great deal" difficult, whereas fewer providers indicated these levels of difficulty for the treatment of PTSD (13.7%) or SUD (40.5%) alone.

Participants also responded to an open-ended question regarding the most difficult dilemmas encountered when treating adolescent clients with PTSD+SUD. Providers most frequently mentioned themes including: (1) addressing the functional relation between PTSD and SUD (20.8%); (2) accessing and coordinating resources/case management (16.8%); (3) engaging parents and caregivers (14.9%); (4) addressing a client's motivation for treatment (14.9%); and (5) planning and prioritizing treatment components (10.9%). Finally, the most commonly reported emotions (free response) included: frustration (34%), sadness/sorrow (15%), anger (12%), helplessness/powerlessness (7%), anxiety (5%), fatigue (4%), and hopelessness (4%).

Discussion

To our knowledge, the findings from the current study are the first to assess training experiences, practice behaviors, and attitudes of clinicians who treat adolescents with PTSD +SUD. Clinicians are critical stakeholders in the process of disseminating and implementing evidence-based treatments for youth with co-occurring problems, such as PTSD+SUD. Thus, the identification of current attitudes and practice behaviors, as well as potential gaps in provider training and barriers to effective treatment delivery, can advance development, evaluation, and ultimately dissemination and implementation of evidence-based treatments for PTSD+SUD to adolescents. Overall, the findings suggest that adolescents diagnosed with PTSD+SUD present substantial treatment challenges to providers and that continued efforts to inform best practices for assessment, diagnosis, and treatment of these youth are critically needed.

Provider Characteristics, Training, and Treatment Approaches

Providers in the study were demographically similar to the providers represented in the Back et al. survey (Back et al., 2009)—mostly female, in their early forties, with over a decade of experience treating PTSD and SUD symptoms of adolescent clients. Despite participants' active involvement in professional organizations promoting evidence-supported practices, the current findings indicate potential training gaps of relevance to the treatment and management of PTSD+SUD among youth. The vast majority of mental health providers (91%) endorsed having completed training in an evidence-supported treatment for PTSD; however a minority reported training in treatment of SUD (40%) and even fewer reported training for PTSD+SUD (30%). To this end, it is not surprising that one-fifth of mental health providers reported use of an evidence supported treatment for PTSD (e.g., CBT, TF-CBT) followed by a subsequent referral for additional treatment to specifically address substance use behaviors. Providers employed by SUD treatment facilities reported cross-training experiences (i.e., training in both SUD and PTSD treatment) more frequently than providers in mental health settings.

In light of these results, individual providers and agency practice managers should conduct periodic needs assessments to identify training gaps that limit providers' ability to deliver clinical services pertinent to the families they serve, and then prioritize professional

development resources for trainings in evidence-based treatments to fill those gaps. For instance, if a high proportion of adolescents with PTSD served by a mental health clinic also report substance use problems, but few providers are trained in SUD or PTSD+SUD treatments, then opportunities for trainings in treatments for SUD should be sought. Similarly, if adolescents served by a substance use treatment facility have co-occurring PTSD but few providers are trained in PTSD or PTSD+SUD treatments, then opportunities for training in treatments for PTSD should be sought. Generally, such trainings involve faceto-face workshops conducted by treatment experts (e.g., Cohen & Mannarino, 2008) offered through professional organizations or independently. Increasingly, post-training monitoring and consultation is recommended as a necessary component to develop competence in a new treatment model (Beidas & Kendall, 2010). Even in the absence of formal trainings, it may still be helpful for providers to seek out supervision or consultation from experts in PTSD, SUD, and/or PTSD+SUD depending on each provider's or agency's gaps. Another gap concerns the lack of training in strategies for preventing health risk behaviors that commonly correlate with PTSD, SUD, and PTSD+SUD, such as self-harm and sexual risk behaviors. For example, regardless of setting, only one-third of providers reported training in addressing sexual risk behaviors with adolescent patients. Although age-appropriate sexual health education is a recommended component of TF-CBT (Judith A. Cohen et al., 2006), the majority of participating providers did not report receiving formal training in how to address this topic with adolescent patients. Given the developmental relevance and elevated rates of these problems among trauma-exposed adolescents(Danielson, Macdonald, et al., 2010), this may represent a pertinent gap in training to be addressed by future dissemination efforts.

Although many participants reported regular use of evidence-based treatments with adolescent patients, there was a lack of consensus regarding which assessment and treatment strategies to use with adolescents with PTSD+SUD. Most participants endorsed delivering some form of evidence-based intervention, including, but not limited to, general CBT and Motivational Interviewing approaches, as well as TF-CBT specifically. A sizeable proportion of the sample endorsed strong views about whether PTSD or SUD should be treated first (i.e., in a sequential treatment model rather than in an integrated fashion), with over half of participants agreeing it is important for clients to be abstinent from substance use before starting trauma-focused treatments, and one-third of participants indicating that adolescent clients with PTSD+ADHD tend to be referred out at the agency level. These findings highlight attitudinal and systemic hurdles in delivering integrated care for adolescents with PTSD+SUD. Of note, less than 10% of providers reported use of an integrated treatment model (e.g., Seeking Safety). These findings are likely reflective of the current state of the science-including a lack of large-scale empirical support for specific integrated adolescent treatment protocols for PTSD+SUD (Berenz & Coffey, 2012; Najavits & Hien, 2013). However, efforts to develop and evaluate integrated treatment models are currently underway for SUDs and a range of co-occurring psychiatric disorders (e.g., A-CRA (Godley et al., 2014)), including PTSD+SUD (Risk Reduction through Family Therapy, RRFT (Danielson, McCart, et al., 2010; Danielson et al., 2012)). Notably, preliminary evidence (Danielson, McCart, et al., 2010; Danielson et al., 2012; Najavits et al., 2006) supports the utility of integrated treatments for PTSD+SUD, including pilot work

suggesting that exposure-based integrated treatments are feasible and safe with adolescents(Danielson et al., 2012). These efforts carry potential to fill this gap and provide models to assist treatment providers in integrating and prioritizing treatment components when working with adolescents with PTSD+SUD and their families.

Provider Practice Behaviors, Challenges, and Attitudes

Providers frequently endorsed feelings of frustration, sadness, anger, and helplessness in response to challenges associated with the treatment of PTSD+SUD. Among the most commonly reported challenges were case management, high-risk client symptoms (dependency, self-harm), and working with clients' families, all of which can be highly stressful. Adolescents with PTSD+SUD often present with a range of additional related problems (e.g., risky sexual behaviors, truancy, non-suicidal self-harm, family conflict) that may warrant additional clinician time and resources that often extend beyond a traditional (once a week, 50 minute session) format. Further, adolescents with PTSD+SUD are often both avoidant (due to the trauma) and ambivalent about pursuing SUD and trauma-related treatment goals, which can also be challenging for clinicians. Reports of burnout, frustration, and compassion fatigue by mental healthcare and addictions counselors are well documented (Craig & Sprang, 2010; Shoptaw, Stein, & Rawson, 2000). Results of this study suggest providers who work with adolescents with PTSD+SUD may be particularly vulnerable to these problems. In addition to self-care, organizational efforts to provide training, supervision, peer support, and case management assistance may play a valuable role in promoting providers' health, encouraging the successful implementation of evidence-based treatments for this challenging symptom presentation, and overcoming high turnover rates that can be prevalent when dealing with difficult-to-treat populations.

Limitations of Findings

Several key limitations should be noted. First, providers were not randomly recruited for participation, but rather all participants were members of professional societies or practice networks involved in dissemination of evidence-based treatments for child and adolescent traumatic stress. While the recruitment approach allowed us to target clinicians' reportedly engaged in treating adolescents with PTSD+SUD, responses should not be considered representative of all frontline practitioners working with adolescents with PTSD+SUD. Specifically, some evidence suggests (Foa, Gillihan, & Bryant, 2013; Holleman, Eliens, van Vliet, & van Achterberg, 2006) that members of professional societies, like those used for recruitment in the current study, are more likely to seek out training in and use of evidence-based treatments in practice. Relatedly, relative to similar provider survey studies (Back et al., 2009), the current sample size is small. The combination of small and biased sampling, inferential statistics should be interpreted with caution.

Second, nearly two-thirds of providers in the current study worked in mental health settings, and CBT was the predominant theoretical orientation endorsed by participants. Sample characteristics may have influenced training experiences, practice patterns, and theoretical orientation. Although SUD counselors were under-represented in the current survey, another recent survey conducted in 345 U.S. SUD treatment centers found that 90% of centers endorsed the use of CBT (Olmstead, Abraham, Martino, & Roman, 2012). Still, future

studies should aim to gather information from a representative sample of providers who work with adolescents with PTSD+SUD, including in SUD treatment facilities.

Third, all findings are derived from data collected at a single time-point. We were unable to follow-up with providers to elicit response drivers or more in-depth feedback. Finally, the data were anonymous self-report, and there was no verification of provider data (e.g., work setting, background training, verification of implementing evidence-based practices with fidelity). Nonetheless, although preliminary, the findings of the current study address an under-studied and important clinical topic and may have important implications for treatment delivery, dissemination and future research.

Conclusions and Significance

Taken together, provider perspectives reflected in the current study support and extend conclusions from a recent review of treatment models for adolescents with SUD and cooccurring psychiatric disorders (Godley et al., 2014). Recognizing the current dearth of available empirical literature regarding integrated treatment approaches for this population, Godley and colleagues suggest that a reasonable approach at present is to provide practical training to clinicians in treatment approaches with components showing effectiveness in addressing SUD and its range of comorbidities, along with guidance on how to conduct a problem-based assessment and adapt evidence-based treatment components to meet the needs of the youth based on their specific range of presenting problems. Findings from the current study also support the need to continue the development and evaluation of promising integrated approaches for the treatment of adolescent PTSD+SUD and ensure that providers across a range of settings receive training in those treatments shown to be most effective in reducing symptoms and promoting adaptive developmental trajectories in youth with PTSD +SUD. Further, provider identified challenges present opportunities for practical interventions and innovations to facilitate efficient and effective case management and care coordination that often accompanies work with dually diagnosed adolescent populations.

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Participant demographic, training, and work setting characteristics (N= 138).

Age, $M \pm SD$	42.9 years ± 10.9
Gender (% female)	79.7%
Years of clinical experience, $M \pm SD$	13.9 ± 9.2
Primary work setting	
Mental health	63.8%
Substance abuse	13.8%
Child advocacy/child welfare	8.0%
Juvenile justice	5.8%
School/educational	2.2%
Other ¹	6.4%
Training background (highest degree) 2	
Ph.D./Psy.D./Ed.D.	22.5%
Master's degree	72.5%
Bachelor's degree	0.7%
M.D.	3.6%
Certified Alcohol and Drug Counselor (CACD)	8.7%
Other (e.g., AAAS, certificate)	0.7%
Field	
Clinical psychology	22.5%
Counseling psychology	37.0%
School/educational psychology	3.6%
Social work	26.1%
Marriage and family therapy	2.9%
Pastoral counseling	1.4%
Medicine	3.6%
Other (management, art therapy, unspecified)	2.9%
Primary theoretical orientation	
Cognitive-behavioral	65.2%
Psychodynamic/analytic	2.9%
Systems	6.5%
12 step	1.4%
Eclectic	18.1%
$Other^{\mathcal{J}}$	5.9%
Caseload; $M \pm SD$	
Young children (0-5 years)	$12.1\%\pm19.3$
Older children (6-12 years)	$25.4\%\pm20.1$
Adolescents (13-17 years)	$44.3\%\pm28.0$
Adults (18+ years)	$23.3\%\pm27.4$
Completed formal training in clinical problems	

Substance use disorder/addiction (n=136)	45.6%
Co-occurring PTSD and SUD (n=135)	32.6%
Depression (n=133)	70.7%
Self-harm behaviors (n=136)	54.4%
Risky sexual behaviors (n=134)	33.6%

Note.

^IOther work settings included academic, child abuse pediatrics, forensic psychology, and assessment and treatment center.

 $^2\mathrm{Sum}$ to over 100% due to some providers listing multiple highest degrees.

 3 Other theoretical orientations included reality therapy, multimodal, pharmacotherapy, and person-centered.

Provider attitudes and practices related to treating adolescents with PTSD+SUD.

Item	Mean (SD)
I regularly assess for substance use/problems in my practice with adolescents (n=122)	2.7 (0.7)
I regularly assess for PTSD symptoms in my practice with adolescents (n=122)	2.7 (0.8)
It is important that a patient be abstinent from substance use before starting trauma-focused treatments, such as PE (n=117)	1.7 (1.0)
Treatments for SUD are insufficient for patients who also experience PTSD (n=114)	1.7 (1.1)
SUD symptoms must be treated before PTSD treatment can be effective (n=123)	1.5 (1.0)
Treatments for PTSD are insufficient for patients who also experience SUD (n=117)	1.2 (0.9)
PTSD symptoms must be treated before SUD treatment can be effective (n=122)	1.2 (1.0)
My agency tends to refer patients with PTSD+SUD to another provider (n=106)	1.2 (1.2)
A patient with co-occurring PTSD and SUD should have 2 therapists: one to treat each problem (n=118)	0.9 (0.9)

Note. Each item rated on a 0-3 scale: 0=strongly disagree, 1=somewhat disagree, 2=somewhat agree, 3=strongly agree.

Sources of gratification in treating adolescents with PTSD+SUD.

Item	М	SD
Overall gratification treating		
PTSD alone (n=119)	2.55	0.67
Depression (n=125)	2.50	0.67
PTSD+SUD dual diagnosis (n=121)	2.12	0.83
Self-harm behaviors (n=126)	2.11	0.83
Risky sexual behaviors (n=120)	1.99	0.79
SUD alone (n=98)	1.77	0.99
Specific sources of gratification		
Developing expertise in working with these clients	2.44	0.93
Teaching clients new coping skills	2.39	0.84
Helping clients become abstinent from substances	2.13	0.81
Working with clients' parents and families	2.02	0.90
Obtaining insight about yourself	1.68	0.80
Listening to clients' trauma histories	1.54	0.83
Serving as a "parent figure" to clients	1.10	0.99

Note. Each item rated on a 0-3 scale: 0=not at all, 1=somewhat, 2=moderately, 3=a great deal.

Challenges in treating adolescents with PTSD+SUD

Item	М	SD
Overall difficulty treating		
PTSD+SUD dual diagnosis (n=132)	1.44	1.01
SUD alone (n=109)	1.25	1.09
Self-harm behaviors (n=129)	1.09	0.84
Risky sexual behaviors (n=129)	1.04	0.81
PTSD alone (n=128)	0.59	0.77
Depression (n=133)	0.56	0.79
Specific difficulties		
Case management	1.24	0.93
Clients' dependency	1.22	0.84
Clients' self-harm	1.12	0.81
Working with clients' parents and families	1.12	0.90
De-escalating clients (e.g., when dissociating or agitated)	1.03	0.80
Clients' anger	0.99	0.83
Relationship problems	0.92	0.81
Not knowing how to work with these clients	0.90	0.76
Prioritizing treatment components or goals	0.82	0.78
Hearing painful details of trauma	0.81	0.75
Deciding what kind of treatment approach to use	0.79	0.76
HIV/AIDS	0.74	0.86
Counter-transference toward these clients	0.63	0.64
Setting boundaries	0.56	0.70
Clients' crying/sadness	0.56	0.73

Note. Each item rated on a 0-3 scale: 0=not at all, 1=somewhat, 2=moderately, 3=a great deal.