J Contemp Psychother
DOI 10.1007/s10879-016-9340-9

ORIGINAL PAPER

Relationship-Based Recovery Case Study: An Interpersonally-Empowering Approach to Recovery from Substance Use Disorder and PTSD

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Abstract
Background Posttraumatic stress disorder (PTSD) and substance use disorder (SUD) are prevalent and pernicious disorders that are commonly comorbid. Though promising findings have been documented for psychotherapies addressing PTSD/SUD, this is a relatively new area of inquiry.
Aims To (a) describe relationship-based recovery (RBR), a recently developed cognitive-behavioural treatment for comorbid PTSD and SUD, and (b) explore how RBR might facilitate reduction of PTSD and substance use problems.
Methods This study used a single case design, with assessments occurring at baseline, post-treatment, and 3-month follow-up.
Results Clinically significant reductions in PTSD and SUD, as well as increased satisfaction with interpersonal relationships, were found at post-treatment and 3-month follow-up. Following treatment, the patient no longer met diagnostic criteria for disorders identified at pre-treatment.
Conclusions The patient appeared to benefit from the treatment. Research investigating RBR as a potential treatment for PTSD/SUD is warranted.

Keywords Posttraumatic stress disorder · Substance use disorder · Individual CBT · Interpersonal

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Introduction

Posttraumatic stress disorder (PTSD) is a prevalent and pernicious disorder (Bremner et al. 1996) that is frequently comorbid with substance use disorders (SUDs; Brady et al. 2004). Comorbid PTSD/SUD is associated with greater financial strain, unemployment, and likelihood of suicide attempts than either disorder alone (e.g., Blanco et al. 2013). Furthermore, during SUD treatment, individuals with PTSD/SUD are at higher risk for relapse (Norman et al. 2007). Though promising findings have been documented for psychotherapies addressing this comorbidity (e.g., Mills et al. 2012), with a small but growing literature suggesting trauma-focused PTSD treatments such as prolonged exposure and cognitive processing therapy may reduce PTSD symptoms in this population (e.g., Brady et al. 2001), this is a relatively new area of inquiry and

Published online: 22 September 2016

additional research is needed to assess the efficacy of treatments for PTSD/SUD (van Dam et al. 2012). This is particularly important given currently available psychotherapies for PTSD/SUD do not appear to produce better outcomes compared to SUD treatment as usual (Schumm and Gore 2016). Since interpersonal problems can maintain or aggravate the course of PTSD and SUD and interfere with successful treatment delivery (e.g., Brewin et al. 2000), treatments that incorporate a focus on strengthening interpersonal relationships may improve outcomes for this population. In this paper, we present an overview and initial case study investigation of a developing therapy for PTSD/SUD, relationship based recovery (RBR: Schumm et al. 2014).

Theoretical Underpinnings of RBR

RBR builds on empirically-supported theories of PTSD and SUDs. First, PTSD is conceptualized as a disorder of impeded recovery in which most individuals experience symptoms similar to those of PTSD in the immediate aftermath of traumatization, but symptoms persist and result in a diagnosis of PTSD among only a minority of individuals (Rothbaum et al. 1992). Within the context of RBR, avoidance of traumatic stimuli, maladaptive appraisals, and substance use are considered factors that may hinder natural recovery of PTSD symptoms posttrauma (Brady and Sinha 2005), and are thus addressed within the treatment. Related to temporal sequencing of PTSD/SUD symptoms, one hypothesis holds that individuals medicate themselves with substances to alleviate emotional distress and cope with traumatic events and their consequences (Stewart 1996). An alternative hypothesis is that preexisting substance use or use in the immediate wake of trauma promotes the onset and maintenance of PTSD symptoms (Brady et al. 2004). RBR incorporates both of these empirically-supported pathways by viewing PTSD and SUD as bidirectionally related, with each disorder maintaining and potentially exacerbating symptoms of the other.

Third, PTSD and SUD are recognized to exist within an interpersonal context that can be utilized to facilitate recovery. Interactions between the patient and their social milieu are posited to be integral to recovery as these disorders have deleterious effects on relationships and social support can bolster recovery. According to the cognitive-behavioural interpersonal theory of PTSD (Monson et al. 2010), an individual's recovery from trauma is posited to be influenced by three systems: (1) cognitions, behaviours, and emotions that operate within the traumatized individual to result in maladaptive coping; (2) cognitions, behaviours, and emotions of the traumatized individual's significant other that influence the traumatized individual's recovery from PTSD; and (3) the interaction of cognitions, behaviours, and emotions of both individuals that influence their relationship and feedback to influence individual-level factors. Extending this theory to SUD, when one individual in a dyad has SUD, the cognitive-behavioural-emotional processes of both individuals may influence recovery from substance use. Also, these processes may influence the relationship and, in turn, facilitate or hinder recovery from SUD. It is widely recognized that SUD has a negative impact on intimate relationship adjustment (e.g., Whisman et al. 2006). Indeed, behavioral couples therapy for SUD is based on the theoretical rationale that substance use and relationship discord are causally connected and reciprocally influenced (O'Farrell and Fals-Stewart 2006). Moreover, behavioural couples therapy for SUDs has been identified as more efficacious than individual-based treatment for reducing substance use and improving relationship satisfaction (Powers et al. 2008). Cognitive-behavioral conjoint therapy for PTSD has also demonstrated as improving interpersonal functioning while reducing PTSD symptoms (Monson et al. 2012). Thus, we developed RBR using adaptations of these two couple-based treatments to bolster PTSD and SUD treatment by incorporating the beneficial effects of interpersonal support in recovery.

Relationship-Based Recovery

RBR is a 16-session, manualized, cognitive-behavioural, trauma-focused treatment for individuals with PTSD/SUD that incorporates a harm-reduction philosophy for substance use. RBR is designed to simultaneously target PTSD, SUD, and interpersonal difficulties by emphasizing relationships throughout treatment. Sessions are 60 min in length, with patients completing at-home practice assignments to facilitate skill acquisition and generalization. To augment the individual treatment sessions, patients are asked to invite concerned significant others (CSOs; i.e., significant others who are concerned about the patient's substance use and PTSD) to take part in the patient's recovery by participating in the practice assignments, many of which are designed as dyadic interventions. CSOs do not attend sessions and the therapist does not make contact with CSOs. Rather, the therapist helps the patient facilitate effective sharing of information and skills presented in session with the goal of ameliorating interpersonal distress.

Interventions from behavioral couples therapy for SUD were adapted to address substance use-related problems. The recovery contract was adapted as a strategy for defining behaviourally-specific goals and strategies aimed at reducing substance-related problems, with the integration of a harm reduction perspective that is flexible in allowing patients to choose a specific behavioural target

that might not include abstinence (e.g., no more than three standard alcoholic drinks, 2 days per week). Other components of the recovery contract include a daily trust discussion in which the patient invites a CSO to engage in a brief check-in about the patient's substance use goals, progress toward those goals, and reinforcement for the CSO supporting the patient, while the CSO reinforces the patient for efforts to meet substance use goals. The recovery contract also includes opportunities for additional behavioural goals that the patient and CSO may choose in support of substance use recovery (e.g., self-help meetings).

Similar to cognitive behavioral conjoint therapy for PTSD (Monson and Fredman 2012), traumatic events are processed in RBR consistent with cognitive theories of PTSD, whereby trauma memories are contextualized primarily through addressing maladaptive appraisals related to the trauma. Further, maladaptive cognitions related to PTSD, SUD, and interpersonal relationships are addressed in the therapy. RBR also incorporates in vivo exposure assignments into the treatment. Referred to as "approach tasks", these at-home practice assignments are intended to generate new learning related to here-and-now feared trauma-related stimuli.

RBR is organized into four phases summarized in the acronym *R.E.A.C.H.* for Recovery, with each phase building upon the foundation of skills acquired in the prior phase. This additive approach to skills training facilitates continued practice for the duration of the remaining sessions. The initial phase of the treatment (***R***educing substance use while establishing safety) involves psychoeducation about the treatment rationale and introduction of behavioural strategies to decrease problematic substance use, as well as the use of conflict management strategies to enhance safety and trust within interpersonal relationships. Phase 2 (***E***nhancing relationships and ***A***ddressing avoidance) focuses on improving relationships to decrease problematic substance use, undermine PTSD-related avoidance, and promote avoidance of substance use-related associations. Interpersonally-oriented behavioural interventions (e.g., communications skills training) are introduced. Additionally, patients address avoidance through trauma-relevant in vivo approach assignments. The third phase of RBR (***C***hallenging thinking that is unhelpful to recovery) focuses on cognitive appraisals related to PTSD, problematic substance use, and relationship difficulties. A dyadic cognitive intervention is used to explore and challenge thinking that is unhelpful to recovery. The final phase (***H***andling ongoing recovery by developing a plan) is designed to facilitate ongoing recovery while highlighting treatment gains.

Given the dearth of research on treating comorbid PTSD/SUD, studies with single case designs are important to advance our understanding of clinical issues (Hersen and Barlow 1984). Indeed, there has been a steady increase in the publishing of case studies (Yin 2013). Increased use of case studies provides a balance to traditional nomothetic designs and can allow for detailed understanding of issues related to the treatment's clinical utility.

Method

Procedure

This case example is part of a case series study of RBR treatment that was provided in a co-therapist format. Participants completed pre-treatment, post-treatment, and 3-month follow-up assessments. All assessments were conducted by trained master's- and doctoral-level clinical psychology students, and post-treatment assessments were completed by assessors who had not provided treatment to the patient. The study was approved by the Research Ethics Board at the institution where the study was conducted. With respect to this case example, the patient's name and identifying information was changed to protect the patient's privacy. Additional consent was obtained from the patient to release confidential material as part of this manuscript.

Session-by-Session Overview of the Treatment

Session 1 of RBR is comprised of an introduction to the treatment and establishing patient-specific treatment goals. This includes psychoeducation about the bidirectional influence between PTSD and SUD, and how these disorders can overlap with interpersonal relationships to cause distress. Self-report ratings of PTSD symptoms, substance use, and relationship happiness are completed by the patient at the beginning of each session, which are graphed and discussed as a way to (a) reinforce the rationale for targeting these three domains simultaneously such as when increases in PTSD coincide with increases in substance use or decreases in relationship happiness and (b) provide a visual indication of relative progress during treatment. This feedback also serves as an effective intervention strategy, since self-monitoring can reduce the frequency of undesirable behaviours, while increasing behaviours consistent with the patient's goals. Session 2 is focused on learning skills to reduce substance use. A recovery contract is established between the patient and therapist, incorporating substance use goals, the trust discussion (abovementioned), and additional behaviours that are incompatible with substance use. Given it is often necessary for individuals to feel safe in their relationships prior to eliciting support, patients' are taught conflict management strategies in session 3 (time-out, slowed breathing).

Phase 2 (sessions 4 through 8) is designed to enhance relationships with others while decreasing PTSD-related behavioural avoidance and emotional numbing. During the fourth session, the therapist engages the patient in a discussion related to how the patient's PTSD and SUD symptoms occur within an interpersonal context (e.g., arguments as a result of intoxication; avoiding social activities due to fear of crowded spaces), as well as ways in which obtaining and building support from others can be beneficial to recovery from PTSD/SUD. Communication skills are introduced and successively built upon from session 5 to 7 to facilitate the patient's interaction with CSOs through improved listening skills, identification of feelings, noticing how thoughts influence feelings, and problem solving. Significant attention is also given in Phase 2 to the distinction between helpful and unhelpful avoidance. This is in recognition that individuals in recovery from PTSD/SUD may receive seemingly mixed messages regarding avoidance. Namely, substance-use oriented treatments typically promote avoidance of people, places, and things that increase risk for relapse to alcohol or drug use, whereas PTSD treatments typically emphasize how avoidance of trauma-related stimuli perpetuates and can exacerbate PTSD symptoms. The patient practices communication skills and engages in trauma-related in vivo approach assignments with significant others to reduce PTSD-related avoidance while increasing interpersonally rewarding activities (e.g., sharing thoughts and feelings, going to see a movie).

Phase 2 ends with an introduction to examining and balancing thoughts unhelpful to recovery (e.g., "I need to drink when I am upset"). During session 8, the patient learns a dyadic cognitive technique to help develop flexibility in their thinking that is reflected in the acronym S.O.L.V.E.: ***S****top* and notice what you are thinking, work with a significant other to ***O****bserve your thought* and identify the bottom line thought associated with painful emotions, ***L****ook for other possible thoughts* by brainstorming alternative interpretations with your significant other, ***V****ote on the best thought* by discussing whether each thought is balanced and considering how it impacts behaviours and feelings, and ***E****stablish ways to practice the best thought* (i.e., identifying ways to engage in behaviours that bolster balanced thinking). The role of CSOs to be curious and join with the patient during this cognitive technique is emphasized.

Phase 3 (sessions 9–14) builds on the patient's enhanced relationship skills by applying the cognitive technique to unhelpful and unbalanced traumatic event- and PTSD-related cognitions, and thoughts impeding recovery from SUD and contributing to relationship distress. Each Phase 3 session introduces an area of unhelpful and unbalanced thinking that can keep people stuck along the trajectory of recovery, beginning with thoughts that are interfering with the patient's ability to achieve acceptance of the traumatic event(s) or occurrence of PTSD or SUD. Subsequent sessions focus on more interpersonally-oriented themes (e.g., trust, intimacy).

In Phase 4, a continuing recovery plan is collaboratively built to facilitate continued use of skills subsequent to treatment, while reducing the chances of a relapse to PTSD, problematic substance use, or relationship difficulties. The patient also develops an action plan in the event of relapse to mitigate negative effects, promote increased awareness of warning signs and high-risk situations for relapse, and establish a shared understanding of ways that significant others can support the patient to intervene in high-risk situations or facilitate the patient getting back on track with recovery after a relapse. Session 15 focuses on recovery gains and the potential for posttraumatic growth resulting from trauma exposure (e.g., "I see how brave I am to be able to recognize and address my substance use problems"), while using the abovementioned cognitive technique for thoughts impeding the patient from seeing benefits from recovery experiences (e.g., "If I see the benefits of recovery, then what I experienced was not traumatic"). The final session is dedicated to a review of the treatment and reinforcing gains made by the patient based on his/her identified goals. Recovery impact questions (e.g., questions related to how PTSD and substance use have affected relationships with others; beliefs related to trust) completed initially for home practice in session 2, then again for practice following session 15, are used to help the patient examine ways in which his/her thinking has changed over the course of treatment.

Case Example

Paul was a 61-year-old white male who was living on social assistance when he consented to participate in this study. He indicated that he was reared in rural Canada with his father, mother, and 10 older siblings. Paul described his childhood as "unhappy", often suffering physical and emotional abuse from his father, who Paul noted drank heavily most nights of the week. Paul identified his mother as loving, but unable or unwilling to intervene when his father became violent. When Paul turned 18 years of age, he enlisted in the Canadian Navy and spent over 10 years in service. After being honorably discharged, Paul's employment was unstable. He married in his mid 30 s and had two children. By 40, Paul and his wife divorced, and he reported having no contact with his children for the past 10 years. Subsequent to his divorce, Paul stopped working, went on social assistance, and moved into government-assisted housing. Paul indicated that he began drinking around 8 years of age to, from his perspective, emotionally

escape, and this pattern escalated over the course of his adult life. For the past 15 years, Paul has been involved in alcoholics anonymous (AA), which has been his main source of social support.

Paul was referred for participation in our study by his case manager at a local organization that he had been connected with for 2 years. This organization is an intensive mobile case management service designed to serve people with addictions who are frequent service users (i.e., 8 + admissions to withdrawal management services in the previous year or 5 + admissions to emergency departments in the previous 2 months or 20 + admissions in the previous year), which can include providing assistance with advocacy, harm reduction strategies, trustee program, navigation of social systems (e.g., legal, medical), referrals, and housing support. Paul had not prior engaged in trauma-focused treatment for PTSD, primarily due to an absence of affordable services available in the city for individuals with co-occurring SUD.

Measures

PTSD diagnosis according to the DSM-IV-TR (American Psychiatric Association 2000) was determined using the Clinician-Administered Posttraumatic Stress Disorder Scale (CAPS; Blake et al. 1995); this was based on meeting symptom criteria and a minimum CAPS score of 45 (Weathers et al. 2001). The CAPS is widely used and has been shown to have excellent psychometric properties (Weathers et al. 2001). The PTSD checklist (PCL; Weathers et al. 1993) was used to assess PTSD symptom severity. This self-report measure has been shown to have excellent reliability (Weathers et al. 1993). Paul completed the PCL at the pre- and post-treatment assessments and prior to each treatment session.

The mini international neuropsychiatric interview (MINI; Lecrubier et al. 1997) was used to assess SUD and other mental health disorders. The MINI is a semi-structured interview consistent with DSM-IV-TR diagnoses that has evidenced good psychometric properties (Sheehan et al. 1997). The timeline followback interview (TLFB; Sobell and Sobell 1995) was used to evaluate daily frequency of substance use. The TLFB uses a calendar method and has well-established reliability and validity (Sobell and Sobell 1995). The Inventory of Drug Use Consequences (InDUC; Tonigan and Miller 2002) was used to measure problems related to drug and alcohol use, which has good to excellent reliability. The InDUC generates a total score and five subscales: impulse control, social responsibility, physical, interpersonal, and intrapersonal.

With respect to interpersonal relationships, the Interpersonal Support Evaluation List (ISEL; Cohen and Hoberman 1983) was administered. This self-report measure is designed to assess perceived availability of social support across four domains (appraisal, belonging, tangible help, self-esteem). The ISEL has demonstrated as reliable and valid (Cohen and Hoberman 1983).

Initial Assessment

Paul met diagnosis for PTSD, Chronic. Although Paul reported repeated instances of childhood maltreatment, as well as other types of traumatic events, his index event occurred at 6 years of age, when his father placed him bareback on a horse then beat the horse until it reared up and threw Paul to the ground. Paul's 3-month pretreatment alcohol use was characterized by binges that lasted between 2 to 5 days, including 6–24 beers depending on access to money. Paul met diagnostic criteria for alcohol dependence, with physiological dependence. Paul also endorsed cannabis use several times per month; however, he denied any associated problems indicative of a further substance use diagnosis. Additionally, Paul met criteria for major depressive disorder, severe, in partial remission, panic disorder with agoraphobia, and social anxiety disorder, symptoms of which occurred in contexts that were independent of traumatic stimuli. With respect to interpersonal functioning, Paul described feeling detached from family members and identified feeling closest to his case manager and AA sponsor. Besides going to weekly 12-step meetings, where he rarely talked with others, Paul described spending most of his time alone in his apartment. He had not been in a romantic relationship in over 20 years.

Results

Treatment took place over an 8-month period, including 17 sessions.[1] As mentioned previously, RBR is divided into four treatment phases structured around the acronym R.E.A.C.H. for recovery. Treatment progress will be discussed in reference to these phases. Figure 1 depicts progress on PTSD and alcohol use treatment outcomes over the course of treatment. Paul indicated a desire to abstain from alcohol. He was not interested in changing his use of cannabis.

[1] RBR began as a 15-session protocol, which was expanded to 16 sessions to reduce the amount of out-of-session practice asked of participants in the first 2 sessions. This modification included transferring some of the treatment content from sessions 1 and 2 into an additional session subsequent to session 3. All of the content remained the same between the original 15-session protocol and current 16-session protocol. Paul completed the 15-session protocol and received an additional two sessions. The first was because he had lost his treatment binder with all of his handouts, and the second was after a 2-month break in therapy due to a relapse to alcohol use.

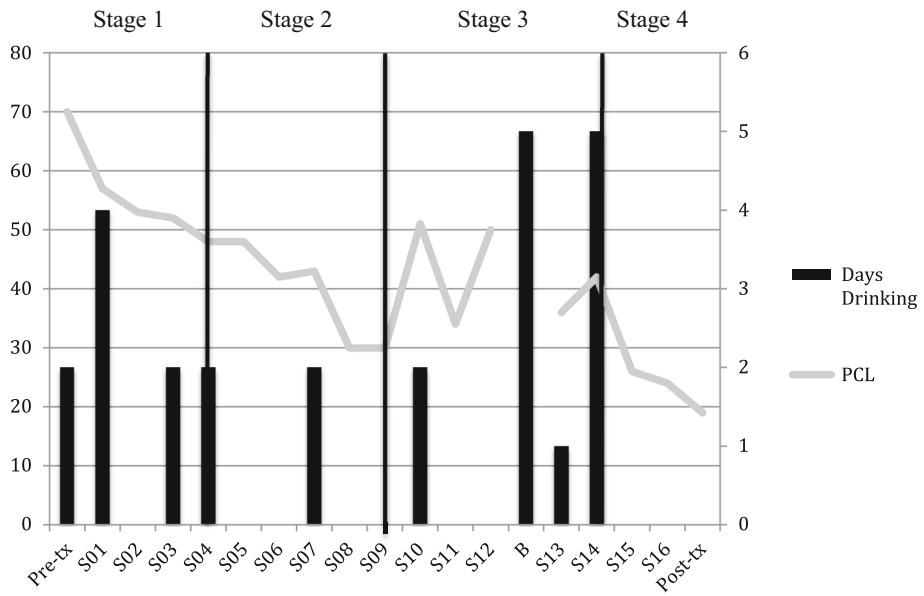

Fig. 1 PCL scores and number of days drinking in the past week stratified by session number. Graph separated into four stages of treatment. *B* booster session provided due to alcohol relapse where no PCL was administered; *PCL* PTSD checklist; *Pre-tx* pre-treatment scores; *Post-tx* post-treatment scores

Phase 1 of the treatment commenced with psychoeducation about the reciprocal influences of PTSD, SUD, and relationship functioning. Paul strongly identified with the maladaptive cycle between drinking and PTSD. He also described a pattern of worsening interpersonal relationships. As a result, Paul was anxious about including other people in his recovery, and he indicated having "no friends" or family members to which he felt close. For the first several sessions, Paul completed the at-home practice assignments with his case manager and AA sponsor. In addition, Paul's case manager sat in on the first treatment session (not contributing). This had been agreed upon due to Paul expressing fear about attending sessions alone, with the understanding that attending without his case manager was a treatment goal.

Paul reported consuming alcohol in the days prior to session 3 and 4. He had ceased engaging in trust discussions with CSOs and other recovery contract strategies. Paul also reported a decrease in relationship satisfaction. When queried about his thoughts regarding the decrease in relationship satisfaction, he stated that it was common for him to avoid people, as he believed they would be disappointed in him for drinking. Discussion and support were offered to continue the trust discussion and other recovery contract behaviours. By the end of the first phase, he had exhibited a decrease in PTSD symptom severity and had engaged four CSOs in the at-home practice assignments. In addition, he started attending sessions alone as of session 3.

The second phase of treatment included a discussion related to helpful and unhelpful avoidance. Paul identified stores that sold alcohol and having access to money placed him at risk for alcohol consumption, and that avoiding such places and having a trustee to control his money reduced his likelihood of drinking. With respect to unhelpful avoidance, he noted avoiding crowds, violent television, and older men who reminded him of his father. To circumvent the negative reinforcement associated with avoidance, Paul began completing approach tasks (e.g., going to 12-step meetings earlier to be around groups of people). With the introduction of communication skills, Paul began to see changes in his relationships with others and indicated feeling closer with CSOs as a result of sharing thoughts and feelings. Paul continued to experience decreases in PTSD and number of days drinking during this phase of treatment.

In the third phase of treatment, Paul used the cognitive technique with CSOs, to explore and challenge thinking that was unhelpful to recovery. A noteworthy application of this technique occurred when Paul expressed treatment ambivalence after his AA sponsor (and CSO) recommended that Paul quit therapy until he had achieved a year of sobriety. For at-home practice, Paul completed a cognitive worksheet with this CSO, using the communication skills he had learned to share his thoughts about treatment. As illustrated in Fig. 2, Paul explored many different thoughts before arriving on one that he felt was a balanced thought: "I'm learning things and explanations about myself with PTSD therapy. I "see" a time where I can be at peace with my past". When discussing this sheet in session, Paul explained that his balanced thought was tied to his perceived need to address PTSD in order to abstain from alcohol.

Paul continued to complete approach tasks, such as staring at himself in the mirror because he found his visage to be a reminder of his father. He did this multiple times between sessions and stayed in the task until he

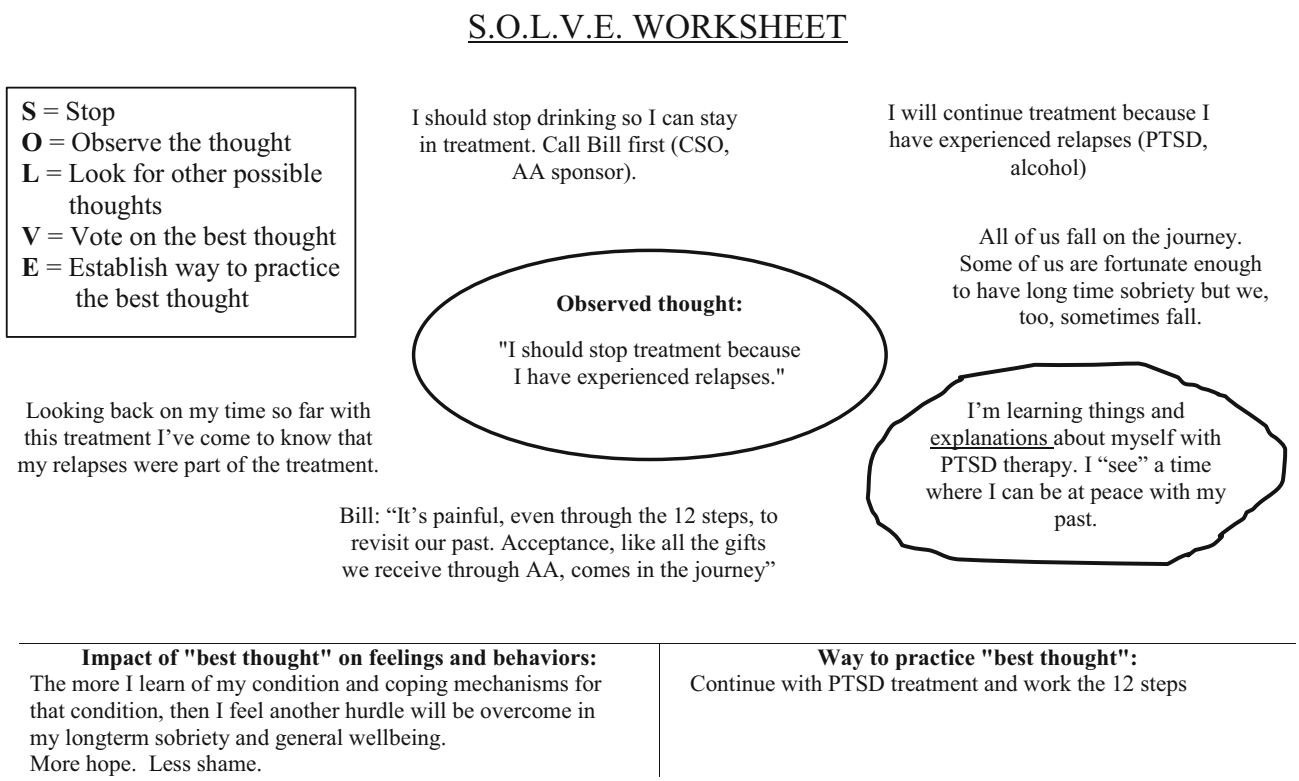

Fig. 2 Example S.O.L.V.E. sheet completed by patient

experienced a decrease in distress. He also approached other members of AA who reminded him of his father and engaged them in general conversation.

Between sessions 12 and 13, Paul canceled four consecutive sessions due to heavy alcohol consumption that he identified as triggered by trauma-related memories. As a result, an additional session was scheduled to explore managing his drinking. This session was intended to (1) reinforce coming to treatment and (2) create a plan to avoid immediate future alcohol use. Part of Paul's case formulation was that he feared social rejection and shame, especially during periods of relapse to drinking. Discussion was focused on Paul's ambivalence around recovery. Allowing Paul to direct the discussion, Paul decided to empty all remaining alcohol when he got home and call his AA sponsor. In hindsight, this was a critical point in Paul's treatment, because it solidified, in his mind, the connection between alcohol use and PTSD.

The fourth stage of treatment focused on consolidating treatment gains. Paul remained abstinent in this phase of treatment and demonstrated insight into the dynamic relationship between his drinking and trauma symptoms. He identified that using the cognitive worksheets gave him perspective on his thinking and increased his acceptance of his traumatic experiences. In session, he presented as more euthymic. When comparing his trauma impact statements, Paul was surprised by his earlier thoughts, finding them inconsistent with his current beliefs. Paul described feeling happy and confident about his ability to abstain from drinking and engage with others. Indeed, he had begun speaking with family members again and was interacting with others in AA meetings and within his community. Further, he had incorporated many additional CSOs into his recovery (i.e., four of his siblings, four friends he met through AA meetings and within the community). This presentation was in stark contrast to the cautious mistrust of others, pessimism surrounding abstinence, and general melancholic mood present in session 2.

At post-treatment assessment, Paul no longer met criteria for PTSD, panic disorder, agoraphobia, or social anxiety disorder, and alcohol dependence was in early full remission. Unexpectedly, he reported symptoms consistent with a diagnosis of cannabis dependence. At 3-month follow-up, Paul did not meet diagnostic criteria for any disorder assessed. Both alcohol dependence and cannabis dependence were in early full remission. Table 1 contains additional assessment information. In preparation for publication, Paul was offered an opportunity to share any thoughts he had about his experience in RBR. This interaction occurred 7 months post-treatment. Paul stated that what made the biggest change for him was examining his thoughts and beliefs about himself and others. He identified entering into a romantic and stable relationship as the greatest treatment outcome, which he believed resulted from reductions in PTSD symptoms and

Table 1 Assessment results for PTSD, substance use, and interpersonal factors

Outcome	Pre-treatment	Post-treatment	3m follow-up[a]
PTSD			
CAPS	87	13	3
PCL	70	19	–
Substance use			
InDUC	107	12	22
Interpersonal			
ISEL-total	44	107	–
ISEL-apprasial	14	30	–
ISEL-tangible	3	23	–
ISEL-self-esteem	10	27	–
ISEL-belonging	17	27	–

CAPS clinician-administered PTSD scale; *PCL* PTSD checklist; *InDUC* inventory of drug use consequences; *ISEL* interpersonal support evaluation list

[a] Due to administrative error, the PCL and ISEL measures were not contained within the 3m self-report package completed by the patient

enjoying his longest period of sobriety, with no alcohol consumed post-treatment. Paul also noted stable euthymic mood and acquiring employment as additional benefits.

Discussion

This paper provides a rationale and description of a developing treatment for PTSD/SUD that simultaneously targets relationship functioning and harnesses the beneficial effects of interpersonal support in recovery. Adapted from empirically-supported conjoint treatments for PTSD and SUD, RBR is a brief, trauma-focused, individual cognitive-behavioural therapy. The present case study provides a first step toward exploring RBR as a treatment for PTSD/SUD.

Paul appeared to benefit from the treatment, with notable decreases in PTSD symptoms, diagnostic remission, an ongoing period of sustained abstinence from alcohol use, and substantial changes in his interpersonal interactions and relationships. At least for this patient, recognition of a bidirectional relationship between PTSD symptoms and alcohol use appeared to be an important component of treatment. Relapses that occurred in the course of treatment and exploring thoughts regarding overlap between PTSD and SUD provided opportunities to further emphasize this relationship. This increased cognitive flexibility facilitated positive changes in Paul's mood and increased confidence with identifying triggers, managing cravings, and enlisting support from CSOs. It is important to recognize that Paul experienced ambivalence regarding the treatment, which is common among individuals in SUD or trauma-focused treatments. In these instances, we used the treatment interventions to assist Paul in resolving this ambivalence (e.g., communication skills, cognitive worksheets). In one case, we offered a brief additional session to address a prolonged relapse to alcohol use that we believed was clinically indicated due to a high likelihood for (a) continued problematic alcohol use and (b) premature treatment termination if we did not intervene. It is interesting that Paul met criteria for cannabis dependence at the post-treatment assessment, but not the pre-treatment or 3-month follow-up assessments. Paul began to identify over treatment that using cannabis put him at risk for drinking alcohol, and he accordingly shifted his perceptions to view use of cannabis as problematic and ultimately ceased using cannabis. These findings are noteworthy because it may represent a possibility that RBR or other integrated treatments for PTSD/SUD do not need to explicitly focus on each substance of abuse to have beneficial effects across multiple drug classes.

Limitations

Despite the positive outcomes reflective of this case study, further empirical evaluation is required to determine whether RBR is an effective treatment for PTSD/SUD. It is currently unknown if this treatment would lead to reliable changes in a larger sample, and it is possible that results could have been partially due to the passage of time. Also, RBR sessions are intended to occur once weekly; however, Paul's treatment occurred over a much longer period due to alcohol relapses and transportation- and health-related reschedules. It is unclear how this prolonged treatment period influenced the results. Further, Paul completed the initial 15-session RBR treatment. While no additional content was added in the revised 16-session version of the RBR, the extent to which these two versions of the treatment influence outcomes is unknown.

Research Implications

We will be conducting a grant-funded open trial of RBR to investigate whether this treatment appears to result in improvements with respect to PTSD symptoms, substance use problems, and relationship functioning. Future empirical investigation of this treatment should include a randomized controlled trial of RBR compared to treatment-as-usual to assess whether changes over the course of treatment are due to the therapy. Provided the results of these studies demonstrate positive shifts in primary outcomes, RBR should be compared with active treatments for PTSD/SUD such as concurrent treatment of PTSD and substance use disorders using prolonged exposure (COPE; Back et al. 2014).

Clinical Implications

This is the first PTSD/SUD treatment to integrate trauma-focused interventions with an emphasis on relationship functioning and incorporation of significant others into the patient's recovery through at-home practice assignments. Conjoint treatments for PTSD (Monson and Fredman 2012) and SUD (O'Farrell and Fals-Stewart 2006) have demonstrated efficacy in treating both the disorder and improving relationships. Including CSOs as part of at-home practice may lead to such improvements in relationships, even among individuals who are unable or unwilling to have a CSO attend treatment sessions. Overall, results from this case study provide a first step toward exploring RBR as a treatment for comorbid PTSD/SUD. Further research investigating RBR is warranted.

Acknowledgments We wish to extend our gratitude to the client who participated in this study. The views expressed in this article are those of the authors and do not necessarily reflect those of the U.S. Government or the Department of Veterans Affairs.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

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