1. Introduction

In this chapter, we propose the use of the Cognitive Behavioral Analysis System for Psychotherapy as a group modality in the treatment of co-morbid chronic depression and posttraumatic stress disorder. CBASP has been found to be effective for the treatment of chronic depression and the functional impairments often associated with this disorder (i.e., pessimism, sense of failure, lack of satisfaction, guilt, sense of punishment, self-hate, self-accusations, irritability, social withdrawal, indecisiveness, work inhibition, sleep disturbance, loss of appetite, weight loss, somatic preoccupation, and loss of libido, etc.). [1,2,3,4,5,6]. Although large studies such as Klien et al. [6,7,8] have focused on individual treatment for which it was developed, CBASP has been shown to be feasible as a group treatment in U.S., Canada, and in Germany. Clinical application of group CBASP in the U.S., thus far, has focused on combat veterans, who have been shown to be particularly vulnerable to Posttraumatic stress disorder (PTSD) and chronic depression [9]. We will outline the nature of these often chronic, co-existing symptoms and then present the rationale. For group CBASP interventions with co-morbid population.

The rationale for developing a group protocol for CBASP is based on a number of variables. For example, group involvement for chronically depressed patient reduces social isolation which limits opportunities to experience social interaction and new learning. In addition, interactions among patients with similar symptoms and experiences may create opportunities for validation, belonging, and the generation of hope that may not be as strong in individual psychotherapy. Group interactions also provide an in-vivo learning environment that maximizes interpersonal exposure and enhances social skill development. We have found that peer modeling has a positive impact on attendance as well as increased compliance with assignments and in session participation. Finally, within the VA Healthcare...
System where we have treated combat veterans, the provision of. Group psychotherapy allows greater access to treatment for growing numbers of veterans seeking help.

The rationale for developing a group format for this established, evidence-based treatment for chronic depression stems, in part, from the need for greater access to treatment for increasingly numbers of veterans returning from combat with PTSD and MDD symptoms. Group methodologies have been shown to be very effective in working with homogeneous populations, both in terms of cultural characteristics and symptom presentation [10]. In fact, veterans share a distinct military culture and as such report a “bond” and increased sense of cohesion with the experiences of each other than they do with most civilians [11]. Utilizing this commonality to enhance a sense of social connection and support as well as counteract patterns of interpersonal avoidance may improve treatment outcomes for this frequently treatment resistant population.

In a meta-analysis of 48 group therapy studies of depression treatment, McDermut, Miller, Brown [12] found that patients treated in group modalities reported a significant reduction in depressive symptoms when compared to 85% of untreated patients. In studies exploring the benefits of culturally relevant intervention strategies, Ginder and Smith [13] found that when group interventions with homogeneous cultural groups, they were four times more effective than groups that were culturally nonspecific.

2. Problem statement

2.1. Co-morbid MDD and PTSD

Veterans often present with a co-morbid symptom presentation, and co-morbid symptom expression has demonstrated poorer treatment outcomes across psychopathologies [14,15]. The co-morbidities of chronically depressed individuals include anxiety disorders and substance dependence, somatic and physiological disorders and include a range of personality disorders [16,17]. Understanding how these various symptom structures and clinical presentations relate, and developing effective strategies for addressing clinical concerns is paramount, if we hope to effectively treat patients with co-morbid depression and PTSD.

We are focusing on the co-occurrence of chronic depression and chronic posttraumatic stress disorder (PTSD), because it represents the most common co-occurring symptom set for males (48%) and females (49%) of any Axis I disorders, with the exception of PTSD and alcohol abuse for males (51%) [18]. This co-morbidity has also become increasingly critical to our understanding of the etiology of chronic depression from a developmental perspective. For the patient presenting with early onset chronic depression we can typically find a developmental profile of maltreatment in the form of emotional abuse or neglect, physical abuse or neglect, and sexual abuse [19]. However, interpersonal maltreatment is not the only childhood traumatic experience occurring within the context of family and caregiver relationships, individuals are also subject to a range of losses or “psychological insults” [20], such as warfare, sociopolitical stressors, and environmental disasters. These stressors often have a negative impact on individuals’ views of themselves, others, and their world [20].
The foundational derailment of secure attachments and normative cognitive-affective development produces negative self-other attributions and an enhanced fear response toward unfamiliar or threatening environmental stimuli. Behaviorally, this is manifested in a predominantly avoidant coping strategy, which, in turn, increases the strength of the fear structure [21]. Chronic depressive trajectories of late onset or adult traumatic events have received less attention in the literature and yet represent approximately 8% of the chronically depressed adult population. For instance, over 50% of military veterans diagnosed with PTSD carry a diagnosis of depression lasting for two or more years with no evidence of depressive disorder prior to their military duty [22,9]. This co-morbid PTSD/chronically depressed population has a high treatment refractory rate for both antidepressant medication and psychosocial interventions [23].

PTSD is a chronic often disabling disorder that affects approximately 6.8% of the U.S. population with a lifetime prevalence of 3.6% for males, and 9.7% for females [18]. In the Veterans Health Study [22] it was shown that 31% of the over 2,000 veterans sampled, had experienced significant depressive symptoms with 54% of these depressed veterans evidencing one or more psychiatric co-morbidity, predominantly PTSD. Additionally, 88% had medical co-morbidities such as hypertension, heart disease, diabetes, and degenerative joint disease. The lifetime prevalence of Major Depressive Disorder in patient populations such as combat veterans who have a diagnosis of PTSD has been reported to be as high as 68% [24]. Large community sample co-morbidity research has demonstrated that individuals who have PTSD are 3-5 times more likely to develop Major Depressive Disorder over their lifetime [18]. There is a complex interaction among neurobiological and psychosocial factors that involve the overactivation of the hypothalamic-pituitary-adrenal axis [25]. While the empirical literature has begun to outline the interaction of these two disorders, most of the treatment literature focuses on effective interventions with either MDD or PTSD alone. This presents a gap in our understanding about how to treat patients with co-morbid chronic depression/PTSD.

That we are treating interacting disorders rather than two separate or sequential disorders complicates both treatment and the evidence base of the treatment modality, which is based on data from single diagnosis samples. Regarding the complexity of treatment, the clinician has, in the case of PTSD, the treatment goal of reducing patients’ trauma symptoms when their motivation is poor and their coping strategies (i.e., avoidance, substance abuse, anger) are maladaptive and entrenched. When treatment for chronic depression is linked to that of PTSD, treatment can be compromised and derailed by the expression of trauma symptoms that may undermine the patient’s sense of safety and trust and reduce treatment adherence.

As clinicians working in the Veterans Administration HealthCare System, we have noted that when these disorders co-occur, patients report greater symptom distress, treatment interventions can become highly problematic, and/or patients become treatment refractory [23]. Although first-line PTSD treatments, such as Prolonged Exposure Therapy (PE) and
Cognitive Processing Therapy (CPT) for non-comorbid PTSD report a remission of acute depressive symptoms when PTSD symptoms are actively addressed, some chronically depressed patients find it difficult to engage in and complete trauma focused therapies that activate traumatic memories and require adherence to between-session imaginal and in-vivo exposures. This problem may be reflected in a 23% drop-out rate for civilians receiving trauma-focused therapy and as high as 30% dropout for veterans with PTSD. Many of these veterans had co-occurring disorders, including MDD [24].

3. Application area

3.1. CBASP group application

The adaption of CBASP to a group treatment maintains the core structure and principles of the individual treatment while expanding on behavioral skill development and behavioral activation. The structure of the CBASP group follows the outline provided below, which provides for pretreatment screening and education, treatment measures and co-construction of the transference hypothesis, which is generalized to the impact on the group environment rather than specifically on the therapist as in individual CBASP treatment.

3.2. Pre-treatment interview

Screening and Baseline measures

- Interview and differential diagnosis MINI v6,
- Significant Other History (SOH), Transference Hypothesis
- Beck Depression Inventory -II
- CBASP Interpersonal Questionnaire (CIQ)
- Depression Timeline
- Interpersonal Impact Inventory (IMI)
- Interpersonal Inventory of Problems (IIP)

3.3. Session structure

- Check-in (mood and activity level) 10 minutes
- Presentation of Coping Questionnaire* 50 minutes
- New learning, i.e., behavioral skills, 20 minutes
- Consolidation of new learning 10 minutes
- Assignment and troubleshooting

*Each member is responsible for 3 CQs each week.

3.4. Session 1-6 initial phase

Primary focus is on the development of Situational Analysis using the Coping Questionnaire:

- Situational “slice of time”
• Development of narrative (beginning, mid, end points, behavioral focus)
• Identify situational interpretations or “reads”
• Actual Outcome=Desired Outcome
• Remediation of interpretations and development of Action Interpretations
• Generalization of learning

Introduction of Behavioral Activation - Daily monitoring sheet and identification of depressant vs. antidepressant behaviors

3.5. Sessions 6-10 early treatment

Continued review of Situational Analyses, and Future Situational Analyses with focus on developing new behavioral skills.
• Active listening/communication skills
• Assertiveness
• Emotion Regulation skills
• Monitoring and incremental increase antidepressant activities
• Role plays to practice new interpersonal behaviors generated in group, i.e., “let’s try that out and see how it works”

3.6. Session 10-12 mid- treatment

Situational Analyses and Future Situational Analyses with focus on:
• Interpersonal Impact Inventory (IMI)
• Identification of interpersonal “hot spots” related to Significant Other History transference hypothesis for each group member.
• Focus on behavioral manifestation of transference hypothesis in interpersonal life.
• Link behaviors to circumplex – role play alternative behaviors, and cognitions that mediate interpersonal “pulls.”
• Review the impact of behaviors on achieving Desired Outcomes

3.7. Session 12-18 mid-treatment

Situational Analyses and Future Situational Analyses with focus on:
• Improving behavioral skills, i.e., behavioral activation, communication, assertiveness, emotion regulation
• Complete Interpersonal Discrimination Exercise (IDE) based on Situational Analyses
• Generalization and consolidation of new learning

3.8. Session 18-24 late treatment

CBASP skills are being practiced weekly:
•  Situational Analysis and Future SAs
•  Interpersonal interactions and behavioral skills: Behavioral Activation, Active Listening, Assertiveness, Emotion regulation
•  Interpersonal Discrimination Exercise based on situational “hotspots”

3.9. Sessions 24-28 termination and relapse prevention

•  Review of basic principles of learning theory and the issues related to extinction trial
•  Individualized behavioral practice plan, identification of roadblocks, supports, and contacts
•  Group feedback of individual gains, areas of vulnerability, and role in the group
•  Establish future meeting dates and support contacts

4. Research course

4.1. Method

In a study conducted at the Ann Arbor Veterans Healthcare System, 52 male veterans, aged 55-66 with PTSD and MDD were treated using CBASP group therapy for 28 weeks [26]. A comparative sample of 45 male veterans, aged 49-62, were treated with a supportive therapy for the same number of sessions. There was exclusion criteria for psychosis/schizophrenia, bipolar disorder, and active substance abuse. In each of these group therapy conditions, chronic depression was the primary diagnosis, PTSD was secondary. All participants were on antidepressant medications and dosage was unchanged during the group intervention. Symptom measurement, using the BDI-II [27] and the PSTD Checklist-C [28] were given to all therapy participants at the beginning and end of treatment. These measures were again given at 1 month and 6 month follow-up.

4.2. Research results

Data was collected and analyzed using SPSS version 18. Group data was compared using paired t-test. There was a significant improvement in the CBASP group, \( t(51) = 5.12, p < .004 \) for depression and PTSD symptoms \( t(51) = 3.24, p < .05 \), as compared to no significant change in the supportive treatment group \( t(44) = 1.15, ns \) (Figure 1).

The CBASP group was measured at the end of 1 month post treatment and again after 6 months post treatment to ascertain the durability of the effects of treatment. The results of the treatment sessions and follow up measures on the BDI-II and PCL-C are seen in Figure 2. Depression symptoms demonstrated increase at 1 month and 6 month follow-up assessment compared to end of treatment level. The PCL-C continued to drop at 1 month and then showed an increase at 6 months. The increase for both the BDI-II and PCL-C during the follow up phase were that was nonsignificant.
Note: CBASP group N=52 and TAU group N=45. BDI=Beck Depression Inventory–II, PCL-C= PTSD Checklist-Civilian.

**Figure 1.** CBASP and TAU Pre and Post scores on BDI-II and PCL-C

**Figure 2.** CBASP mean scores on BDI-II and PCL-C (N=52)

Figure 2 CBASP session scores on BDI-II and PCL-C with 1 and 6 months follow up.

5. Limitations and future research

The conclusions drawn from this sample of male veterans with chronic depressive disorders and co-morbid PTSD, demonstrates the feasibility of CBASP as a treatment for co-morbid MDD/PTSD with significant reductions in depression and PTSD symptoms compared to treatment as usual. The lack of randomization, absence of a control condition, and a relatively small effect size represent some of the limitations in this study. Nevertheless, the results suggest that using group CBASP to address co-morbid chronic
depression and PTSD provides a feasible means of addressing the complexities of these co-occurring disorders.

The direction of future research is focused on dismantling of the CBASP method to identify the relative power of the active mechanisms within the model as well as their interrelationalship and impact on outcome. In addition, we are actively exploring different configurations and dosages of the group method to determine the most effective delivery system. This includes explore the added benefit of parallel individual CBASP sessions as well as providing twice weekly group sessions to see if these augmentations provide significant additive effects to weekly, group only sessions. We believe that it is essential to provide termination phase sessions that are paced to the patients' learning acquisition and consolidation. This may necessitate spread out session at the end of group treatment, with the expectation that this might minimize the extinction effect and symptom relapse.

6. Conclusions

CBASP group therapy shows promise in the facilitation of cognitive, emotional, and behavioral change by providing the opportunity for patients to process reactions with other group members who share similar life experiences. Pilot studies have shown CBASP to be feasible and effective in a group format [29] whether alone or in combination with individual therapy. In this chapter we have focused on culturally specific application for group CBASP to treat outpatients in US Veteran Administration Medical Centers; however, CBASP group is being studied in heterogeneous groups and inpatient applications in Canada, Germany the U.S. and UK. Data from this research will serve to inform clinicians as to relative effectiveness of this methodology within a group context, but will begin to address questions about CBASP’s therapeutic mechanisms and their role in promoting reduction in the symptoms of chronic depression. Beyond the potential advantages of CBASP groups in terms of greater treatment access and cost-effectiveness, there are the nonspecific factors such as enhanced social support, normalization of symptoms, and interpersonal skill development within a social context that make it a powerful foundation for behavioral change and a durable impediment to depression relapse.

Author details

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