Development and initial evaluation of Transdiagnostic Behavior Therapy (TBT) for veterans with affective disorders

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ABSTRACT

Considerable attention has focused on the growing need for evidence-based psychotherapy for veterans with affective disorders within the Department of Veteran Affairs. Despite, and possibly due to, the large number of evidence-based protocols available, several obstacles remain in their widespread delivery within Veterans Affairs Medical Centers. In part as an effort to address these concerns, newer transdiagnostic approaches to psychotherapy have been developed to provide a single treatment that is capable of addressing several, related disorders. The goal of the present investigation was to develop and evaluate a transdiagnostic psychotherapy, Transdiagnostic Behavior Therapy (TBT), in veterans with affective disorders. Study 1 provided initial support for transdiagnostic presentation of evidence-based psychotherapy components in veterans with principal diagnoses of affective disorders ($n=15$). These findings were used to inform the development of the TBT protocol. In Study 2, an initial evaluation of TBT was completed in a second sample of veterans with principal diagnoses of affective disorders ($n=29$). The findings of Study 2 demonstrated significant improvements in symptoms of depression, anxiety, stress, posttraumatic stress, and related impairment across participants with various principal diagnoses. Together, the investigation provided preliminary support for effectiveness of TBT in veterans with affective disorders.

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1. Introduction

Between 2001 and 2010, nearly 1.9 million U.S. service members were deployed in Operations Enduring/Iraqi Freedom (OEF/OIF), many returning home with psychiatric disorders post-deployment (Hoge et al., 2004, 2006). As a result, the Department of Veterans Affairs (DVA) has witnessed a large influx of new veterans seeking mental health services. The effective treatment of the affective disorders (depressive disorders, anxiety disorders, trauma- and stressor-related disorders, and obsessive-compulsive and related disorders) has become a major priority within the DVA (Ruzek et al., 2012). These disorders represent the most common psychiatric disorders in the United States (cumulative prevalence of Diagnostic and Statistical Manual IV [DSM-IV] mood and anxiety disorders: 28% past year; 49% lifetime; Kessler et al., 2005a, 2005b), with similar rates of these disorder groups reported in veterans (Magruder et al., 2005; Kashdan et al., 2006; Gros et al., 2011, 2012a, 2013a). The category of affective disorders includes panic disorder (PD), social phobia (SOC), specific phobia, generalized anxiety disorder, major depressive disorder (MDD), and persistent depressive/dysthymic disorder, as well as posttraumatic stress disorder (PTSD) and obsessive compulsive disorder (OCD). Due to high rates of comorbidity within the affective disorders, the presence of one disorder typically is accompanied by several comorbid affective disorders, and the diagnostic (and hence treatment) distinction between disorders is not routinely reliable (Kessler et al., 2005b; Magruder et al., 2005).

1.1. Disorder-specific treatments

Cognitive behavioral therapy (CBT) has demonstrated reliable efficacy in treating affective disorders (Butler et al., 2006; Canadian Psychiatric Association, 2006). CBT involves several different evidence-based treatment components (e.g., psychoeducation, cognitive restructuring, behavior modification) that are typically delivered over the course of 10–20 weeks. Although CBT is a short-term intervention, the benefits of CBT typically persist following the termination of treatment (Butler et al., 2006; Canadian Psychiatric Association, 2006), with long term studies demonstrating maintenance of treatment effects at least 2 years after treatment ends (Hunt and Andrews, 1998). However, despite

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its clear benefits, several limitations exist in the current delivery of CBT. One of the most significant limitations is the sheer number of different manualized CBT protocols, representing a major obstacle to providers through separate manuals and workbooks for each disorder, each with significant direct costs and time and training requirements (Craske, 2012). In addition, indirect costs also can be a significant hurdle for both providers and facilities (e.g., loss of revenue during training activities). In fact, leaders in the development and dissemination of CBT have argued that, "unless these treatments become more 'user-friendly' as recommended (by a recent NIMH task force), it is unlikely that most non-research clinicians will have a sufficient understanding of, or access to these empirically supported techniques for the (affective) disorders" (Barlow et al., 2004, p. 208–209). These notions regarding constraints for training have been echoed by individuals highly involved in the DVA CBT dissemination efforts (Ruzek et al., 2012), suggesting less complicated treatments and related training requirements may be more easily disseminated (Foa et al., 2005).

1.2. Transdiagnostic treatment

In contrast to the lengthy training necessary for the disorder-specific CBT protocols, a shift to a transdiagnostic CBT protocol for affective disorders could eliminate much of the unnecessary procedures, time commitment, and financial burden from therapists to address these highly related disorders within the DVA. Transdiagnostic treatments, or "those that apply the same underlying treatment principles across mental disorders, without tailoring the protocol to specific diagnoses" (McEvoy et al., 2009, p. 21), are based on the notion that the affective disorders have common underlying symptoms and so their related disorder-specific CBT protocols contain important but overlapping treatment components. It has been suggested that these components can be distilled into a single treatment and therefore address the symptoms and comorbidities across multiple disorders at once (Norton, 2009). This notion is most true of the affective disorders in which a large number of overlapping symptoms and related components of CBT exist. For example, CBT for SOC, PD, and specific phobias, Exposure with Response Prevention for OCD, and Prolonged Exposure for PTSD all contain situational/behavioral exposures as an essential, if not most important, component of treatment (Canadian Psychiatric Association, 2006; Barlow, 2007). Similar behavioral components exist in CBT for MDD as well (behavioral activation). These behavioral techniques are based on the same theories, guided by the same principles, and thus, are nearly identical across each of the disorder-specific protocols. In addition to potentially reducing the training burden of providers, transdiagnostic treatments also may be more fully able to address the needs of patients with comorbidities without requiring providers to successfully identify and implement multiple treatment protocols, and therefore lead to faster outcomes. To date, a small number of transdiagnostic treatment approaches have been proposed for the affective disorders (Norton, 2009). Although still in development and preliminary evaluation, early outcomes suggest that transdiagnostic approaches can be delivered efficaciously across the affective disorders, with moderate-to-high effect sizes (Ellard et al., 2010; Farchione et al., 2012; Norton, 2012a, 2012b; Schmidt et al., 2012). For example, in a recent presentation of initial outcome data, 26 participants with principal diagnoses of anxiety disorders completed a maximum of 18 weekly sessions of individual transdiagnostic psychotherapy and demonstrated significant improvements in measures of anxiety and depression at post-treatment, when compared to a waitlist control group (Farchione et al., 2012). Similar findings were presented in the other transdiagnostic outcome studies (Norton, 2012a, 2012b; Schmidt et al., 2012).

To date, no transdiagnostic CBT protocols have been developed for or studied in veterans. Although the nature of these treatments suggest that the specific type of patient should not matter (e.g., veteran vs. civilian), there is some data to suggest that there may be important differences between veteran and civilian populations that could influence the effectiveness of these treatments. First and most relevant, disorder-specific CBTs for affective disorders that have been largely developed in civilian populations have demonstrated lower effectiveness in veterans (Bradley et al., 2005). In addition, the illness burden associated with both physical and psychiatric conditions in Veterans Affairs Medical Centers (VAMCs) is double the severity of that which is found in civilian facilities (Rogers et al., 2004). In fact, nearly one half of combat veterans endorse three or more comorbid affective disorders and significantly more impaired functioning as a result (Ginzburg et al., 2010). And finally, the prevalence, severity, and overlap of different specific affective disorders vary between civilians and veterans, with some disorders more prevalent/severe in civilian populations (e.g., SOC; Kashdan et al., 2006), and other disorders more prevalent/severe in Veterans populations (e.g., PTSD and PD; Gros et al., 2011). In fact, among the three most investigated transdiagnostic protocols, PTSD, arguably one of the most problematic psychiatric disorders within the DVA (Magruder et al., 2005), was found in less than 5% of the investigated samples (Farchione et al., 2012 [one out of 37 participants]; Norton (2012a [two out of 37 participants]; Schmidt et al., 2012 [zero out of 96 participants]). Similarly, the majority of existing protocols also did not investigate efficacy in patients with principal diagnoses of MDD, another highly prevalent psychiatric disorder in veterans (Gros et al., 2012a). Together, these findings suggest that treatments should be developed to target veterans with affective disorders, taking into account the veteran-specific differences, rather than modifying an existing manual that was developed in civilian populations.

1.3. Present study

The present investigation sought to develop and evaluate a transdiagnostic psychotherapy designed specifically for veteran populations with affective disorders. The initial phases of this project began prior to the publication of the alternative transdiagnostic protocols (Barlow et al., 2010; Norton 2012b), and so, the present investigation focused on developing a new transdiagnostic protocol in veterans, rather than expanding the literature of the existing protocols to veteran samples. The project also was completed as an initial pilot project within a DVA to develop a treatment that would be compatible with veteran patients within DVA clinical settings. It was hypothesized that a single transdiagnostic protocol could be developed to treat symptoms of depression, anxiety, and PTSD and related impairment in veterans with various affective disorders and comorbidities.

2. Study 1

The goal of Study 1 was to identify and investigate transdiagnostic presentation of evidence-based treatment components for consideration for incorporation into a transdiagnostic protocol for veterans with affective disorders. Once the candidate components were identified, an initial evaluation was completed in a small sample of veterans with affective disorders to determine their effectiveness across disorders, as well as the feasibility of administering these components together in a single, easy-to-administer transdiagnostic protocol.