Journal of Anxiety Disorders 28 (2014) 108–114

Contents lists available at ScienceDirect

Journal of Anxiety Disorders

Research paper

Evaluating treatment of posttraumatic stress disorder with cognitive processing therapy and prolonged exposure therapy in a VHA specialty clinic

Matthew D. Jeffreys [a,*], Courtney Reinfeld [a], Prakash V. Nair [b], Hector A. Garcia [a], Emma Mata-Galan [a], Timothy O. Rentz [a]

[a] South Texas Veterans Healthcare System, 5788 Eckhert Road, San Antonio, TX 78240, United States
[b] University of Texas Health Science Center, Department of Epidemiology and Biostatistics, 7703 Floyd Curl Drive, San Antonio, TX 78229, United States

ARTICLE INFO

Article history:
Received 19 October 2012
Received in revised form 5 April 2013
Accepted 15 April 2013

Keywords:
PTSD
Psychotherapy
Cognitive processing therapy
Prolonged exposure therapy
Veterans
Treatment
Health services
Mental health
Translational research
Evidence based treatment

ABSTRACT

This retrospective chart review evaluates the effectiveness of manualized cognitive processing therapy (CPT) protocols (individual CPT, CPT group only, and CPT group and individual combined) and manualized prolonged exposure (PE) therapy on veterans' posttraumatic stress disorder (PTSD) symptoms in one Veterans Health Administration (VHA) specialty clinic. A total of 517 charts were reviewed, and analyses included 178 charts for CPT and 85 charts for PE. Results demonstrated CPT and PE to significantly reduce PTSD Checklist (PCL) scores. However, PE was significantly more effective than CPT after controlling for variables of age, service era, and ethnicity. Additional findings included different outcomes among CPT formats, decreased treatment dropouts for older veterans, and no significant differences in outcome between Hispanic and White veterans. Study limitations and future research directions are discussed.

Posttraumatic stress disorder (PTSD) is highly prevalent and disabling affecting veterans of all service eras. One study found between 15% and 17% of veterans returning from Afghanistan and Iraq at 1-year follow-up met screening criteria for PTSD (Hoge, Terhakopian, Castro, Messer, & Engel, 2007). Prevalence estimates for Vietnam veterans include a 9.1% current and a 19% lifetime prevalence (Dohrenwend et al., 2007). A rate of 10.1% has been estimated for veterans of Operation Desert Storm (Kang, Natelson, Mahan, Lee, & Murphy, 2003).

Because of this high prevalence of PTSD in combat veterans, a need was identified to deliver evidence-based psychotherapies for PTSD in Veterans Health Administration (VHA) settings immediately following the start of the wars in Afghanistan and Iraq (Rosen et al., 2004). VHA began a national initiative in 2006 to formally train clinicians in cognitive processing therapy (CPT) and prolonged exposure (PE) therapy (Karlin et al., 2010; Ruzek & Rosen, 2009). Although there are increasing numbers of clinicians trained in CPT and PE, there has been limited systematic evaluation of the effectiveness of these treatments in VHA settings (Alvarez et al., 2011; Chard, Schumm, Owens, & Cottingham, 2010; Morland, Hynes, Mackintosh, Resick, & Chard, 2011; Rauch et al., 2009; Schnurr et al., 2007; Tuerk et al., 2011; Yoder et al., 2012).

There is strong support for the efficacy and tolerability of cognitive-behavioral therapies for PTSD treatment (Bisson & Andrew, 2007; Bradley, Greene, Russ, Dutra, & Westen, 2005; Mendes, Mello, Ventura, Passarela Cde, & Mari Jde, 2008; Ponniah & Hollon, 2009). Both CPT and PE are efficacious treatments for PTSD related to non-combat and combat traumas alike (Foa, Zoellner, Feeny, Hembree, & Alvarez-Conrad, 2002; Hembree, Foa, et al., 2003; Monson et al., 2006; Resick, Nishith, Weaver, Astin, & Feuer, 2002; Schnurr et al., 2007). This finding is reflected in the revised VA/Department of Defense (DoD) Clinical Practice Guideline which strongly recommends CPT and PE for PTSD treatment (VA/DoD, 2010). Although data are limited, trials directly comparing CPT and PE have demonstrated similar efficacy between the two treatments (Nishith, Resick, & Griffin, 2002; Resick et al., 2002). One long-term study has demonstrated lasting improvement in PTSD symptoms at 10-year follow-up for both treatments (Resick, Williams, Suvak, Monson, & Gradus, 2011). Further, similar outcomes have been

* Corresponding author at: UTHSCSA, 5788 Eckhert Road, San Antonio, TX 78240, United States. Tel.: +1 210 699 2145; fax: +1 210 699 2257.
E-mail addresses: Matthew.Jeffreys@va.gov, m.jeffreys59@att.net (M.D. Jeffreys).

0887-6185/$ – see front matter. © 2013 Published by Elsevier Ltd.
http://dx.doi.org/10.1016/j.janxdis.2013.04.010

found between variations of CPT conducted with and without a written trauma account (CPT-C) (Resick et al., 2008).

Translation of CPT and PE into clinical practice has raised some interesting implementation questions regarding dropout rates and treatment response by service era and ethnicity. Two studies demonstrated Vietnam veterans less likely to drop out of treatment, but there were differing results for treatment outcomes by service era (Chard, Schumm, Owens, & Cottingham, 2010; Yoder et al., 2012). Chard and colleagues found greater improvement in outcome for Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn (OEF/OIF/OND) veterans treated with CPT as compared to Vietnam veterans. Yoder and colleagues found no difference in outcome between the two service eras for PE. Studies of CPT and PE in veterans have not demonstrated differences in outcome by ethnicity, though Hispanic veterans have been underrepresented (Chard et al., 2010; Monson et al., 2006; Tuerk et al., 2011). This is the first study the authors are aware of comparing CPT and PE in veterans.

The study identified 528 records for review of veterans who received CPT or PE in one VHA specialty clinic. In particular, treatment outcome and drop outs for CPT and PE were examined. Features unique to this program included a large number of Hispanic veterans and veterans of different service eras receiving differing treatments based upon patient and therapist preferences. Most Vietnam veterans in this program received CPT and most OEF/OIF/OND veterans received PE.

The following study hypotheses were evaluated for this article based upon the literature reviewed above:

1) Both CPT and PE show equal benefit for PTSD symptoms.
2) Differing CPT formats are equally effective.
3) Dropout rates are higher for the OEF/OIF/OND veterans as compared to veterans of other eras.
4) OEF/OIF/OND veterans show greater reduction in their PTSD symptoms than veterans of other eras.
5) Hispanic and White veterans respond similarly to treatment.

The implications and limitations of the study findings are discussed for clinical practice and future research.

1. Methodology

1.1. Study overview

The study was a retrospective chart review of one specialty PTSD clinic beginning January 1, 2006 through January 21, 2011. The study was approved through the study site's institutional review board and research and development committee. Charts were reviewed for veterans treated in the clinic who were diagnosed with military-related PTSD. A data collection sheet was followed to ensure consistent recording from each chart. As an exempt study, limited data were collected and did not include treating therapist, specific dates of treatment, prior treatment, concurrent treatment with medications, specific trauma types, service connected status, or comorbidities. Outcome data on cases in progress as of January 21, 2011 were not collected due to exceeding the time range allowed for the chart review.

1.2. Clinician training

Therapists were licensed clinical psychologists, licensed clinical social workers, and pre- and post-doctoral trainees. CPT was provided initially by two psychologists with VHA training in CPT before the official rollout who subsequently were trained through the rollout. Initial training in CPT consisted of a two day workshop followed by phone consultation. All pre- and post-doctoral trainees co-facilitated CPT groups with licensed clinicians and received weekly supervision. Training, supervision, and fidelity monitoring for the trainees was provided by the two psychologists. Because the current data were collected before and during the national rollout, two versions of the CPT manual were used (Chard, 2006; Resick, Monson & Chard, 2007). CPT group only therapy was provided according to its treatment manual (Chard, Resick, Monson, & Kattar, 2009).

PE was provided by one psychologist initially with non-VHA training who subsequently completed the rollout training, and by one social worker trained through the rollout. VHA training consisted of a four day workshop with subsequent supervision and successful completion of two cases using the PE treatment manual (Foa, Hembree, & Rothbaum, 2007). Therapists who joined the team were subsequently trained in CPT and PE through the VHA rollout.

1.3. Treatment sample

A total of 528 medical records were identified for review from a clinical database and appointment logs for calendar years 2006–2010. There were 396 records with PTSD Checklist (PCL; Weathers, Huska, & Keane, 1991) values available one month pre-treatment (268 for CPT and 128 for PE). A total sample of 263 veteran charts identified as completing treatment and having PCL values available one month pre-treatment and one month post-treatment were included in the data analysis for CPT and PE (178 for CPT and 85 for PE). Dropout from treatment was defined as completing less than 2/3 of the recommended appointments. Demographics for veterans with pre- and post-treatment data available are shown in Table 1.

1.4. Interventions

CPT is a twelve-session, manualized treatment protocol which focuses on modifying cognitions surrounding five main trauma themes including safety, trust, power and control, esteem and intimacy (Resick et al., 2008). CPT with the written trauma account was offered in group only, individual only, or combined group and individual formats. CPT without the written trauma account was provided also and was identified as CPT-C in this study. Sessions were 60 min for individual therapy and 90 min for group therapy as directed by CPT treatment protocols. Patients were expected to complete practice assignments, but no measures of adherence were available for this study.

PE is delivered in an individual format for approximately 10–15 weekly 90 min sessions and consisted of the following core components: psycho education, breathing retraining, in vivo-exposures, and imaginal exposures as described in the literature (Hembree, Rauch, et al., 2003). Patients were expected to complete in vivo and imaginal exposure exercises, breathing exercises, and listen to the session recording as homework to benefit from the therapy, but as with CPT no measures of adherence were available for this study.

1.5. Measures

The Clinician Administered PTSD Scale (CAPS; Blake et al., 2000) was used diagnostically in records reviewed starting January 1, 2006 and was replaced later with the Mini Neuropsychiatric Interview (MINI) for PTSD during the latter half of 2010 (Lecrubier et al., 1997). Both the CAPS and the MINI are accepted structured diagnostic interviews for the assessment of PTSD. The clinicians utilized only the PTSD diagnostic category of the MINI as part of the assessment protocol.

Progress in treatment was monitored through the PCL completed by the patient and recorded by the clinician at differing treatment intervals to measure PTSD symptom improvement. The