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Increased utilization of PE and CPT over time: A case example from a large Veterans Affairs PTSD Clinic

Natalie E. Hundt^{a,b,c}, Juliette M. Harik^{d,e}, Karin E. Thompson^{f,b,c}, Terri L. Barrera^{a,b,c}, Shannon Reynolds Miles^g

^aVA HSR&D Houston Center of Excellence, Michael E. DeBakey VA Medical Center, Houston, TX

^bMenninger Department of Psychiatry and Behavioral Sciences, Baylor College of Medicine, Houston, TX

^cVA South Central Mental Illness Research, Education and Clinical Center, Houston, TX

^dNational Center for PTSD, White River Junction, VT

^eGeisel School of Medicine at Dartmouth, Hanover, NH

^fMichael E. DeBakey VAMC, Houston, TX

^gHSR&D Center of Innovation on Disability and Rehabilitation Research (CINDRR) at the James A. Haley Veterans Hospital, Tampa, FL

Abstract

Prior single-site and regional studies have documented difficulties in implementing prolonged exposure (PE) and cognitive processing therapy (CPT) for posttraumatic stress disorder (PTSD) into practice in Veterans Affairs (VA) Medical Centers, estimating that between 6–13% of VA patients with PTSD receive PE or CPT (Lu, Plagge, Marsiglio, & Dobscha, 2013; Mott et al., 2014; Shiner et al., 2013). However, these studies examined data from fiscal years 2008–2012, and therefore may not reflect more recent utilization patterns. Beginning in 2007, the VA invested heavily in increasing implementation of PE and CPT, including nationwide training rollouts and consultation. Given the length of time required for successful implementation of new practices, it is important to evaluate use of PE and CPT over time. We examined current use of PE and CPT at one VA medical center PTSD specialty clinic and compared this to prior rates for the same clinic. Chart reviews for all patients receiving a PTSD clinic initial evaluation between January 1, 2015, and May 31, 2015 indicated that 52% of patients began a course of PE or CPT within the one-year follow-up period, representing a fivefold increase from 2008–2012. We discuss changes in clinic structure, processes, training, and clinician support that might account for the successful implementation of PE and CPT in this clinic. We also present data on alternate referrals provided to patients not engaging in PE and CPT, and predictors of engagement in PE and CPT.

Keywords

Evidence-based psychotherapies; implementation; veterans; posttraumatic stress disorder

Beginning in 2007, the Veterans Health Administration initiated nationwide rollouts of cognitive processing therapy (CPT; Resick, Monson, & Chard, 2008) and prolonged

exposure (PE; Foa & Hembree, 2007) for posttraumatic stress disorder (PTSD). Both are recognized as evidence-based psychotherapies (EBPs) for PTSD (Veterans Health Administration/Department of Defense [VA/DoD], 2010). These implementation efforts included provider trainings followed by intensive consultation, the appointment of an evidence-based psychotherapy coordinator at each facility, and a mandate that all veterans with PTSD have access to CPT or PE (VA, 2012). Backed by significant federal funding and administrative support, the CPT and PE rollouts were among the largest psychotherapy dissemination efforts in the US.

Evaluation data from the rollouts have allowed the VA, as well as the broader field of mental health, to learn from these implementation efforts. For example, clinicians' beliefs about exposure therapy became more favorable over the course of PE training (Ruzek et al., 2016) and VA patients who received PE or CPT from clinicians in the trainings improved significantly (Eftekhari et al., 2013). Notably absent, however, is comprehensive data describing the reach of these implementation efforts (i.e., the number of patients who receive the intervention; Glasgow, Vogt, & Boles, 1999) outside the training cases, and the local clinical changes necessary to support sustained use of PE and CPT. Although standardized psychotherapy note templates exist for CPT and PE, the template data are only available for patients whose provider elected to use the standardized template, and are only available after October 2014, preventing comparisons to earlier time points in the EBP rollouts.

Consistently, results of single-site or regional studies using data collected from 2007 to 2012 suggest that between 6–13% of patients in VA PTSD specialty clinics received PE or CPT (Lu, Plagge, Marsiglio, & Dobscha, 2013; Mott et al., 2014; Shiner et al., 2013). The relatively low rates of CPT and PE use within the first five years of the rollout may have been due to provider concerns regarding the utilization of trauma-focused therapies (Foa, Gilliaman, & Bryant, 2013; McLean & Foa, 2013; Olatunji, Deacon, & Abramowitz, 2009) or clinical policies and structures that did not support EBP use.

More recent single-site studies show comparatively higher rates of CPT and PE utilization, ranging from 48% of veterans referred to PE or CPT (Miles & Thompson, 2016) up to 82% of veterans who were deemed appropriate for CPT or PE (Kehle-Forbes, Meis, Spoont, and Polusny, 2015). This suggests substantial variability in implementation of PE and CPT across VA sites and the need to understand how changes in VA PTSD clinic functioning can affect the use of these treatments. Comparison across existing studies has been complicated by the fact that investigators have calculated utilization rate based on different veteran subgroups, such as all veterans in a PTSD clinic (e.g., Shiner et al., 2013) compared to those specifically referred for PE or CPT (e.g., Kehle-Forbes, Meis, Spoont, & Polusny, 2015; Miles & Thompson, 2016), which may represent a smaller, more motivated cohort that does not necessarily generalize to the entire population of veterans with PTSD.

To evaluate the longer term sustainability of implementation efforts, it is important to examine how use of CPT and PE changes over time (Stirman et al., 2012). Although the VA has a large workforce of providers trained in CPT and PE, this does not guarantee the implementation or maintenance of CPT and PE use (Karlin & Cross, 2014). Indeed, when systems implement new practices, there may be an initial surge in use that is not sustained

(Schmidt & Taylor, 2002). Alternatively, the use of a new practice can continue to grow as clinics become more efficient at supporting treatment delivery, as additional providers are trained, and as more patients learn about the benefits of these interventions. The national dissemination initiatives themselves have evolved over time, moving from a centralized training system to one of localized trainings (Karlin & Cross, 2014) and replacing face-to-face training with a blended online and teleconference learning model. Additionally, local policies and practices likely impact the implementation of CPT and PE in individual VA clinics, and this also may change over time. For example, many PTSD clinics require that CPT and PE are preceded by preparatory groups (Hamblen et al., 2015), though policies vary by site. Examining PTSD clinic flow, including patient engagement in other forms of psychotherapy besides CPT and PE, will inform future efforts to facilitate EBP implementation.

The current study updates and extends prior work examining utilization of CPT and PE at a large VA medical center. Specifically, we conducted chart reviews to investigate the number of patients who initiated or completed PE or group or individual CPT within a PTSD specialty clinic from January to June of 2015 and compared these results to those of prior studies conducted at this site (redacted for review). We descriptively discuss changes in clinic structure, staffing, and training over the relevant years that may have facilitated real-world implementation of CPT/PE. We also present data on treatments received by patients not engaging in PE and CPT, as well as numbers of veterans receiving other types of therapy before, during, and after PE or CPT. These data may assist the VA in planning for alternative service needs, such as treatment for PTSD comorbid with other disorders.

Method

This study was approved by the local IRB and VA Research and Development Committee as a retrospective chart review study.

Environment

The PTSD Clinic functions as a sub-specialty clinic providing trauma-focused psychotherapy to veterans simultaneously enrolled in the General Mental Health Clinic (GMHC), which does not itself deliver PE or CPT. At the time of initiation of data collection, the PTSD clinic was comprised of four full-time psychologists and one social worker. An additional full-time social worker and two full-time psychologists were added in April, 2015, which increased the number of PTSD Clinic staff to eight. All of these providers routinely deliver and have achieved or are in the process of completing official VA PE and CPT provider status. The clinic also typically contains 2–3 psychology interns and fellows at a time, whose cases are included in this study. Veterans were referred to the PTSD Clinic if they had a primary diagnosis of PTSD or Other Trauma or Stressor-Related Disorder and were interested in psychotherapy for PTSD. Veterans were not required to have military-related PTSD. Enrollment in the PTSD clinic requires that if the patient has a comorbid disorder such as substance use disorder, it must be addressed through concurrent therapy or medications or assessed as currently not severe enough to interfere with participation in trauma-focused psychotherapy. Veterans meet with a PTSD Clinic

psychologist or social worker and complete a semi-structured evaluation to confirm diagnoses, identify the index trauma, and discuss psychotherapy options. Treatments available in the PTSD clinic at the time of data collection included individual PE, individual or group CPT, PTSD psychoeducation, Dialectical Behavioral Therapy (DBT), Seeking Safety, anxiety management group, PTSD meditation group, emotion regulation group, and cognitive behavioral therapy (CBT) for insomnia/nightmare rescripting. Although all PTSD Clinic therapists presented the rationale for PE or CPT as the first-line treatments for a primary diagnosis of PTSD, including written handouts and promotional videos, veterans had the final say in their choice of treatment. If the veteran wanted a type of psychotherapy not offered in the PTSD clinic, such as anger management, or if a disorder other than PTSD was determined to be primary, a referral was made to a different clinic. PTSD Clinic clinicians did not always recommend PE/CPT depending on presenting concerns; for example, patients with severe substance use disorder might be referred to Seeking Safety or other substance abuse treatments.

Data Collection

We completed chart reviews for all patients who attended an intake for the PTSD Clinical Team (PCT) between January 1, 2015 and June 30, 2015; only patients admitted to the PCT were included in this data. The following demographic data were collected for each patient: age, gender, race/ethnicity, marital status, and VA service connected disability status for PTSD. Clinical data were collected from the PCT intake template, including *DSM-5* diagnoses (determined during the intake), nature of the primary or index trauma, eligibility for admission to the PCT, and if a different referral than PE/CPT was deemed appropriate by the clinician.

We also collected treatment information for the 1-year window following admission to the PCT for each eligible veteran; thus, follow-up data extend through June 30, 2016 for the last veterans admitted to the cohort. One year was chosen because some patients may delay entry into PE or CPT to complete preparatory treatments first, or because there may be wait times to access the desired treatment. All individual and group therapy notes within the 1-year post-admission window were reviewed, whether in the PCT or other VA mental health clinics. Each session that was labeled as PE or CPT by the therapist was counted as this treatment, regardless of whether they used the official templates or the level of fidelity to the protocol, which was difficult to assess from a chart review procedure.

Data Integrity

Chart reviews were completed by one of two master's-level research assistants who received thorough training and had prior experience conducting VA chart review research. De-identified data were entered directly into a shared project database. The first author (redacted for review) served as the second reviewer for each chart. For any disagreement, the final rating was based on consensus. There were no disagreements between the raters about the main variable of interest, whether a patient was categorized as a PE or CPT recipient.

Data Analyses

As veterans may have engaged in multiple treatments, we created a PE/CPT recipient group consisting of patients who completed at least 1 session of PE or CPT during the 1-year follow-up, regardless of whether they participated in additional treatments. In contrast, the non-PE/CPT group consisted of patients who did not engage in any sessions of PE or CPT, and thus may contain patients who did other forms of treatment or did not receive any psychotherapy.

We examined frequencies, means, and standard deviations for the demographic and clinical characteristics of the whole sample, the PE/CPT recipients, and the non-PE/CPT recipients. Consistent with prior research, we defined PE/CPT completion as attending at least 7 sessions (Mott et al., 2014; Tuerk et al., 2011). We also compared the PE/CPT recipients and the non-PE/CPT recipients on demographics and clinical characteristics, using chi-square for categorical variables and independent samples *t*-tests for continuous variables. Finally, we examined utilization of other treatments and the association of other treatment utilization with receipt of PE or CPT.

Results

Descriptive Analyses

In the six month window, 201 patients completed a PCT intake. Of these, 37 (18.4%; see Figure 1) did not meet admission criteria for the PCT; the remaining 164 patients were enrolled in the PCT. These patients were primarily male (79.3%; see Table 1), most commonly African American (48.5%) or white (30.1%). Close to half (45.4%) were either married or living with a romantic partner. More than half (61.0%) had VA PTSD service-connected disability status. The average number of mental health disorders was 2.05 ($SD = 0.79$), with the most common co-occurring diagnosis being a depressive disorder (65.2%) or a substance use disorder (20.1%). For the majority of veterans, the index trauma was engaging in combat (62.8%), with 47.6% of the sample endorsing Operation Enduring Freedom/ Operation Iraqi Freedom (OEF/OIF) combat events. The second most common index trauma was military sexual trauma or adult sexual assault (17.1%; Table 1).

Utilization of PE and CPT

Within the 1-year follow-up, 52.4% of veterans enrolled in the PCT completed at least 1 session of PE or CPT (Figure 1). CPT was used more commonly than PE (37.8% vs. 16.5% of PCT enrollees). We compared these rates to two prior studies in the same PCT using similar chart review methods. Data from individual therapy patients seen by PE or CPT trained therapists in 2008 to 2012 revealed that 11.4% of veterans in this clinic engaged in PE and CPT (redacted for review), compared to the 52.4% in the current study. Given that changes in the denominator (number of patients referred to the PCT) over time may impact the percentage of patients receiving EBP, we also examined the absolute numbers. In the 2008–2012 data, 1.9 new patients per month began PE or CPT, compared to 14.33 in 2015. However, since (redacted for review) looked only at individual therapy patients, and the PCT clinic offers CPT in a group format, we also created a subsample of patients who received only individual therapy to ensure that the data were comparable across time. Examined this

way, we found 10.16 new individual therapy PE or CPT patients per month in 2015. Thus, whether we compare utilization of PE and CPT as a percentage or an absolute number of new patients per month, the rate of PE and CPT utilization was approximately 5 to 7 times greater in 2015–2016 than in 2008–2012.

Next, we compared the 2015–2016 data to another previous study (redacted for review), which examined patients who agreed to a referral to individual PE or CPT between August 2012 and November 2013. The 2012–2013 study found that 48% of patients began an individual EBP (6.33 new EBP patients per month). Given that this sample represents a selected group who agreed to begin an EBP, comparison of this sample to the 2015 data is likely to underrepresent change over time; however, this suggests that the rate of PE and CPT utilization in 2015 was a minimum of 1.6 times greater in 2015–2016 than in 2012–2013.

We also analyzed completion of EBP and found that 48.8% of the patients who initiated EBP completed at least 7 sessions. The CPT completion rate (50.0%) was not significantly different from the PE completion rate (44.4%; $\chi^2 = 0.12$, $p = .73$). The completion rate of CPT group (58%) was not significantly different from individual CPT (44%; $\chi^2 = 1.06$; $p = .30$).

We examined use of other forms of therapy before, during, and after EBP. Only 10 patients (11.6% of PE/CPT patients) engaged in another form of therapy before beginning PE or CPT. Few ($n = 8$; 9.3% of PE/CPT patients) engaged in other therapy during PE or CPT, and slightly more ($n = 24$; 27.9%) engaged in other therapy after PE or CPT. Patients engaged in a wide variety of other treatments, including PTSD psychoeducation, Seeking Safety, DBT, CBT for insomnia, depression-focused therapies, couples therapy, supportive therapy, etc. As there were many “other” treatments utilized in this group, we did not analyze these statistically. However, there was no apparent pattern, with the possible exception that depression therapies appeared to be more commonly received after PE or CPT than before.

Treatment Utilization in the non-PE/CPT group

We also examined treatment receipt among veterans who did not engage in PE or CPT. Most did not engage in any psychotherapy ($n = 43$; 55.1% of the non-EBP group). Data on utilization of other treatments, including those delivered outside the PCT, are presented in Table 2. More veterans received treatment targeting a co-occurring disorder ($n = 22$; 28.2% of non-EBP patients), primarily DBT, Seeking Safety, or other substance-use treatment; a smaller, but partially overlapping group received non-PE/CPT PTSD therapies, such as PTSD psychoeducation or an anxiety management group ($n = 19$; 24.3% of non-EBP patients).

Variables associated with PE/CPT utilization

Finally, we used a series of chi-square and t -tests to examine whether patient characteristics were associated with receipt of PE/CPT (see Table 1). The following characteristics had no association with receipt of PE/CPT: gender ($\chi^2 = 0.10$, $p = .45$), age ($t = -.40$, $p = .69$), and VA service connected disability for PTSD ($\chi^2 = 0.21$, $p = .38$). A dichotomous combat status variable did not predict EBP initiation ($\chi^2 = .10$, $p = .44$), nor did a more fine-grained

analysis of trauma-type with six categories, as presented in Table 1 ($\chi^2 = 3.26, p = .66$). Marital status was associated with EBP receipt ($\chi^2 = 10.55, p = .03$), such that a greater proportion of veterans who were married or living with a partner received EBP than single, divorced, separated, or widowed veterans. Race/ethnicity was associated with EBP use, such that patients identifying as Asian, Native American, or “other” were less likely to initiate EBP than other racial/ethnic groups. Number of co-occurring diagnoses was associated with PE/CPT initiation ($t = 2.77, p = .01$), such that patients with more diagnoses were less likely to initiate PE/CPT. Only a diagnosis of a substance-use disorder was individually associated with lower likelihood of PE/CPT initiation ($\chi^2 = 8.12, p < .01$).

Given previous suggestions that pre-therapy before PE/CPT may help make patients “ready” for PE/CPT (e.g., Hamblen et al., 2015), we examined whether there was any relationship between receiving pre-PE/CPT therapy and initiation or completion of PE/CPT. Regression results suggested that receipt of pre-PE/CPT therapy was significantly associated with initiation of PE/CPT ($\beta = -.405, p < .01$), such that patients who received pre-PE/CPT therapy were less likely to initiate PE/CPT than those who did not. PE/CPT completion rates were nearly identical across those who received pre-therapy (50.0%) and those who did not (48.8%; $\chi^2 = .01, p = .94$).

Discussion

These data suggest a strong upward trend in utilization of PE and CPT in a single VA PTSD clinic from 2008–2015. This supports the impact of the national EBP training rollouts which began in 2007, indicating not only sustained maintenance of training effects but also further adoption over time. This manuscript provides a case example of wholesale, sustained clinic change throughout 2008–2016, long after the initial roll-out trainings began in 2007.

The growth in PE and CPT utilization was likely supported by a variety of local changes in clinic structure/organization to facilitate implementation of PE and CPT. Outpatient mental health services were reorganized so that the PTSD Clinic became a sub-specialty clinic to which only patients with a primary diagnosis of PTSD who were interested in and could benefit from PE or CPT were referred. Referrals came from GMHC or Primary Care Mental Health where initial assessments were completed and general mental health treatment such as medication management could be provided. Patients in the PTSD Clinic would continue to be followed in GMHC for medication management or other services as needed. Patients who declined PTSD Clinic services could access other psychotherapy services in GMHC. The development of a GMHC where all mental health patients were assessed and could receive other services allowed PTSD Clinic providers to have greater capacity in their patient panels to deliver PTSD-specific EBPs. An explicit priority of the clinic changes during this period was to increase the provision of EBP for PTSD. Although the number of EBP trained providers in the clinic decreased slightly from 2008–2015 (from 8 EBP trained providers to 5, and then increased to 8 in April 2015), as part of the reorganization, PTSD Clinic providers dedicated all of their individual psychotherapy time to providing PE and CPT only. Prior to the reorganization, therapists were conducting more assessments, providing non-EBP groups, and were using individual therapy slots for supportive and process oriented therapy as well as case management, in addition to some EBPs.

Additionally, before the reorganization, the clinic contained a larger number of non-EBP trained providers; after reorganization the clinic contained only EBP trained providers, which may have allowed for attitudinal shifts as EBP providers reinforced each other's efforts to implement EBP. In order to accomplish these substantial practice changes among providers, several factors were identified as facilitative, including the PTSD clinic director serving as a local champion for PE and CPT, endorsement of PE and CPT by well-respected PTSD clinic team members, and administrative support to protect time for clinicians to learn and practice new treatments. Ongoing and routine training of PTSD clinic staff as well as other mental health staff to promote and educate about the efficacy of these treatments has been important to sustaining these practice changes, as have monthly PE/CPT consultation team meetings and other mechanisms to observe and share treatment effectiveness such as in-services and grand rounds. Additionally, the PTSD clinic's ability to demonstrate to leadership the value of these treatments by collecting local program evaluation and treatment outcome data and advocating for the need to reserve provider time for these activities, especially in the face of increasing demands for other services to address access (such as walk-in clinics), has been paramount. Incorporation of peer support specialists located within the PTSD clinic who have lived experience with these treatments has served to encourage otherwise reluctant veterans to engage in these treatments. Finally, logistical strategies such as revising clinic grids to allow for 90-minute PE sessions, and scheduling processes to allow greater frequency of sessions have been critical.

Although the rate of initial engagement in PE and CPT has improved significantly, the attrition rate from PE and CPT remains approximately 50%, which is consistent with other studies of attrition in VA PTSD settings (e.g. Mott et al., 2014; Watts et al., 2014) although less than dropout from EBPs in some civilian samples (72% dropout; Zayfert, et al., 2005). More research is needed regarding predictors of attrition from PTSD care and interventions to decrease attrition. More veterans initiated CPT than PE, although it is unclear if this represents veteran preference, provider comfort, or the availability of CPT in a group format.

These results also shed light on the treatment patterns of patients who do not engage in PE and CPT, as understanding veterans' other needs are important to facilitate implementation of EBPs. About a quarter of veterans meeting criteria for enrollment in a PTSD clinic did not engage in psychotherapy, a potential "missed opportunity," although it is possible that these patients no longer needed PE or CPT due to pharmacotherapy or natural recovery. Of the patients who engaged in non-PE/CPT psychotherapy, the majority were in treatment for co-occurring conditions. Although PE and CPT are considered first-line treatments for PTSD, many of the other treatments received in this sample were first-line options for the co-occurring disorder, such as DBT for borderline personality disorder and CBT for panic disorder. Clinical guidelines do not address the sequencing of psychotherapy for co-morbid disorders, and clinical judgement or patient preference is relied upon to determine sequencing. More research is needed to establish clinical guidelines for the treatment of PTSD with co-occurring disorders (e.g. Foa et al., 2013) or to integrate treatment for multiple disorders (e.g. Falsetti, Resnick, & Davis, 2005).

Our results indicated that participating in a therapy other than PE or CPT was associated with a lower likelihood of later beginning an EBP, and had no effect on completion rates for

EBP. However, these results cannot be taken as conclusive given the small group of such patients. One explanation for these findings may be that clinicians recommended non-trauma-focused therapies for more ambivalent or complex patients, or patients who did not buy in to the PE or CPT rationale during treatment planning. More research is needed to establish the relationship of “pre-treatments” with EBP initiation and successful completion.

Finally, we examined predictors of EBP initiation. Significant predictors included being married or living with a partner, potentially due to social support or encouragement to seek treatment. Additionally, race/ethnicity was related to EBP use, such that patients who identified as White, African American, or Hispanic/Latino were equally likely to initiate EBP, whereas other races/ethnicities were less likely to do so. However, few participants were in the “other” race category, and therefore these results are preliminary. Interestingly, combat service era was not related to initiation, which is in contrast to several prior studies indicating lower rates of EBP initiation in OEF/OIF veterans (e.g., Mott et al., 2014). This may indicate that as the PTSD clinic has increased adoption of EBPs, disparities in care based upon service era have decreased. Trauma type was not associated with EBP initiation, which is consistent with some prior work (e.g., Miles & Thompson, 2016). Finally, greater number of mental health diagnoses and the presence of a substance use disorder were both associated with a lower likelihood of EBP initiation. This may be because these patients were more often referred to care for the co-occurring disorder, for integrated care such as Seeking Safety, or because providers were more likely to have concerns about the readiness of these veterans for trauma-focused therapy.

Limitations

This study relied upon data from medical records, which are limited by the validity of patients’ reports, the accuracy of clinicians’ records regarding the treatment delivered, and the data integrity of chart review; future studies may use official PE and CPT templates. Other potentially relevant veteran characteristics (e.g., education, income, use of pharmacotherapy) were not examined, and it is possible that not all veterans in the clinic needed PE or CPT. Structured diagnostic instruments were not used to identify diagnoses. These data do not include services received in the private sector. Additionally, these data come from a single large urban VA PTSD Clinic and therefore may not generalize to other VA settings, particularly those in smaller or more rural areas, or uptake of other treatments for PTSD, such as Eye Movement Desensitization Reprocessing (Shapiro, 1989). However, these data have the unique strength of providing a longitudinal look at the utilization of two EBPs in a single setting over the period from 2008 to 2015.

Conclusions

These results suggest that, despite challenges, adoption and long-term maintenance of PE and CPT are feasible in large VAMCs that are able to support practice changes in the clinic. For example, ensuring that providers have sufficient time for training, supervision, and case consultation as well as administrative support to facilitate scheduling of more frequent and lengthy sessions are critical to sustained implementation. Other factors considered

facilitative include EBP champions within teams, peer support, and mechanisms to share and celebrate treatment efficacy.

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Figure 1.

Flowchart of patients into and through the PTSD Clinical Team. Three patients participated in both PE and CPT; therefore percentages of patients participating in PE and CPT sum to over 100% of the cell labeled as “began PE or CPT”. Many patients who did not participate in PE or CPT engaged in multiple other forms of treatment (for example, seeking safety and a PTSD psychoeducation group; thus, the numbers in this column sum to over 100%.

Table 1

Demographics of veterans in the study

Patient Characteristic	All PTSD clinic patients (<i>n</i> = 164)	PE/ CPT patients (<i>n</i> = 86)	Non-PE/CPT patients (<i>n</i> = 78)	Difference between PE/CPT patients and non- PE/CPT patients
% Male gender	79.3	80.2	78.2	$\chi^2 = .102$, $p = .449$
Age	43.73 (<i>SD</i> = 13.76)	44.14 (<i>SD</i> = 13.89)	43.28 (<i>SD</i> = 13.70)	$t = -.397$, $p = .692$
Race/Ethnicity				$\chi^2 = 9.132$, $p = .028$
% White	30.1	34.1	25.6	
% African American	48.5	50.6	46.2	
% Hispanic	17.2	15.3	19.2	
% Other races	4.3	0.0	9.0	
% Married	36.8	43.5	29.5	$\chi^2 = 10.55$, $p = .032$
% Living with partner	8.6	9.4	7.7	
% Divorced/separated	28.8	28.2	29.5	
% Widowed	4.3	0.0	9.0	
% Never Married	21.5	18.8	24.4	
% with VA PTSD disability status	61.0	59.3	62.8	$\chi^2 = .21$, $p = .382$
% with comorbid depressive disorder	65.2	61.6	69.2	$\chi^2 = 1.04$, $p = .196$
% with comorbid substance use disorder	20.1	11.6	29.5	$\chi^2 = 8.12$, $p = .004$
% with comorbid anxiety disorder	9.8	9.3	10.3	$\chi^2 = .042$, $p = .522$
% with comorbid personality disorder	4.3	3.5	5.1	$\chi^2 = .269$, $p = .446$
# of Diagnoses (range 1–4)	2.05 (<i>SD</i> = .79)	1.91 (<i>SD</i> = .67)	2.22 (<i>SD</i> = .88)	$t = 2.769$, $p = .011$
Index Trauma				$\chi^2 = 3.26$, $p = .660$
% Combat	62.8	64.0	61.5	
% OEF/OIF	47.6	51.2	43.6	
% Gulf War I	6.1	7.0	5.1	
% Vietnam	9.1	5.9	12.8	
% MST	17.1	16.3	17.9	
% Childhood	4.3	3.5	5.1	
% Other military	15.9	16.3	15.4	

Note. Bolded findings significant at $p < .05$. PTSD = posttraumatic stress disorder; PE = Prolonged Exposure; CPT = Cognitive Processing Therapy; VA = Veterans Affairs; MST = military sexual trauma; OEF/OIF = Operation Enduring Freedom/Operation Iraqi Freedom.

Table 2

Treatments received by non-PE/CPT group (n = 78)

Veterans receiving a treatment targeting a co-occurring condition (n = 22; 28.2%)		Veterans receiving a non-PE/CPT PTSD-related treatments (n = 19; 24.3%)	
Treatment	n; %	Treatment	n; %
DBT	7; 8.9%	PTSD 101 Group	8; 10.3%
Seeking Safety	5; 6.4%	Anxiety Management Group	3; 3.8%
Other SUD-treatment	6; 7.7%	Supportive therapy	3; 3.8%
CBT for another anxiety disorder	4; 5.1%	Emotion regulation group	2; 2.6%
Eating disorder therapy	1; 1.3%	CBT-Insomnia	2; 2.6%
Pain CBT	1; 1.3%	Meditation group	1; 1.3%
Couples therapy	1; 1.3%		
ACT for Depression	1; 1.3%		

Note. PE = prolonged exposure; CPT = cognitive processing therapy; DBT = dialectical behavior therapy; SUD = substance use disorder; CBT = cognitive behavioral therapy; ACT = acceptance and commitment therapy; PTSD = posttraumatic stress disorder. Patients may have completed multiple forms of treatment; thus, column numbers sum to more than the total *n*.