Treatment of Complex PTSD: Results of the ISTSS Expert Clinician Survey on Best Practices

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This study provides a summary of the results of an expert opinion survey initiated by the International Society for Traumatic Stress Studies Complex Trauma Task Force regarding best practices for the treatment of complex posttraumatic stress disorder (PTSD). Ratings from a mail-in survey from 25 complex PTSD experts and 25 classic PTSD experts regarding the most appropriate treatment approaches and interventions for complex PTSD were examined for areas of consensus and disagreement. Experts agreed on several aspects of treatment, with 84% endorsing a phase-based or sequenced therapy as the most appropriate treatment approach with interventions tailored to specific symptom sets. First-line interventions matched to specific symptoms included emotion regulation strategies, narration of trauma memory, cognitive restructuring, anxiety and stress management, and interpersonal skills. Meditation and mindfulness interventions were frequently identified as an effective second-line approach for emotional, attentional, and behavioral (e.g., aggression) disturbances. Agreement was not obtained on either the expected course of improvement or on duration of treatment. The survey results provide a strong rationale for conducting research focusing on the relative merits of traditional trauma-focused therapies and sequenced multicomponent approaches applied to different patient populations with a range of symptom profiles. Sustained symptom monitoring during the course of treatment and during extended follow-up would advance knowledge about both the speed and durability of treatment effects.

It is now well established that the majority of people who report exposure to trauma have experienced multiple traumas

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rather than a single incident or event (Kessler, 2000). A subset of these individuals experience circumstances such as childhood abuse or genocide campaigns under which they are exposed for a sustained period to repeated instances or multiple forms of trauma. This type of experience, called complex trauma, creates risk for a symptom profile distinguishable from posttraumatic stress disorder (PTSD), commonly referred to as complex PTSD (Herman, 1992). For the DSM-IV field trials, this syndrome was operationalized as Disorders of Extreme Stress Not Otherwise Specified (DESNOS) (Pelcovitz, Van Der Kolk, Roth, Mandel, Kaplan & Resick, 1997). As the result of the DSM-IV field trials, Complex PTSD symptoms were included, not as a separate diagnostic entity, but rather as "associated features" of PTSD (American Psychiatric

Association, 2000, p. 465). The presence of PTSD in combination with these associated features is commonly referred to as complex PTSD (Courtois & Ford, 2009) retaining Herman's terminology. Despite this designation, there has been continued controversy and some limited systematic investigation about the presence, clinical significance, and treatment implications of this set of symptoms.

Although an expert consensus survey had been conducted for PTSD (Foa et al., 1999) as a basis for developing practice guidelines, these guidelines did not include consideration of the symptoms of complex PTSD. To address the absence of treatment guidelines for complex PTSD and to provide direction about continued research, the International Society for Traumatic Stress Studies (ISTSS) undertook an expert consensus survey to obtain recommendations about the clinical characteristics of complex PTSD, effective interventions for its treatment, and the expected course of recovery after treatment. This report summarizes the results of the survey on key treatment issues and is intended to inform the development of an ISTSS best practices guideline for the treatment of complex PTSD. Given the impending revisions of both the DSM and the World Health Organization's International Classification of Diseases nomenclature, the results of an expert opinion survey may be a valuable contribution to the discussions.

In addition to being prolonged and repeated, complex trauma is typically of an interpersonal nature and occurs under circumstances where escape is not possible due to physical, psychological, maturational, environmental, or social constraints (Herman, 1992). The most commonly considered examples of complex trauma are childhood sexual abuse and physical abuse, but other examples of complex trauma that meet the above criteria include being a victim of domestic violence, sex trafficking, or the slave trade; being a child soldier; and being a refugee and civilian war victim who has experienced torture, genocide campaigns, or other forms of organized violence (Herman, 1992). Complex PTSD includes the defining symptoms of PTSD (reexperiencing, avoidance/numbing, and hyperarousal) as well as a range of disturbances in self-regulatory capacities (e.g., Ford, Courtois, Steele, Van der Hart, & Nijenhuis, 2005; Van der Kolk, Roth, Pelcovitz, Sunday and Spinazzola, 2005). These have been grouped into five broad domains: (a) emotion regulation difficulties, (b) disturbances in relational capacities, (c) alterations in attention and consciousness (e.g., dissociation), (d) adversely affected belief systems, and (e) somatic distress or disorganization.

Research in both community and clinical samples has demonstrated that this symptom profile predominates in the aftermath of chronic, repeated interpersonal violence as compared to other types of traumatic events (see Van der Kolk et al., 2005). In addition, the presence of complex PTSD is inversely related to the age of onset of first trauma, such that those with early life trauma are more likely to manifest the symptoms of complex PTSD rather than only those of PTSD (see Van der Kolk et al., 2005). An emerging literature identifies the presence of complex PTSD se-

quelae in refugee and civilian survivors of mass violence, where in addition to high rates of PTSD, clinically significant levels of disturbances in emotion regulation and relational capacities, as well as in systems of meaning, dissociation, and somatization have been reported (see de Jong, Komproe, Spinazzola, Van der Kolk, & Van Ommeren, 2005; Hinton & Lewis-Fernández, 2010; Morina & Ford, 2009).

Based on patient observation, clinical scholarship has long proposed that the effects of complex trauma be treated in a sequenced and phase-based fashion (e.g., Janet, 1925). Contemporary formulations of this approach to complex PTSD (Courtois & Ford, 2009; Herman, 1992) have recommended that the initial stage of treatment focus on patient safety, symptom stabilization, and improvement in basic life competencies. A second and later stage includes the exploration of traumatic memories for the purposes of first reducing acute emotional distress resulting from the memories and then reappraising their meaning and integrating them into a coherent and positive identity. Reviews of authoritative writing and clinical opinion on complex PTSD and related disorders have recently been synthesized (Courtois & Ford, 2009) and have articulated the potential benefits of this approach as well as the use of a variety of psychotherapeutic strategies applicable within this model.

The ISTSS practice guidelines (Foa, Keane, Friedman, & Cohen, 2009) suggest that future directions in the treatment of PTSD include the identification of conditions of therapy that enhance patient outcomes. A review of the treatment literature indicates that cognitive-behavioral therapy is effective for resolving PTSD and related symptoms among victims of chronic and prolonged trauma, including those whose traumas occurred in early life (see Cahill, Rothbaum, Resick, & Follette, 2009). It is not known, however, whether current established treatments provide the optimal outcome for these patients considering both the prolonged and repeated nature of the trauma, as well as the additional symptom burden from the problems in self-regulation the patients carry if they do have complex PTSD. Some but not all studies have indicated that patients with complex trauma histories may respond to conventional treatments less optimally than those who do not have complex histories (Hembree, Street, Riggs, & Foa, 2004; Van der Kolk et al., 2007; Van Minnen, Arntz, & Keijsers, 2002 [university sample]; but see Resick, Nishith, & Griffin, 2003; Van Minnen et al., 2002 [community sample]). Research investigating strategies for enhancing treatment outcomes for patients with complex PTSD symptoms is consistent with the research direction advocated by ISTSS. It is also in line with the strategic goals articulated by the National Institute for Mental Health (U.S. Department of Health and Human Services [USDHHS], 2008), which include the identification of patient and environmental (social, cultural) moderators of treatment for the purposes optimizing outcome.

To date, there are few studies exploring adaptations of, or alternatives to, established PTSD treatments developed specifically for individuals with complex trauma histories and intended

to target complex PTSD symptoms. Eight published studies have been identified in which early life complex trauma history was a requirement for enrollment and in which complex PTSD symptoms were the targets of treatment. All the studies investigated enhanced or phase-based trauma treatment models. Three evaluated the benefits of stabilizing and rehabilitative programs without the use of trauma-focused components (Bradley & Follingstad, 2003; Dorrepaal et al., 2010; Zlotnick et al., 1997); four included a trauma-focused component integrated with a sequenced (Cloitre, Koenen, Cohen, & Han, 2002; Cloitre et al., 2010; Steil, Dyer, Priebe, Kleindiest, & Bohus, 2011) or parallel (Chard, 2005) component addressing stabilization, skills training, and issues specific to repeated and early life trauma. One included a trauma-focused group treatment supported by case management (Classen et al., 2011). One of the latter studies (Cloitre et al., 2010) conducted a head-to-head contrast of a phase-based treatment compared to two separate conditions each representing a single phase of the combined approach-stabilization phase only or trauma-focused phase only. The results indicated the superiority of the combined phase-based approach.

All eight of the studies reported improvements in PTSD symptoms as well as in complex PTSD symptoms such as difficulties with emotion regulation, dissociation, self-injurious behaviors, self-concept, and interpersonal functioning. In total, the findings of these studies consistently support the feasibility, acceptability, and efficacy of these various alternative approaches. Generalizations for the purposes of evidence-based treatment guidelines, however, cannot be made due to the small number of studies to date, methodological variations across the studies, differences in the samples recruited regarding trauma history, differences in symptom assessment methods, and differences in the outcome measures used. Most of the studies, for example, evaluated a selected subset rather than the entire spectrum of symptoms included in complex PTSD. Lastly, there is little information based on head-to-head comparisons that would allow determination of the relative benefits of traditional trauma-focused treatment with multicomponent sequenced treatments.

Similar difficulties emerge regarding the articulation of evidence-based treatment guidelines for individuals with adult-onset complex trauma histories such as refugees and civilians exposed to war or genocide campaigns. Recommendations regarding treatment approaches have emphasized a phase-based model in which safety and stabilization precedes specific therapies for symptoms (Turner & Herlihy, 2009). The presence of complex symptom profiles has been recognized as requiring attention in treatment (e.g., Beltran & Silove, 1999), as have the psychological and social dimensions typical in this experience including family separation, cultural dislocation, and ongoing fear for family members remaining in the country of origin. The authors of a recent literature review (Nickerson, Bryant, Silove, & Steel, 2011), which identified 19 empirical treatment studies, concluded that traumafocused treatment may have some efficacy in treating PTSD in

refugees, but that multimodal approaches, including those with a stabilization phase, may alleviate other mental health and psychosocial difficulties experienced by refugees, and presumably not assisted by trauma-focused approaches.

Given the limited data regarding optimal treatment for the symptoms of complex PTSD, ISTSS conducted a survey to obtain expert opinions regarding recommendations for treatment. Health service providers rely on the reports of expert opinion to fill the gap between the recognition of a significant clinical problem and the presence of a cumulative and determinative body of empirical evidence about how best to treat the problem (see Brook et al., 1986). In addition, the presence of consensus among experts, or the lack thereof, may identify important questions and directions for future research.

The survey reported here was modeled directly on that used by the experts in the Foa et al. (1999) Consensus Guidelines for PTSD. The survey first covered the most frequent, impairing, and difficult-to-treat symptoms described in the complex PTSD diagnostic formulation. This was followed by items about the overall treatment approach as well as the most effective interventions for specific types of symptoms. The final questions in the survey focused on the most specific and crucial treatment decisions that need to be made in practice across different phases of treatment, and included preferred modalities of treatment, expected duration of treatment, and expected course of improvement.

METHOD

The proposal for conducting the expert survey was initiated by the Complex Trauma Task Force of ISTSS. The completion of the survey and review of its outcome is the first in a series of steps intended to determine the potential benefit of developing ISTSS treatment guidelines for complex PTSD. The survey was vetted and approved by the ISTSS Board of Directors in June 2008.

Participants

The panel of experts was selected through a process of peer nomination (Kahn, Docherty, Carpenter, & Frances, 1997). The set of experts was comprised of 25 individuals recognized as expert clinicians in the treatment of complex PTSD and 25 individuals recognized as experts in the treatment of standard PTSD (PTSD without DESNOS). The survey intentionally included experts who ranged in theoretical allegiance and public views about complex PTSD to assess the presence of consensus, if any, across individuals with differing types of clinical and research experiences and personal history with ISTSS. Experts were identified through list generation of names; each member of the Task Force was requested to identify 10 clinical experts in complex PTSD and 10 in PTSD. After this list of names was generated, candidates for the survey were identified as expert in either complex PTSD or PTSD by their publication record. Candidates for the

survey were required to have at least two peer-reviewed articles as confirmed by searches in Medline and PsychLit. All of the complex PTSD experts had publications describing, evaluating, or treating complex PTSD or DESNOS. All of the PTSD experts had publications concerning the treatment of PTSD, but none which focused on complex PTSD (see Appendix A for the list of panelists).

Procedures

The complex PTSD symptom profile was comprised of 11 symptom domains. Three represented the DSM-IV-TR PTSD symptom clusters of reexperiencing, avoidance/emotional constriction, and hyperarousal; eight symptom clusters were derived from the DSM-IV-TR associated features. The eight symptom clusters were organized according to the five broad domains of problems described in the introduction. Emotion regulation difficulties included (a) affect dysregulation (e.g., highly reactive, inhibited/explosive anger), and (b) behavioral dysregulation (e.g., self-harm, aggression towards others, risk taking). Relational capacity disruption included the symptom of (c) relational difficulties (e.g., conflictual or chaotic relationships, preoccupation with or avoidance of relationships). Alterations in attention and consciousness included (d) attentional disturbance (e.g., difficulty following directions, completing tasks), (e) state-like dissociation (e.g., derealization, depersonalization), and (f) more enduring dissociative disturbances in self-concept (dissociative identity disturbances). Adversely affected belief systems was indexed by (g) disturbances in systems of meaning (e.g., feeling permanently damaged, ineffective, ashamed, and despairing). Somatic distress/disorganization symptoms included (h) chronic pain, parts of the body are numb or para paralyzed. The specific items used in the survey for each of the symptom categories were derived from established symptom measures of PTSD (e.g., Foa, 1995) and symptoms of complex PTSD (e.g., Briere, 1995). The items submitted by the Task Force were subjected to repeated rounds of review until agreement on the operationalization and inclusion of all items was obtained.

The method for eliciting expert opinion, a single-round, mailin survey rather than an in person process, allowed for a larger number of experts and avoided the undue influence of dominant personalities as well as the potential revision of ratings resulting from comparison with others and with the distribution of opinion (see Kahn et al., 1997).

The format, order, and content of survey questions was identical to those in the PTSD expert consensus survey (Foa et al., 1999) and differed only in that the questions referred to the definition of complex PTSD elaborated above. Experts were asked to provide ratings regarding the most appropriate treatment approach, the general efficacy of various interventions for complex PTSD as a whole, and the efficacy, safety, and acceptability of the

interventions for each of the 11 symptom sets individually. To reduce response bias in recommended therapies, treatments were not referred to by specific names (e.g., prolonged exposure), but rather were identified in a generic way (e.g., exposure therapy; see Appendix B). Information regarding the appropriateness of the format, frequency, and duration of treatment was also obtained using the same rating system.

Due to space limitations, this report provides responses only to the above questions. The survey also contained items about whether the expert's choice of psychotherapy technique was affected by type of complex trauma history, presence of comorbid diagnoses, and age of the patient. Questions about preferences in medication or use of alternative psychosocial modalities were also queried. Detailed results obtained from the entire survey as well as ratings as a function of expert group (which differed little) are planned to be provided in the future through a public access venue (e.g., ISTSS website).

Measurement

The response options for the ratings were identical to those used in the 1999 PTSD survey as well as in expert surveys of other psychiatric disorders. These were originally developed by the RAND Corporation for ascertaining expert consensus (see Kahn et al., 1997). A 1 to 9 rating scale was used with the anchor points relevant to the type of item. Anchors for judging the appropriateness of a technique used the following anchors: 7-9 = Usually appropriate: a first-line treatment you would often use; 4-6 = Reasonable: a second-line treatment, a treatment you would sometimes use under certain conditions (e.g., due to patient preference or if first-line treatment is ineffective, unavailable, or unsuitable); 2-3 = Usually inappropriate: a treatment you would rarely use (e.g., it is often ineffective or poorly tolerated); 1 = Extremely inappropriate: a treatment you would never use in regard to its overall appropriateness. The same format was used to judge the effectiveness, safety, and acceptability of a technique for each of the 11 symptom sets. Effectiveness was defined as "likely to decrease complex trauma symptoms by 75% and improve general functioning"; safety was defined as "unlikely to increase severity of symptoms, impulsive behaviors, or suicidality"; and acceptability was defined as "likely to promote engagement, responsiveness, and retention in treatment" (Foa et al., 1999).

The 1–9 rating scale was also used to rate the 11 complex PTSD symptom domains in regard to their frequency and associated impairment. Anchors for the 1–9 rating scale regarding the frequency of the symptoms were as follows: 1-3 = Almost never or rarely present; 4-6 = Sometimes present; 7-9 = Usually or almost always present. Anchors for the ratings on impairment were 1-3 = Minimal or modest contributor to impairment; 4-6 = Moderate contributor to impairment; 7-9 = Substantial contributor to most important contributor to impairment.

Data Analysis

Following Foa et al. (1999) and as recommended by Kahn et al. (1997), consensus was defined by use of the mean score and confidence interval as applied to categories of ratings. The distribution of the experts' ratings on the overall appropriateness of an intervention or approach was organized into three categories: first line (scores 9-7)—indicating a judgment that the intervention or approach was appropriate for use, second line (scores 6-4) indicating a judgment that the intervention or approach was appropriate as an alternative or under specific conditions, and third line (scores 3–1)—indicating a judgment that the intervention or approach was usually inappropriate. Answers to queries regarding effectiveness, safety, and acceptability were similarly organized into three categories based on the same range in scores. We then calculated the mean, standard deviation, and confidence interval (CI) for each item, along with the distribution of ratings in percent. The interpretation of the ratings was based on the CI of each item, which provides a statistically calculated range in which there is a 95% chance that the mean score would fall within that range if the survey were repeated with a similar group of experts. The CIs for each treatment option are shown as horizontal bars in Figures 1-5. If the bars do not overlap, there is a statistically significant difference between the mean scores of the two choices.

It was required that an item be assigned to the category into which the lowest value of the CI fell. Thus, for example, for an intervention to be classified as first line, the entire CI had to exceed 6.5. In cases where the CI straddled second- and first-line categories, the item was designated as a high second-line choice. The range for second line was 3.5 to 6.49, and if any portion of the CI fell below 3.5 an item was designated as third line.

RESULTS

Symptoms: Presence and Impairment

Ratings regarding the relative presence of each of the 11 symptom domains defining complex PTSD showed a range of results. The three standard PTSD symptom clusters were rated as *Usually or always present* with the following proportions: avoidance 84%, reexperiencing 80%, and hyperarousal 78%. The number of experts who endorsed ratings of *Usually or always present* was equivalent or numerically higher for three other symptom sets: affect dysregulation 93%, relationship disturbances 87%, and disturbances in systems of meaning 76%. Ratings for the remaining symptom sets rank ordered by percent endorsing symptoms as *Usually or always* present were behavioral dysregulation 60%, attentional difficulties 53%, somatic symptoms 49%, dissociative symptoms 48%, and identity dissociation/disturbances 27%.

Ratings on impairment were similar. The two symptoms that were most commonly endorsed as substantial contributors to impairment were affect dysregulation 94%, and relationship distur-

bances 94%. These were followed by behavioral dysregulation at 78%, reexperiencing at 69%, avoidance and dissociation at 67%, hyperarousal at 65%, disturbances in systems of meaning at 59%, identity disturbances at 52%, attention dysregulation at 42%, and somatic symptoms at 35%.

Treatment

The majority endorsed a phase-based approach as a first-line treatment approach for complex PTSD patients. Agreement was high with 82% of respondents placing their score within the 7–9 categories. The mean was also in that range and the lower bound of the CI exceeded 6.5 (CI = [7.5, 8.5]). Each treatment approach was rated separately such that any approach could be rated as a first-line intervention, independent of (and in addition to) other interventions. Given this, it is of note that the majority of experts did not choose to select the combined use of skills training and memory processing or use of skills training as a first-line intervention. There was consensus that the use of a treatment approach which focused primarily on memory processing was usually inappropriate. These results are presented in Figure 1.

There was agreement regarding overall effectiveness, safety, and acceptability that two treatments were extremely or usually effective: narration of trauma memories and emotion-focused or emotion regulation interventions. Three other treatments were rated as top second-line interventions: cognitive restructuring, education about trauma, and anxiety and stress management as can be seen in Figure 2. Regarding ratings of individual interventions, most were rated as extremely or usually safe. Case management, meditation and mindfulness, and narration of trauma produced ratings whose CIs straddled first- and second-line categories, suggesting that the interventions were viewed as usually safe. There were two interventions for which ratings of safety were equivocal: bilateral stimulation, and sensory motor and movement strategies. These are in Figure 3. Ratings of acceptability (whether an intervention was likely to promote patient engagement, responsiveness, and retention in treatment) yielded three interventions designated as first line: education about trauma, emotion-focused and emotion regulation interventions, and anxiety and stress management. All of the others were rated as high second-line interventions except for bilateral stimulation and sensorimotor and movement strategies; these were rated as having equivocal acceptability (see Figure 4.)

In summary, emotion focused and emotion regulation strategies were the only type of intervention that received first-line ratings in effectiveness, safety, and acceptability. Effective first-line and top second-line interventions that also achieved, or were very close to, first-line safety and acceptability ratings were education about trauma, anxiety, and stress management, and cognitive restructuring.

Table 1 lists all of the interventions for which there was agreement among raters that the intervention was viewed as first-line

			95%	6 Con	fidence	e inte		Experts' ratings (%)						
		3 rd lin	ie	2	2 nd line			1 st line				1 st line	2 nd line	3 rd line
Approach	1	2	3	4	5	6	7	8	9	Μ	SD			
Sequenced treatment										8.0	1.6	85	15	0
Primarily coping skills										5.3	2.2	34	40	26
Combine processing and skills										4.3	2.4	27	23	50
Primarily memory processing										2.7	2.1	7	17	76

Figure 1. Ratings of overall approach to treatment of complex posttraumatic stress disorder.

choice (column 2) and top second-line choice (column 3) for specific symptom sets as designated targets of treatment. Education about trauma was rated as a first-line intervention for all 11 symptom clusters. This was followed by emotion-focused and

emotion regulation interventions, which was rated as a first line intervention for 6 of the 11 symptom clusters. Less wide applicability characterized cognitive restructuring and anxiety and stress management (2 of 11 symptom clusters); narration of trauma and

				95% Co	nfidenc	e interv	al					Exp	Experts' ratings (%)		
		3 rd lir	ne		2 nd line	,		1 st line				1 st line	2 nd line	3 rd line	
Effectiveness	1	2	3	4	5	6	7	8	9	М	SD				
Narration of trauma memory										7.3	1.4	75	23	2	
Emotion regulation interventions										7.0	1.5	65	35	0	
Cognitive restructuring										6.7	1.8	55	41	4	
Education about trauma										6.6	2.1	55	33	12	
Anxiety/stress management										6.0	1.9	49	41	10	
Interpersonal/social skills										5.8	1.8	33	55	12	
Meditation/mindfulness										5.6	2.0	36	47	17	
Sensorimotor/movement										4.3	2.4	22	33	45	
Bilateral stimulation										4.3	2.4	18	36	46	
Case management										4.1	1.7	4	57	39	

Figure 2. Rank ordering of overall effectiveness ratings for complex posttraumatic stress disorder. Effectiveness was defined as likely to decrease complex trauma symptoms by 75% and improve general functioning.

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		95% Confidence interval										Experts' ratings (%)			
		3 rd lin	ie		2 nd line			1 st line				1 st line	2 nd line	3 rd line	
Safety	1	2	3	4	5	6	7	8	9	М	SD				
Education about trauma										8.2	1.0	96	4	0	
Anxiety/stress management										7.8	1.5	86	12	2	
Cognitive restructuring										7.4	1.4	86	12	2	
Emotion regulation interventions										7.0	1.5	72	26	2	
Interpersonal/social skills										7.0	1.5	71	25	4	
Case management								l		6.9	2.1	66	27	7	
Meditation/mindfulness										6.6	1.8	65	29	6	
Narration of trauma										6.5	1.6	55	45	0	
Bilateral stimulation										5.3	2.4	30	50	20	
Sensorimotor/movement strategies										5.1	2.4	35	35	30	

Figure 3. Rank ordering of overall safety ratings for complex posttraumatic stress disorder. Safety was defined as unlikely to increase severity of symptoms, impulsive behaviors, or suicidality.

interpersonal skills were deemed applicable for only 1 of 11 symptom clusters.

Apart from the repeated endorsement of education about trauma, the respondents' ratings indicated a strong preference for tailoring interventions to specific symptoms: emotion-focused interventions were the most strongly recommended intervention for affect dysregulation symptoms, interpersonal effectiveness skills training for relationship disturbances, cognitive restructuring for disturbances in systems of meaning, narration of trauma for reexperiencing symptoms, and anxiety and stress reduction interventions for hyperarousal and somatic symptoms. Notably, meditation and mindfulness interventions were not endorsed as first-line interventions for any symptom set, but were frequently mentioned as a top second-line intervention for many types of target symptoms (6 of 11 categories), reflecting experts' belief that they are important interventions but are not by themselves sufficient. Other than psychoeducation, the three most valuable types of interventions for the treatment of the full range of complex PTSD symptoms, identified by their frequent endorsement as either a first- or top second-line interventions were emotion regulation interventions, rated as a first- or top second-line for all 11 symptom categories, narration of trauma (9 of 11 categories), and cognitive restructuring (8 of 11categories).

Ratings of treatment modalities identified individual therapy as a first-line approach during the first phase of treatment and individual plus group and therapist-led structured groups were designated as top second-line approaches. The use of individual therapy was identified as a first-line approach for the processing of trauma memories, and group work combined with individual therapy received a top second-line rating. The CIs for group work as a modality for trauma memory processing fell between second-and third-line and are presented in Figure 5.

Ratings were made on appropriate treatment frequency and duration. Weekly sessions were identified as first-line during the initial phase of treatment, while two-to-three times a week session work was rated as a top second-line approach. Weekly sessions were rated as the first-line approach for processing of trauma memories, regardless of when they took place in the treatment, with no other approach receiving ratings high enough to be considered as second line or higher. Ratings were obtained regarding how long to continue a treatment approach taken in the initial phase of work following an observed good response as well as how long it typically took for an initial good response to be observed. Among the response options offered (1, 3, 6, 12, or 24 months or more), the most highly endorsed option was 3 months (M = 6.1, CI = [5.5, 6.8]), suggesting that raters viewed this interval as a time during

	95% Confidence interval										Experts' ratings (%)			
	3 rd line				2 nd line		1 st line					1 st line	2 nd line	3 rd line
Acceptability	1	2	3	4	5	6	7	8	9	М	SD			
Education about trauma										8.0	1.4	86	14	0
Emotion regulation interventions										7.1	1.2	74	26	0
Anxiety/stress management										7.1	1.7	68	30	2
Cognitive restructuring										6.9	1.7	66	30	4
Interpersonal/social skills										6.7	1.5	61	37	2
Meditation/mindfulness										6.3	1.9	52	38	10
Narration of trauma memory										6.2	1.6	46	52	2
Case management										6.2	2.0	45	41	14
Bilateral stimulation										5.0	2.3	27	43	30
Sensorimotor/movement strategies						I				4.8	2.0	16	65	19

Figure 4. Rank ordering of ratings of overall acceptability for complex posttraumatic stress disorder. Acceptability was defined as likely to promote engagement, responsiveness, and retention in treatment.

which it was usually likely improvement would be observed. No treatment duration for the consolidation of treatment gains was rated as extremely appropriate. The most highly rated interval for consolidation of positive response was 3 months (M = 6.1, CI = [5.5, 6.7]).

Considering that patients had a good response to trauma memory work, raters indicated what length of time they would commit to this activity before viewing it as completed or taking a break from it with rating options of 1 week, 1 month, 3 months, and 6 months. No timeline was identified as a first-line approach, but the ratings for 1 month and 3 months were 5.4 with CIs of [4.5, 6.2] and [4.8, 6.3], respectively, placing them squarely in second-line approaches. Responses were reviewed to determine whether a first-line designation for any particular time period would emerge within subgroups of raters depending on which overall approach to treatment they endorsed or whether they endorsed trauma memory processing as a first-line intervention. Even within these subgroups, no time interval obtained a first-line rating.

Items were rated about frequency of treatment during a third or maintenance phase (identified as a 6- to 12-month interval during which the patient is in remission) and conditions for extending treatment. Weekly tapering over time was rated as a first-line approach whereas maintenance visits every 2 weeks or monthly were

identified as equivalent top second-line approaches. Extending treatment was identified as a first-line response to factors creating risk for relapse that would support continuing psychotherapy when current life stressors were present. Extending treatment was designated as a high second-line approach (usually appropriate depending on conditions) in the presence of poor social support, poor functioning when symptomatic, and high suicide risk based on history.

DISCUSSION

Here we report on experts' ratings to survey items regarding the treatment of complex PTSD that was intended to serve as the basis for the development of best practice guidelines. A major concern in such an enterprise is whether or not experts will agree regarding what constitutes the set of symptoms comprising complex PTSD and how best to treat them. Substantial agreement was found among experts in their characterization of complex PTSD, an approach to its treatment, and types of interventions that were considered appropriate. There was no strong agreement about periods that were expected for overall duration of treatment, nor for initial or later phases of work.

Table 1. First-Line Interventions and Top Second-Line Interventions Targeted to Symptom Sets

Most prominent symptom set	First-line interventions	Top second-line interventions				
Reexperiencing	Education about trauma Narration of trauma memory	Cognitive restructuring Emotion regulation interventions Anxiety/stress management				
Avoidance/constriction	Education about trauma Emotion regulation interventions	Cognitive restructuring Narration of trauma memory Mediation/mindfulness Interpersonal skills training				
Hyperarousal	Education about trauma Emotion regulation interventions Anxiety/stress management	Narration of trauma memory Cognitive restructuring				
Affect dysregulation	Education about trauma Emotion regulation interventions	Cognitive restructuring Meditation/mindfulness Anxiety reduction Narration of trauma memory Interpersonal skills training				
Relationship difficulties	Education about trauma Interpersonal skills training Cognitive restructuring	Emotion regulation interventions Narration of trauma memory				
Disturbances in meaning	Education about trauma Cognitive restructuring	Narration of trauma memories Emotion regulation interventions				
Behavioral dysregulation	Education about trauma Emotion regulation interventions	Cognitive restructuring Interpersonal effectiveness Meditation/mindfulness				
Attentional dysregulation	Education about trauma Emotion regulation interventions	Meditation/mindfulness Anxiety/stress management Narration of trauma memory				
Somatic symptoms	Education about trauma Anxiety/stress management	Emotion regulation interventions Narration of trauma memory Cognitive restructuring				
Dissociation	Education about trauma Emotion regulation interventions	Narration of trauma memory Anxiety/stress management Meditation/mindfulness				
Identity disturbance	Education about trauma	Emotion regulation Meditation/mindfulness				

The majority of raters endorsed 9 of the 11 symptom sets of the proposed psychological sequelae of complex PTSD as usually or always present in patients experiencing complex trauma histories. Indeed, the frequency of endorsement regarding the presence of affect dysregulation, relationship disturbance, and disturbed systems of meaning was equivalent to and often numerically higher than those for the *DSM-IV* PTSD clusters of reexperiencing, avoidance, and hyperarousal. A similar pattern was observed for ratings

of impairment where the majority identified affect dysregulation, relationship disturbances, and dissociation as substantial contributors to impairment along with symptoms of reexperiencing, avoidance, and hyperarousal. Despite the unanimity of experts' beliefs, evidence concerning the presence and discriminability of complex PTSD versus PTSD in complex trauma populations is limited. Progress in the assessment of trauma populations requires advances in the development, testing, and routine use of reliable

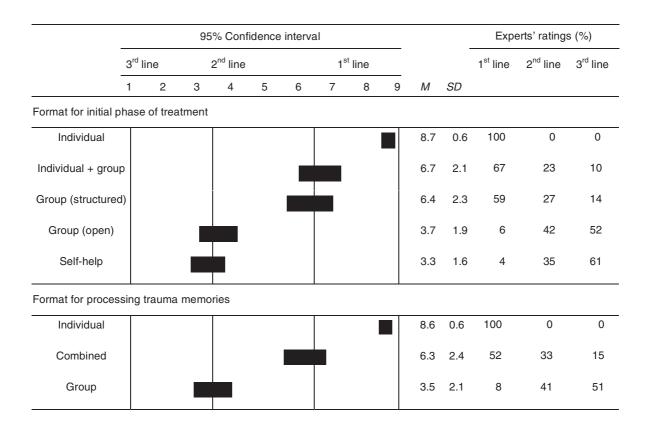


Figure 5. Ratings for preferred treatment modalities for complex posttraumatic stress disorder.

assessment measures that include items representing the full range of symptoms that follow single or complex trauma exposure.

The majority identified a treatment approach that was sequenced and involved the use of multiple types of interventions tailored to the most prominent symptoms. Although there are substantial data identifying the effectiveness of brief traumafocused treatments for patients with complex trauma histories (see Cahill et al., 2009), expert opinion reflects the belief that multicomponent, phase-based approaches will provide even greater benefits. The endorsement of a phase-based approach is consistent with published guidelines by two national organizations that have endorsed phase-based approaches for complex trauma (National Institute for Clinical Excellence [NICE], 2005), where recommendations for the initial phase of treatment include attention to the individual's safety (NICE, 2005), and improving self-management or emotion regulation skills (Australian Centre for Posttraumatic Mental Health, 2007).

Survey results indicate that narration of trauma memories was designated as a highly effective first-line intervention. There were mixed ratings, however, regarding its safety and acceptability. Narration of trauma memories did not achieve a first-line rating for either being safe (unlikely to increase severity of symptoms) or acceptable (likely to promote engagement, responsiveness, and

retention in treatment). In light of the arousal and distress management difficulties experienced by patients with complex PTSD, it is understandable that the revisiting of traumatic memories is considered a sensitive endeavor. Some empirical studies, however, which have included only those with complex trauma histories and subsets of associated complex PTSD symptoms have found that memory processing is reasonably well tolerated and of benefit when conducted in a phase-based or multicomponent fashion (e.g., Chard, 2005; Cloitre et al., 2002).

Ratings concerning preferred techniques for different target symptoms identify the importance of selecting interventions specific to the prominence of a particular presenting problem. Nevertheless, three interventions were repeatedly mentioned as either first-line or top second-line interventions for a range of symptoms (emotion regulation, cognitive restructuring, and narration of trauma), suggesting their importance as core interventions for clinicians to have available in the treatment of complex trauma patients. The two mostly strongly endorsed first-line interventions were education about trauma and use of emotion regulation interventions. The endorsement of psychoeducation about trauma for all 11 symptom categories serves as a reminder of the perceived value of this intervention, which may easily be overlooked, perhaps due to its ubiquitous presence.

There was very strong endorsement of emotion regulation interventions which is consistent with the emerging data indicating the benefits of including emotion regulation interventions described in the introduction section. Meditation and mindfulness interventions were frequently identified as a second-line intervention for six symptom sets (e.g., affect dysregulation, dissociation), an approach to PTSD for which there is some support (Waelde et al., 2008).

No agreement emerged concerning the timeline for treatment. Although research demonstrates that those with PTSD substantially improve in therapies lasting between 9 and 12 weeks, the survey responses suggested a longer treatment course for complex PTSD. There was consensus that life stressors and poor social supports were the greatest risk factors for relapse and that their presence would warrant an extension of treatment. This information suggests that some consideration should be given to the incorporation of interventions that focus on managing life stressors and building social supports.

There are limitations to the survey and the results presented. First, the identified interventions refer to broad classes of intervention, which raters may well have understood and rated differently than would have been the case if terms had been more specific. Though the term *processing of trauma memory* is vague and can include many different specific interventions in a variety of treatment approaches (e.g., imaginal exposure, prolonged exposure, narrative exposure therapy, cognitive processing therapy, telling one's story), nevertheless, the interventions in this class have been found to be similarly effective relative to waitlist and active nonspecific treatments and differ little relative to each other (e.g., Institute of Medicine, 2008).

The treatment recommendations are limited to individuals with complex PTSD as defined in the introduction and the survey did not include items about patients with dissociative disorders. Guidelines are available and are similar in that they recommend a phase-oriented approach, although the specific interventions differ, as does the timeline (see International Society for the Study of Trauma and Dissociation, 2011; Steele & Van der Hart, 2009). We have not discussed nor attempted to distinguish the differences in the formulation of complex PTSD as compared to PTSD cooccurring with Axis I and Axis II disorders in this article. Expert consensus data were collected on treatment recommendations for these symptom profiles and will be reported at a later date.

In summary, despite the above limitations, the current report is of value because it represents the first effort to identify the presence, degree, and nature of agreement among two groups of experts who are often viewed as having opposing opinions regarding complex PTSD and its treatment. For the past decade or more, there has been controversy about whether or not to accept the complex PTSD symptom profile as a separate diagnostic category. Opposing positions have tended to be highlighted in professional forums rather than analyses of a systematic nature that identify points of agreement. This has stalled progress in the formulation and system-

atic investigation of the defining characteristics of this population and the most effective treatment approaches. The information in this report is encouraging, as it has identified the presence of substantial common ground among one set of 50 nominated experts from which best practices guidelines can begin to be developed and future research endeavors can be advanced.

The gap between the evidence and expert opinion about the presence of and interventions for complex PTSD provides a strong rationale for research about complex trauma populations and their treatment. We have three specific recommendations for future research: (a) the development and routine use of brief, reliable measures that assess the full range of symptoms described in PTSD and complex PTSD; (b) evaluation of the relative merits of single-stage trauma-focused therapies versus multicomponent and/or sequential therapies for different symptom sets and different patient populations; and (c) sustained monitoring of symptoms during the course of treatment and during extended follow-up phases in order to identify the speed and durability of treatment effects.

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APPENDIX A: Expert PTSD Clinician Participants

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Note. ^cComplex PTSD expertise.

APPENDIX B: Brief Description of Identified Interventions

Anxiety/Stress Management – A broad class of techniques that focus on the development of coping skills to reduce stress and stress-related difficulties such as muscle ache, rumination, and poor sleep. Techniques include muscle relaxation training, focused breathing or breathing retraining, sleep hygiene.

Cognitive Restructuring – Interventions designed to help individuals alter their understanding of the meaning of their traumatic experiences. Techniques include exploring and revising identified maladaptive cognitions or reappraising the meaning of an event or experience.

Bilateral Stimulation – A class of techniques which include the presence of alternating attention and stimulation such as eye movements which track the back and forth of a visual stimulus (e.g., therapist finger) or through other stimuli such as a tone or tap on body while the individual thinks about or images traumatic memories. The purpose of the intervention is to desensitize the individual to a troublesome memory or thought and reduce overall distress.

Case management – The coordination of services and resources to benefit the patient. This includes medication, employment training, housing, day treatment, HIV testing.

Education about trauma/consequences – Systematic description to patients and their significant others about the symptoms of complex trauma and education about treatments, rationale for treatments and what is known about their efficacy. The goal of education is to provide support to patient by expressing understanding and familiarity with patient's problems and by reassuring client that symptoms and problems can be overcome with time and treatment.

Emotion-Focused Interventions – Techniques that focus attention to and awareness of the individual's emotional experiences for the purposes of clarifying meaning and enhancing appraisal of past, ongoing and future events and to help guide actions and decisions. Emotion regulation interventions focus on improving the individual's ability to manage, modify and express emotions within a range that optimizes achievement of goals.

Interpersonal Effectiveness Training – Interventions focus on improving social skills, identitying and resolving interpersonal difficulties in relationships of various kinds (work, social and intimate relationships) and strengthening positive interpersonal and relational expectations.

Meditation/Mindfulness – Interventions in which directed attention is given to a single stimulus such as one's breath, a sound or a light for a sustained period of time for the purposes of reducing physical and mental stress and improving concentration and sense of well-being. Mindfulness is a class of techniques which draws attention to a variety of subjective experiences such as feelings and sensations without judgement or action with the goal of reducing distress and anxiety and enhancing sense of well being.

Narration of Trauma Memory – Individuals remember and describe the thoughts and feelings associated with a traumatic event for the purposes of tolerating and reducing the distress associated with the memory. This usually, but not always, includes a reappraisal and revision of the meaning of the trauma.

Sensorimotor/Movement Therapies – Interventions that focus on bodily sensations and movement to address and resolve traumatic memories in a nonverbal fashion and to improve attention, decrease dissociation, increase energy and sense of the experience of bodily integration.