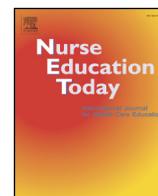




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Practice comparisons between accelerated resolution therapy, eye movement desensitization and reprocessing and cognitive processing therapy with case examples

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ABSTRACT

Recent outcomes for Cognitive Processing Therapy (CPT) and Prolonged Exposure (PE) therapy indicate that as many as 60–72% of patients retain their PTSD diagnosis after treatment with CPT or PE. One emerging therapy with the potential to augment existing trauma focused therapies is Accelerated Resolution Therapy (ART). ART is currently being used along with evidence based approaches at Fort Belvoir Community Hospital and by report has been both positive for clients as well as less taxing on professionals trained in ART. The following is an in-practice theoretical comparison of CPT, EMDR and ART with case examples from Fort Belvoir Community Hospital. While all three approaches share common elements and interventions, ART distinguishes itself through emphasis on the rescripting of traumatic events and the brevity of the intervention. While these case reports are not part of a formal study, they suggest that ART has the potential to augment and enhance the current delivery methods of mental health care in military environments.

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The current challenges faced by U.S. Military Behavioral Health providers may in fact be greater than that of their civilian counterparts, with the overall incidence of mental illness being significantly higher among U.S. Military service members on active duty than among demographically matched civilian populations (Rosellini et al., 2015). Recent emphasis on outcomes for PTSD and current evidenced-based approaches such as Cognitive Processing Therapy (CPT) and Prolonged Exposure (PE) therapy suggest that in spite of a notable reduction in symptoms, as many as 60–72% of patients retain their PTSD diagnosis after treatment with CPT or PE (Steenkamp et al., 2015). Against the backdrop of treatment-refractory PTSD, some argue that current approaches do not comprehensively address the needs of the individual, and thus have suggested augmenting existing evidence-based approaches to directly address shame and guilt using self-forgiveness (Bryan et al., 2015). One such augmentation strategy may potentially be an emerging psychotherapy known as Accelerated Resolution Therapy (ART).

ART applies the core, evidence-based components of trauma-focused therapies by use of a procedural, directive, and short-term approach that is designed to address a single event in a single session, and without homework or repeated re-visitation of the targeted experience or memory (Kip et al., 2014). To date, there are empirical published

data on ART from an uncontrolled prospective cohort study conducted principally among civilians (Kip et al., 2012) and a U.S. Department of Defense (DoD)-funded randomized control trial among service members and veterans (Kip et al., 2013a, 2013b). In addition, a second, large uncontrolled prospective cohort study exclusive to combat veterans and active duty service members is registered at ClinicalTrials.gov (NCT-02030522) and has just been completed, with multiple publications in progress. This study examined the use of ART among both combat veterans and active duty military service members recruited from U.S. combat veteran populations, U.S. Special Forces, clinical populations with refractory PTSD and Military Sexual Trauma (MST), and veterans from the Homeless Emergency Project in Clearwater, FL. In addition, data is being analyzed from a mobile response team that provided veterans with ART sessions at the Eagles Healing Nest in Sauk Center, Minnesota, and several smaller pilot studies examining sleep and other markers of bioactivity are in progress.

In aggregate, ART has shown promising results for the effective treatment of PTSD (Kip et al., 2012; Kip et al., 2013a, 2013b), Military Sexual Trauma (MST) (Kip et al., 2015), depression (Kip et al., 2013), and pain (Kip et al., 2014a). ART was classified in 2015 by the U.S. Substance Abuse and Mental Health Services Administration (SAMHSA) National Registry of Evidence-Based Programs and Practices (NREPP) as an evidence-based therapy effective for trauma and stressor-related disorders and symptoms, depression and depressive symptoms, and personal resilience/self-concept. SAMHSA's evidence

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review process parallels that of the National Institute for Health and Clinical Experience (NIHCE).

ART embodies the core components of trauma-focused therapies and has widespread potential to be disseminated to licensed therapists who are skilled in these trauma-focused models. Much of this potential is based on the brief three-day training model that is used for the Basic ART protocol. After completing this three-day experiential training course, licensed therapists can immediately incorporate ART into their practice.

ART is typically delivered as one 60- to 120-min session weekly, or under certain circumstances, multiple sessions can be delivered during a single week. The underlying premise of ART is that imaginal exposure to traumatic memories reactivates every component of the memory, including physical sensations, emotions, cognitions, images, and perceptions. While these memories are activated and before they are reconsolidated, they are malleable and can even be given a positive valence. ART not only instills this positive valence, but helps clients reconsolidate their memories in a way that maintains it, usually for an extended period of time.

A typical ART session begins with a series of eye movements much like Eye Movement Desensitization and Reprocessing (EMDR). The therapist directs the client to focus their attention on any distressing physiological sensations and suggests creative tools to help the client eliminate them. Clients are then desensitized to a traumatic memory using a step-wise process that involves eye movements and visualization of specific parts of the memory, as well as therapist-directed elimination of distressing thoughts, emotions, sensations, or images. Each component of the memory is addressed, including other life experiences that may be influencing the index memory, until the client can recall the target memory without distress. The therapist also directs the client to rescript the memory, suggesting creative new versions that connote safety, confidence, mastery, and even joy. The client remains in control throughout the session, free to change the scene in whichever way he or she chooses, and to add as many creative elements as he or she desires.

The length of the session will vary according to the client's level of distress, the richness or variety of memory components, and the number of related life events. For example, a combat memory may be restricted to a single brief experience, or it may be so complex that the therapist must break it into several smaller memories within a larger sequence of events. These smaller memories are addressed individually in sequence during a single session until the entire event can be cohesively recalled without distress. For a more detailed description of ART, see Finnegan et al. (2015) and Kip et al. (2014b).

The aim of this paper is to describe the initial adoption of ART as a stand-alone and supplemental intervention at Fort Belvoir Community Hospital (FBCH), a U.S. military hospital near Washington, D.C. This article reflects the experience and perceptions of many providers at FBCH trained in ART, who are also proficient and experienced in the use of the first-line evidence-based therapies for PTSD, i.e. CPT, EMDR, and PE. This work emphasizes many of the common elements between ART, CPT, and EMDR. PE is not included in this analysis since the authors concluded that a discussion of PE, which would involve a requisite review of basic psychological theories, principles, and terminology, would be beyond the scope of this article.

1. Utilization of ART at Fort Belvoir Community Hospital

FBCH's experience with ART began in June 2014, when the University of South Florida College of Nursing (USF) hosted a Basic ART training for federal and military providers. An initial cohort of seven providers attended this training, including the hospital's Director for Behavioral Health (WW). Each provider was experienced treating PTSD in military populations and quickly recognized the potential advantages ART can offer over current treatments for PTSD. Their collective enthusiasm and early treatment successes generated a growing curiosity about ART

among other clinicians, whose interest led to the scheduling of additional ART trainings.

In April 2015, a survey of ART practitioners trained up until that point at FBCH revealed impressive results. Sixteen of the eighteen providers surveyed responded, yielding a response rate of 89%. Each of the survey's respondents had been trained in at least one other evidence-based therapy for PTSD, including thirteen in CBT, twelve in CPT, thirteen in PE, and five in EMDR. Nearly all (88%) of the respondents believed that ART was easier on the client than other PTSD therapies, and 69% felt that ART was easier on the provider. Interestingly, each of the five providers previously trained in EMDR (the therapy most similar to ART) felt that ART was easier on both the client and the provider.

Specific benefits of ART over other therapies as perceived and reported by providers included the fact that ART is very directive and efficient, while still leaving the client in control of the session. With ART, the client can select which images to process, how to rescript them, and even how many (or few) details to reveal about their trauma and rescripted scenes to the therapist. FBCH providers have also noted that ART's use of metaphors and mindfulness techniques gives the therapist "more than just tissues" to help clients process powerful emotions, distressing sensations, and painful feelings of guilt and shame. Additionally, they reported ART to be enjoyable at times, particularly when patients use creativity and playfulness to rescript painful traumatic events. Patients frequently describe feeling "calm" and "relieved" at the end of their ART sessions. One patient recently told his therapist after his second ART session that after a year of doing CPT, he "finally felt like [he] could move forward."

To date, an impressive cadre of fifty FBCH providers has been trained in Basic ART and fifteen have been trained in Advanced and Enhanced ART. WW has purposefully distributed ART training opportunities to behavioral health providers throughout the FBCH health care system. This has created a broad network of ART therapists working in a variety of clinical settings at FBCH, including outpatient, inpatient, substance abuse, school-based, partial hospitalization, and traumatic brain injury programs. This purposeful distribution has enhanced provider collaboration and has also facilitated continuation of ART treatment as clients transition from one care setting to the next. WW ensures continuity in training and supervises the utilization of ART across FBCH, to include ensuring that each trainee receives an organized binder of ART-related forms, templates, patient logs, and scientific articles to facilitate rapid application of their training.

The vast majority of ART-trained providers at FBCH quickly incorporated this versatile therapy into their existing programs and daily practices. However, as perhaps expected, a small minority of clinicians have been slower to implement ART. Those whose practices did not explicitly involve trauma or whose schedules did not easily accommodate 90- to 120-min ART sessions were among this cohort. WW addressed these issues by emphasizing ART's diverse application during each training session, and also by authorizing two 90-min appointments each week for all ART-trained providers. Each clinical service has also been allocated time once a month for an ART case conference so that providers can share their challenges, successes, and new techniques.

Informal provider feedback continues to be extremely positive and suggests that ART has clearly enhanced the staff's ability to manage complex trauma cases. More importantly, however, ART has greatly enhanced the collective competence, confidence, and job satisfaction of FBCH behavioral health providers. Positive comments have included the following: (Table 1)

The following theoretical comparisons and case examples were provided by ART-trained clinicians at FBCH in order to share their perspective on the theoretical and clinical benefits of ART as experienced in clinical practice. These descriptions are not intended as a comprehensive or empirical comparison of competing therapeutic approaches, but rather are intended to stimulate discussion on ways to enhance efficiency and effectiveness in clinical practice.

Table 1
Informal provider feedback.

Positive comments
Patients who have avoided trauma work in the past are much more willing to engage in this therapy.
I love ART as it is extremely effective for PTSD and simple phobias.
The confidence I have now as a provider to effectively treat imminent suicidality, grief, PTSD, and phobias is invaluable.
With other conditions [besides PTSD] like anxiety and depression, it is an excellent tool used in combination with the therapeutic alliance, psychodynamic psychotherapy, CBT elements, and other therapeutic interventions.
It allows the underlying psychodynamic issues to rise up so the patient has insight and better clarity of the problem(s).
I believe it to be absolutely the best, most effective, and expeditious intervention for trauma resolution in children/adolescents.
When using traditional therapy, therapists may experience hopeless feelings when patients are not making progress in treatment. However, ART has given me tremendous confidence that no single barrier can hold me back. By using metaphors/images, it becomes much easier to enable patients to have life-altering options.
Most soldiers tend to prefer more action-oriented approaches, so the eye movements are a great start with psychotherapy, rather than intellectualized approaches.
I love using ART. I haven't used CPT, which was my main trauma treatment prior to ART, in several months and my patients are getting much better quicker. It's fantastic.

2. EMDR and ART

2.1. Theoretical Similarities

EMDR is another eye movement-based psychotherapy that was initially viewed with great skepticism, but has gained popularity since its endorsement by the American Psychiatric Association in 2004 (APA, 2004). EMDR has accumulated a large body of evidence and is among the top three evidence-based therapies adopted by the DoD for the treatment of combat-related PTSD (DoD/VA, 2010). From a theoretical perspective, both EMDR and ART rely upon the assumption that traumatic memories are stored as images, smells, and sensations, and both postulate that confronting and analyzing these memories through imaginal exposure and somatic processing is the key to mastering them (Shapiro, 2001; Kip et al., 2014).

2.2. Common Elements

The most obvious common element between EMDR and ART is the use of eye movements. EMDR also permits alternative modalities for bilateral stimulation, such as tapping, vibrating, and beeping, although the efficacy of these methods has been challenged (Van den Hout and Engelhard, 2012). In addition to providing sensory input, the eye movements also provide a grounding focal point for the client's attention, a calming sensory rhythm, and a means of distracting the client from competing images, sensations, and cognitions that frequently flood the body during imaginal exposure. Both EMDR and ART also incorporate intermittent body scans, which help clients to appreciate the effect of trauma on the body and provide an important psychoeducational component to the therapy. Additionally, both EMDR and ART direct the client to visualize a traumatic scene, they both view success as the instillation of a positive feeling or cognition by the end of the session, they both include techniques to review earlier life traumas, and they both provide the client with a relatively high degree of autonomy over their treatment.

2.3. Divergent Elements

Despite these similarities, however, EMDR and ART differ in a number of significant ways. With EMDR, the therapist's guidance is generally free-associative and open-ended, e.g. "What do you get now? Okay, go with that." In contrast, the ART therapist gives the client specific

instructions on what to do next, e.g. "Check your body from head to toe. What sensations do you have? Okay, notice that [sensation] and follow my hand." The Basic ART protocol is a series of explicit procedural steps augmented with modules involving metaphors, mental exercises, and gestalt techniques. In this respect, ART provides the therapist with more opportunities for verbal direction than EMDR and tends to impart a sense of mastery and creativity more quickly than EMDR.

Another key difference is that ART prioritizes the elimination of uncomfortable body sensations above all other therapeutic work, theorizing that clients cannot effectively process their traumas while in a high state of distress. The therapist doesn't advance the client in the protocol until all distressing sensations have been eliminated or reduced to a nominal level. For highly distressed clients, an entire ART session may consist of sensation processing.

A unique component of ART is the use of rescripting to positively modify traumatic images, while allowing the client to retain factual knowledge of the event. Such modification of traumatic imagery has been described as a powerful, if not preferred, means of processing traumatic material (Smucker, 1997). While some EMDR therapists do encourage their clients to use positive imagery during eye movements, ART explicitly promotes mastery through this rescripting process, which is also supported by bench research demonstrating the effectiveness of stimulus replacement in trauma desensitization (Dunsmoor, 2015). ART's emphasis on completely rescripting at least one distressing event within each session is in contrast to EMDR's emphasis on revisiting the same memory as many times as is necessary for comprehensive processing.

While efficient in this sense, therapists trained in both EMDR and ART have noted that ART typically requires longer sessions (90 min minimum) than EMDR, which can create challenges in some practice settings. However, the additional time investment may be worth the gain, as it is not uncommon for clients to experience significant relief in just one or two ART sessions and to tolerate several weeks between sessions.

2.4. The Trauma Narrative

In EMDR, the client must share at least a few details of the traumatic event being processed in order to orient the therapist to the most significant image, cognition, and emotion associated with the trauma. In ART, however, the trauma "narrative" is visual; it is played out mentally by the client, who is permitted to share as many or as few details he or she feels comfortable doing. Many ART clients have actually achieved resolution of their distress without sharing any details of their trauma with the therapist, making ART a useful modality for patients who cannot or prefer not to talk about their trauma.

2.5. Case Example: EMDR and ART

A 50-year-old retired senior enlisted soldier was working in a management position at a federal law enforcement agency. He was referred for EMDR by a social work intern, who had been treating his PTSD for two months using CBT, mindfulness, and stress reduction techniques with limited improvement. The client's primary trauma was an explosion he had experienced while deployed.

The client had become increasingly avoidant, hyper-alert, and anxious following the explosion; at the time of the evaluation, he was experiencing flashbacks and nightmares two or more times per week. He had been sleeping in his garage for the past twenty-one years, stating it was the only place he felt safe. He was avoidant of social situations and had panic symptoms at work when higher threat levels were announced. His new wife prompted him to request psychotherapy because she was not willing to accommodate this behavior any longer. In therapy, he recognized that this problem, along with his PTSD symptoms, contributed to the demise of his first two marriages.

The client consented to EMDR and was pleased with the effectiveness of the Calm Safe Place (CSP) technique in reducing his anxiety. He placed his traumatic memories in a guided imagery “container” before leaving the session and was told he may continue to process the material and to use his CSP as needed. After his first EMDR session, he stated that he felt calm and was able to tolerate thinking of the explosion.

The following day, the client told his psychiatrist that he had experienced a panic attack in the parking lot after his EMDR session. He canceled his next two EMDR appointments, but agreed to come in and discuss his response to the technique with his therapist. He stated that following the EMDR session, his daily anxiety increased and he experienced more nightmares about the sound of the explosion. He agreed to another EMDR session, but eventually canceled this appointment as well.

The client returned three months later and reported that he had increased his use of alprazolam to cope with his anxiety and panic attacks, which were significantly limiting social activities with his wife. He remained unable to sleep in the bedroom. His therapist, who had since been trained in ART, explained that ART might more effectively address the negative images, sound of the explosion, and sensations he had experienced in previous therapy sessions. He was receptive but understandably anxious. The client canceled one additional appointment, and then finally came in for his first ART session.

During the session, he experienced considerable anxiety, but was able to reduce it as he progressed through the Basic ART protocol. The client rescripted the explosion scene, and after some initial resistance, also rescripted residual “snapshots” of the event. Additionally, he reported being able to visualize himself handling future stressful events well. His Subjective Units of Distress (SUD) score decreased from 10 (most intense) to 1 (least intense) by the end of the session. He agreed to schedule two talk therapy appointments and another ART session.

At his first follow-up appointment, the client reported less anxiety in general, said he was able to go to restaurants and movies, and reported a moderate decrease in his anxiety in the bedroom, where he was able to fall asleep some nights. He had dreamed about the explosion, but it had not triggered the same anxiety he had been having before ART. By the time of his second talk therapy appointment, the client was no longer having dreams about the explosion and he was able to go to movies, restaurants, and church services with tolerable levels of anxiety. He also reported being able to manage his anxiety and panic at work without medication by rapidly applying the self-soothing skills he had learned in EMDR. He expressed motivation to try ART again to target his anxiety at work, and stated his wife was also very pleased with his progress. Sometime after missing his second ART appointment, he reported to his psychiatrist that he was maintaining the progress he had attained and, as of this writing, has scheduled another appointment with his ART therapist.

In this case, the client had gained some benefit from EMDR prior to ART, particularly the CSP technique. However, his trauma remained unresolved and he continued to be triggered and symptomatic. In spite of experiencing some improvement with EMDR, the length of treatment and slow pace of progress may have increased the client's reluctance to return to therapy. His reported maintenance of progress following ART can be attributed to his successful application of skills learned in EMDR, catalyzed by ART's ability to bring rapid relief and a sense of wellbeing.

3. CPT and ART

3.1. Theoretical Similarities

CPT contains elements of cognitive therapy and information processing theory (Resick and Schnicke, 1992). According to CPT, a traumatic event can disrupt a person's original schemas about the self,

world, and others, and results in dysfunctional schemas. If dysfunctional schemas existed prior to the event, a traumatic event may re-activate and confirm them, compounding the individual's suffering. The aim of CPT is to help clients restructure these schemas to produce realistic and balanced cognitions using a process known as accommodation (Resick and Schnicke, 1992; Sobel et al., 2009; Lenz et al., 2014; Resick et al., 2014). ART also postulates that psychological trauma creates distorted cognitions and that cognitive restructuring is a critical element of the healing process. Dysfunctional schemas in ART, however, are understood as distortions in the lens through which the client views past experiences. The client resolves their dysfunctional schemas by literally modifying the way they visualize their trauma(s).

3.2. Common Elements

Both CPT and ART activate the memory of the traumatic event and permit the emergence of new information that changes or challenges the original memory, allowing the client to reprocess their cognitions, information about the event, and the meaning of the event (Resick and Schnicke, 1992; Kip et al., 2013; Kip et al., 2014). Both modalities may result in the client's cognitions shifting from undesirable states of assimilation or over-accommodation to a desirable state of accommodation. A CPT therapist may choose the traditional CPT protocol, which includes a written account of the client's worst trauma, or CPT-C, which does not include the written account and emphasizes cognitive therapy (Resick et al., 2008). An ART therapist may focus on past traumatic images or may utilize metaphors to help the client process themes, emotions and sensations.

3.3. Divergent Elements

ART's approach to resolving cognitive distortions is more passive than that of CPT. The ART client, through the process of reviewing and rescripting traumatic event(s), is able to identify, challenge, and resolve his or her own dysfunctional schemas without the explicit help of the therapist. In CPT, the therapist takes a very active role in helping the client identify and challenge dysfunctional schemas and there is no formal rescripting process involved. CPT and ART modalities also differ in several other ways. Most notably, ART uses eye movements, while CPT does not. Traditional CPT consists of twelve sessions (each one 90 min long) and is writing and homework-intensive. CPT requires that the client write and verbalize his or her trauma narrative, gradually incorporating cognitive restructuring and symptom improvement over the course of treatment. ART, on the other hand, does not require homework, and is typically conducted in fewer than five sessions.

Another fundamental difference involves the focus and targets of each modality. CPT focuses heavily on modifying cognitions and schemas, which in turn may assist with emotional processing. ART focuses on reducing negative sensations and images, which in turn helps the client simultaneously process the trauma on a physical, emotional, and cognitive level (Kip et al., 2014). The trajectory for symptom relief is also typically different between these two therapies. CPT may take four to six sessions before yielding a significant drop in symptom intensity (Resick et al., 2008), while ART has shown significant changes in symptom intensity in fewer than four sessions (Kip et al., 2013; Kip et al., 2015), and in many cases as few as one or two.

3.4. The Trauma Narrative

The trauma narrative in CPT is a several-page-long document that contains as many details about the traumatic event(s) that the client can remember, including sensory details such as sights, sounds, and smells, as well as thoughts and feelings the client recalls experiencing during the event. Clients are instructed to read their trauma narrative out loud to their therapist, a process that promotes desensitization and creates opportunities for the therapist to Socratically explore and

analyze the client's perception of their trauma (Resick et al., 2014). As previously described, the trauma narrative in ART is predominately visual and the client may elect to verbalize as many or as few details of it as he or she desires.

3.5. Case Example

The full CPT protocol was administered to a 25-year-old single, Caucasian active duty Army female soldier who experienced a Military Sexual Trauma (MST) two years prior. She had a high amount of guilt, shame and self-blame over the incident. She also had a history of childhood sexual, physical and emotional abuse, and had witnessed extreme violence as a child. The MST activated her latent thoughts of distrust, low self-esteem, and depressive symptoms, and after the assault, she began to use alcohol to cope with her symptoms. By the time the client engaged in treatment, she met criteria for Alcohol Use Disorder, Severe; Major Depressive Disorder, Recurrent, Moderate; and PTSD. She completed a 28-day residential treatment program for her alcohol use and then began a step-down partial hospitalization program, where her MST was addressed with CPT.

The client engaged readily in CPT for her MST and completed all homework assignments. She found the exposure exercise to be extremely difficult but helpful, as she was able to recall new details during the written narrative exercise that helped her challenge her thoughts of self-blame. Her symptoms spiked, however, when she received news that certain family members were coming to visit, and she became flooded with memories of her childhood traumas. Her high level of distress prevented her from effectively using her CPT skills and worksheets to decrease her symptoms. She indicated that she was bombarded with memories, nightmares, anger and resentment toward her family.

The treatment team proposed a trial of ART to address her intense symptoms and emotional distress. She received three ART sessions, which addressed her worst childhood traumas. Following ART, she was able to re-engage in CPT and complete the twelve-session CPT protocol on her MST. After completing CPT, the client asked to use ART on her MST, because although she felt much better and was able to challenge her original thoughts and emotions related to this event, she still had disturbing images that she wanted to address. After the ART session on her MST, she reported feeling much better. She was then able to talk about her traumatic events without distress and had symptom relief with regards to her past. The use of ART facilitated a twelve-point reduction in her scores on the PTSD Checklist-Civilian (PCL-C) and a nine-point reduction in her scores on the Patient Health Questionnaire (PHQ-9), reflecting a decrease in her PTSD and depressive symptoms from the severe to the moderate range.

This case example illustrates important differences between CPT and ART, demonstrating how ART can complement CPT to improve outcomes. In this case, the client identified her MST as her worst traumatic event. However, as her symptoms related to the MST began resolving, it became apparent that early life experiences also greatly influenced her presentation, highlighting the complex nature of PTSD. ART allowed for relatively quick symptom resolution, as well as rapid cognitive restructuring and emotional processing of long-standing issues, which allowed her to successfully refocus on her CPT work.

4. Discussion

Within the context of these case examples, ART, EMDR and CPT have different strengths and weaknesses. A summary of the components of treatment for CPT, EMDR and ART is provided in the table below: (Table 2)

In practice, CPT and EMDR may be most beneficial for individuals who do not have a complex trauma history, have comorbid or co-occurring depression, are willing to explore cognitions and change their thought processes, are open and able to write out their trauma narrative and/or thoughts, and have life circumstances that allow for longer courses of treatment. In contrast, individuals with complex traumas who are resistant or unable to challenge their thinking patterns and experience intense emotional responses during imaginal exposure may benefit from the use of alternative or supplemental approaches such as ART.

ART may also benefit those with limited financial resources or time to attend therapy appointments and complete homework assignments. Additionally, ART should be considered for those clients who are motivated to improve their symptoms, but still experience high levels of resistance toward addressing their traumatic events. For these clients, ART may be the preferred method, since resistance can be addressed metaphorically and ART permits therapists to begin by addressing sensations only or simple images instead of detailed trauma memories. When a client is able to experience a significant change in their symptoms, he or she may become willing to address more complex or significant traumas or themes using ART or other therapy modalities.

The number of sessions required for both CPT and EMDR can be particularly limiting for active duty military personnel. Depending on their mission, job title, operational tempo (OPTEMPO), and other service-specific requirements, service members may not have time to attend twelve weekly sessions or have time in-between sessions to complete homework. Oftentimes, CPT or EMDR are simply not feasible given these circumstances. Furthermore, because it may take several sessions to see significant relief from symptoms, results-focused service members may be more likely to drop out of CPT or EMDR as compared to ART. Additionally, ART permits a client to complete the entire basic protocol without verbalizing any details about their trauma. This option may help military clients feel comfortable addressing taboo subjects, particularly if there are matters of national security or sensitive material involved in the trauma.

One recent comparison of ART for civilian sexual trauma and MST indicates that both civilian and military clients experienced a significant reduction in their symptoms after ART. However, the reduction was nominally less pronounced in military members. These results highlight the complex nature of military trauma and differences in treatment responses (Kip et al., 2015). This may suggest the need for more research to investigate the regular use of additional ART sessions in military personnel or the value of combining ART with another modality, such as CPT or EMDR.

5. Summary

While addressing mental health concerns is paramount for the fitness and function of a nation's armed forces, traditional interventions are associated with recurring costs that extend beyond service members' active duty time to months and sometimes years after their

Table 2
Summary of treatment components.

Treatment	Components of treatment						
	Education	Written narrative	Cognitive restructure	Imaginal exposure	Vol imagery rescript	Bilateral stimulation/eye movement	Relax or stress modulation
CPT	X	X	X				
CPT-C	X		X				
ART	X		X	X	X	X	X
EMDR	X		X	X		X	X

completion of military service. Thus, there is a military-wide need for mental health interventions that are brief and effective, as well as mobile in some circumstances. Whereas the evidence base for ART is clearly not as robust as that of other first-line therapies formally endorsed for the treatment of PTSD, the Basic ART protocol utilizes the core components of trauma-focused therapy, characterized by an A-level rating in the U.S. Department of Defense/Veterans Affairs Clinical Practice Guideline for PTSD (DoD/VA, 2010).

Particular advantages of ART over other traditional therapies appear to include the following: (Table 3)

In the case examples and descriptions provided, it is evident that ART shares common elements with established trauma-focused approaches, and can serve as a complementary modality to achieve the aims of both EMDR and CPT. Cited advantages of ART over EMDR and CPT include the relatively quick resolution of symptoms directly related to traumatic events and a lack of homework or written requirements. In addition, the client does not have to share trauma details with the provider. The ART protocol works to resolve a single experience in a single session and can address multiple traumatic events in a relatively short time, without repeated visitation of one particular event, allowing other related concerns to be addressed in just a few additional sessions. ART also helps reduce distressing physical sensations, a process which ultimately leads to cognitive and emotional change.

While these case reports are not part of a formal study, they suggest that ART has potential to augment and enhance the current delivery methods of mental health care in military environments. Recommendations for future areas of study are many, including but not limited to the following: evaluation of ART's efficacy as compared to established evidence-based therapies for PTSD in head-to-head trials; evaluating the use of ART with children and adolescents; dismantling individual components of the Basic ART protocol (i.e. eye movements, sensation processing, deep breathing, etc.) to determine the degree to which they contribute to this therapy's efficacy; and evaluating the effect of various ART-based interventions on specific symptoms or clinical problems, such as combat loss, bereavement, physical injury, and complex military trauma. Feedback from providers at FBCH and elsewhere also suggests that ART may have a protective advantage for therapists as compared to traditional narrative-based PTSD therapies. For this reason, there is growing interest in evaluating the effect of ART on provider burnout and job satisfaction. Finally, there is a need for studies evaluating ART's application in operational military environments. For example, can ART enhance performance in individuals without distressing psychological symptoms? Does ART's modularity make it preferable to conventional psychotherapies in highly dynamic environments (such as combat zones), where a therapist may only have one chance to perform an intervention? These and many other questions warrant future consideration by military and civilian investigators who endeavor to advance the science of trauma research.

Disclosure

Dr. Hernandez, Dr. Waits, Dr. Calvio, and Ms. Byrne have no financial disclosures or ethical conflicts of interest to report. The views and

Table 3
Advantages of ART.

Particular advantages of ART over traditional therapies
Efficiency
Modularity
Applicability to a broad range of ages and symptoms
Ability to allow clients to not disclose the details of their trauma
Structured-yet-autonomous format (which shifts ultimate control of the session to the client)
Ability to promote creativity in both clients and therapists
Lack of dependence on a scheduled session interval
Low expense

opinions represented herein are solely those of the authors and do not reflect the official policy or position of the United States Defense Health Agency, the United States Department of Defense, or the United States Government.

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