

+Best Evidence Summaries of Topics in Mental Healthcare

BEST *in* **MH** *clinical question-answering service*

Question

In veterans of the armed forces with post-traumatic stress disorder (PTSD), how effective are trauma-focussed CBT (TFCBT), eye movement desensitisation and reprocessing (EMDR) and narrative exposure therapy, compared to any other non-pharmacological interventions, specifically metaphors of movement, neuro-linguistic programming(NLP), hypnotherapy, integral eye movement therapy and emotional freedom technique, in reducing PTSD symptoms?

Clarification of question using PICO structure

Patients: Veterans of the armed forces with a diagnosis of PTSD
Intervention: Trauma-focussed CBT (TFCBT), eye movement desensitisation and reprocessing (EMDR) and narrative exposure therapy
Comparator: Other non-pharmacological interventions, specifically metaphors of movement, neuro-linguistic programming (NLP), hypnotherapy, integral eye movement therapy and emotional freedom technique
Outcome: Reducing PTSD symptoms

Plain language summary

Clinical and research implications

There was very little evidence specific to the effectiveness or comparative effectiveness of different psychological interventions for the treatment of post-traumatic stress disorder in combat veterans. Data about the effectiveness of trauma-focussed cognitive behavioural therapy and eye movement desensitisation and reprocessing interventions were inconsistent and any treatment effects reported were generally short term and for self-reported outcome measures. There was no evidence about the effectiveness of narrative exposure therapy.

Larger, high quality randomised controlled trials are needed to provide reliable assessments of the relative effectiveness of different psychological interventions for the treatment PTSD. Trials conducted in combat veterans are particularly needed, as this population is currently under represented in the evidence base.

What does the evidence say?

Number of included studies/reviews (number of participants)

We identified three systematic reviews,^{1,2,3} and one additional randomised controlled trial (RCT),⁴ which were considered partially relevant to this evidence summary. Only one systematic review was restricted to the evaluation of psychological interventions for post-traumatic stress disorder (PTSD) in military personnel and veterans.¹ A second systematic review included RCTs which compared psychological interventions with other psychological interventions or usual care, but did not specify type of trauma.² Sources of trauma were not reported, but the review appeared to include only one study of combat veterans.² Only summary data comparing active interventions and data from the study of combat veterans have been included in this evidence summary.² The third systematic review included RCTs which compared psychological interventions with waiting list, control, or alternative psychological or pharmacological treatment.³ Only the results from studies comparing psychological interventions in combat veterans have been included in this evidence summary.³ The additional RCT compared EMDR with emotional freedom technique (EFT), but did not specify the type of trauma experienced by participants; it was not clear whether any participants were combat veterans.⁴

Main Findings

One systematic review, which only included studies conducted in military personnel or combat veterans, reported inconsistent evidence about the effectiveness of cognitive processing therapy (CPT) or EMDR, compared to usual care or active controls.¹ Where any treatment effects were observed, these were short term and related to self-reported outcome measures.¹ A second systematic review found no significant differences in treatment effect (symptoms of PTSD, anxiety, or depression) between TFCBT and EMDR in patients with PTSD (trauma type un-specified).² This review also found that both EMDR and TFCBT reduced self-reported PTSD symptoms, anxiety and/or depression and the number of patients retaining a PTSD diagnosis at the end of treatment compared to 'other therapies' (defined as including supportive therapy/non-directive counselling, psychodynamic therapies and hypnotherapy); there were no significant between treatment differences in clinician assessed PTSD symptoms.² Pooled estimates indicated a small reduction in the number of patients retaining a PTSD diagnosis at the end of treatment in the patients receiving TFCBT compared to those receiving stress management interventions and small reductions in anxiety and depression in patients receiving EMDR compared to those receiving stress management interventions.² One small study, included in this review, which included only combat veterans, indicated that the effect of EMDR on clinician-rated PTSD symptoms was smaller in this population than in the overall PTSD population and that the effect of biofeedback relaxation therapy (classified as TFCBT) on clinician-rated PTSD symptoms was non-significant.² A third systematic review included four studies which compared the effectiveness of different psychological interventions for the treatment of PTSD in combat veterans.³ Results from these studies indicated that EMDR was more effective than biofeedback-assisted relaxation in reducing PTSD symptoms and numbers of patients retaining a diagnosis of PTSD, exposure therapy (ET) and ET followed by behavioural family therapy (BFT) produced similar significant reductions in PTSD symptoms, EMDR was more effective than ET in reducing self-reported intensity of intrusions, and trauma-focused group psychotherapy (TFGP) and present-centred group treatment (PCGT) produced similar significant reductions in PTSD symptoms.³ However, it was not clear whether PTSD symptom outcomes in this review were self-reported or clinician-assessed.³ The additional RCT found similar, large treatment effect sizes (baseline to post-treatment and follow-up) for EMDR and EFT (PTSD symptom scores, depression

score and satisfaction with life scale), with slightly more patients in the EMDR group achieving clinically significant effects.⁴

Authors Conclusions

The authors of the first systematic review concluded that CPT and PE have shown clinically meaningful improvements in many patients with military-related PTSD, however, non-response rates are high and trauma focussed interventions are only marginally superior to active controls. The second systematic review (Bisson 2007) stated that TFCBT or EMDR should be the first-line psychological treatments for PTSD. Similarly, the third review (Ponniah 2009) concluded that TFCBT and to a lesser extent EMDR (due to fewer studies having been conducted and many having had a mixed trauma sample) are the psychological treatments of choice for PTSD, but further research of these and other therapies with different populations is needed. The additional RCT noted that similar treatment effect sizes were observed for EMDR and EFT, with a slightly higher proportion of patients in the EMDR group produced experiencing clinically significant changes.

Reliability of conclusions/Strength of evidence

The evidence included in this summary is derived from three systematic reviews,^{1,2,3} all with significant methodological weaknesses, only one of which focussed on psychological interventions for the treatment of military-related PTSD,¹ and one additional small, high quality RCT comparing EMDR and emotional freedom technique, where the type of trauma experienced by study participants was not specified and it was not clear whether any combat veterans were included in the study.⁴ Overall, there was very little evidence specific to the effectiveness or comparative effectiveness of different psychological interventions for the treatment of PTSD in combat veterans. Data about the effectiveness of TFCBT and EMDR interventions were inconsistent and any treatment effects reported were generally short term and for self-reported outcome measures.

What do guidelines say?

NICE guidelines for the management of post-traumatic stress disorder (CG26, 2005) makes the following recommendations for when symptoms of PTSD are present within 3 months of a trauma:

- "Trauma-focused cognitive-behavioural therapy should be offered to those with severe post-traumatic symptoms or with severe PTSD in the first month after the traumatic event. These treatments should normally be provided on an individual out-patient basis.
- Trauma-focused CBT should be offered to people who present with PTSD within 3 months of a traumatic event.
- The duration of the trauma-focused CBT should normally be 8–12 sessions, but if the treatment starts in the first month after the event, fewer sessions (about 5) may be sufficient. When the trauma is discussed in the treatment session, longer sessions (for example, 90 min) are usually necessary. Treatment should be regular and continuous (usually at least once a week) and should be delivered by the same person.

Where symptoms have been present for more than 3 months after a trauma the guidelines recommends:

- All PTSD sufferers should be offered a course of trauma-focused psychological

treatment (trauma-focused CBT or eye movement desensitisation and reprocessing). These treatments should normally be provided on an individual out-patient basis.

- Trauma-focused psychological treatment should be offered to PTSD sufferers regardless of the time that has elapsed since the trauma.
- The duration of trauma-focused psychological treatment should normally be 8–12 sessions when the PTSD results from a single event. When the trauma is discussed in the treatment session, longer sessions than usual are generally necessary (for example, 90 min). Treatment should be regular and continuous (usually at least once a week) and should be delivered by the same person.
- Healthcare professionals should consider extending the duration of treatment beyond 12 sessions if several problems need to be addressed in the treatment of PTSD sufferers, particularly after multiple traumatic events, traumatic bereavement or where chronic disability resulting from the trauma, significant comorbid disorders or social problems are present. Trauma-focused treatment needs to be integrated into an overall plan of care.
- For some PTSD sufferers it may initially be very difficult and overwhelming to disclose details of their traumatic events. In these cases, healthcare professionals should consider devoting several sessions to establishing a trusting therapeutic relationship and emotional stabilisation before addressing the traumatic event.
- Non-trauma-focused interventions such as relaxation or non-directive therapy, which do not address traumatic memories, should not routinely be offered to people who present with chronic PTSD.
- For PTSD sufferers who have no or only limited improvement with a specific trauma focused psychological treatment, healthcare professionals should consider the following options:
 - an alternative form of trauma-focused psychological treatment
 - the augmentation of trauma-focused psychological treatment with a course of pharmacological treatment.
- When PTSD sufferers request other forms of psychological treatment (for example, supportive therapy/non-directive therapy, hypnotherapy, psychodynamic therapy or systemic psychotherapy), they should be informed that there is as yet no convincing evidence for a clinically important effect of these treatments on PTSD.” (pp.14-17)

Date question received: 07/06/2016

Date searches conducted: 14/06/2016

Date answer completed: 04/07/2016

REFERENCES

Systematic Reviews

1. Steenkamp, M. M., Litz, B. T., Hoge, C. W., & Marmar, C. R. (2015). Psychotherapy for military-related PTSD: a review of randomized clinical trials. *Jama*, 314(5), 489-500.
2. Bisson, J.I., Ehlers, A., Matthews, R., Pilling, S., Richards, D. and Turner, S. (2007) Psychological treatments for chronic post-traumatic stress disorder Systematic review and meta-analysis. *British Journal of Psychiatry* 190 pp. 97-104.
3. Ponniah, K. and Hollon, S.D. (2009) Empirically supported psychological treatments for adult acute stress disorder and posttraumatic stress disorder: A Review. *Depression and Anxiety* 26 pp. 1086-1109.

Randomised controlled trials

4. Karatzias, T., Power, K., Brown, K., McGoldrick, T., Begum, M., Young, J., Loughran, P., Chouliara, Z. and Adams, S. (2011) Controlled Comparison of the Effectiveness and Efficiency of Two Psychological Therapies for Posttraumatic Stress Disorder. Eye Movement Desensitization and Reprocessing vs. Emotional Freedom Techniques. *The Journal of Nervous and Mental Disease* 199 (6) pp. 372-378.

Clinical Guidelines

5. National Institute for Health and Care Excellence. Post-traumatic stress disorder, the management of PTSD in adults and children in primary and secondary care. National Clinical Practice Guideline Number 26. *The Royal College of Psychiatrists & The British Psychological Society*, 2005 (<http://www.nice.org.uk/nicemedia/live/10966/29772/29772.pdf>)

Results

Systematic Reviews

Author (year)	Search Date	Inclusion criteria	Number of included studies	Summary of results	Risk of bias
Steenkam p et al. (2015)	01/03/2015	<p><i>Participants:</i> Service members, veterans or both with PTSD according to DSM IV criteria.</p> <p><i>Intervention:</i> Individual or group psychotherapy that did not include pharmacological interventions.</p> <p><i>Comparator:</i> Any other psychotherapy, waiting list control or treatment as usual.</p> <p><i>Outcomes:</i> PTSD symptoms.</p> <p><i>Study design:</i> Randomised controlled trials (RCTs)</p>	36	<p>This review aimed to assess the effectiveness of psychological treatments for PTSD in military and veteran populations.</p> <p>Fifteen of the 36 included studies evaluated psychological therapies as first-line interventions for military-related PTSD and, of these, eight reported comparisons of active treatments. The remaining 21 studies evaluated psychological therapies as second-line interventions for military-related PTSD; ten of these reported comparisons of active treatments.</p> <p><i>Cognitive Processing Therapy (CPT) as a first-line intervention (5 studies):</i> Of the two studies comparing CPT to a control condition, one found that CPT was associated with a significant improvement in symptoms ($d=0.97$ (95% CI: 0.43 to 1.51), from pre- to post-treatment, but this effect was not retained at 3 months follow-up; the second study found no statistically</p>	<p>The research objective was clearly stated and appropriate inclusion criteria were defined for population, intervention and outcomes, however, only English language studies were included.</p> <p>Three bibliographic databases were searched for relevant studies and searches were supplemented by reference screening of included studies, review articles and</p>

			<p>significant treatment effect.</p> <p>Two studies compared CPT to present-centred therapy (PCT); one used individual therapy for both interventions and included participants with military sexual trauma, and the other used a group therapy approach. Both trials reported that CPT was associated with small improvements in self-reported, post-treatment symptoms, compared to PCT. There were no significant differences between treatments in interviewer-assessed symptoms, or in any outcome at follow-up.</p> <p>The final CPT study was a non-inferiority trial, which found no significant differences in post-treatment symptom measures between group CPT delivered in person or by telemedicine.</p> <p><i>Prolonged exposure (PE) as a first-line therapy (4 studies):</i></p> <p>One study compared PE to minimal attention and found no significant between group differences in measures of PTSD symptoms. One small (n=30) study of combat or terrorism survivors found that PCT was associated with greater symptom reduction than psychodynamic therapy (d=1.80) and that this effect was maintained at 12 months</p>	<p>meta-analyses.</p> <p>No details of the number of reviewers involved in study selection and data extraction were reported and no assessment of the methodological quality of included studies was described.</p> <p>The use of a narrative synthesis was appropriate.</p>
--	--	--	---	--

			<p>follow-up. The remaining two studies, one of which was conducted in female veterans with primarily sexual trauma, compared PE to PCT and found no significant differences in interviewer assessed symptoms of clinically meaningful improvement at any point.</p> <p>Three further studies assessed the effectiveness of other types of exposure therapy compared to a control condition and one study compared group exposure therapy to group PCT; no between group comparisons were reported for any of these studies.</p> <p><i>Eye Movement Desensitisation and Reprocessing (EMDR) as a first line therapy:</i> Two studies evaluated EMDR. One study compared EMDR to usual care or biofeedback relaxation; the results for these two comparisons are described in the Bisson 2007 and Ponniah 2011 reviews below. The second study compared EMDR to usual care or EMDR without eye movement and found that EMDR performed comparably to both control conditions. This review did not report numerical between group comparisons for either study.</p>	
--	--	--	--	--

				<p><i>Second-line psychotherapies:</i> None of the studies evaluating psychological therapies as second line interventions reported effectiveness of comparative effectiveness data for the specified interventions.</p>	
Bisson (2007)	08/2004	<p><i>Participants:</i> Over 16 years old, who had had PTSD symptoms for at least 3 months (at least 70% of participants had a diagnosis of PTSD), no restriction on cause of PTSD.</p> <p><i>Intervention:</i> Psychological interventions.</p> <p><i>Comparator:</i> Treatment as usual/Other intervention</p> <p><i>Outcomes:</i> Retaining a diagnosis of PTSD, assessor-rated and self-reported severity of PTSD symptoms; the primary outcome was clinician-rated severity of PTSD symptoms.</p> <p><i>Study design:</i> Randomised controlled trials (RCTs), which reported at least pre- and post-treatment measures and which retained at least 50% of the sample at post-treatment assessment.</p>	38	<p>The review aimed to determine the efficacy of psychological treatments for chronic PTSD.</p> <p>Thirty eight studies (total number and characteristics of participants not specified) were included in the review.</p> <p><i>EMDR compared with TFCBT:</i> There were no significant differences between these interventions on clinician-rated PTSD symptoms (6 studies, n=187), retention of PTSD diagnosis (7 studies, n=267), self-rated PTSD symptoms (7 studies, n=206), anxiety (4 studies, n=136), depression (7 studies, n=206), or withdrawals (8 studies, n=287).</p> <p><i>TFCBT compared with stress management (method un-specified):</i> There were no significant differences between these interventions on clinician-rated PTSD symptoms (6 studies, n=239), self-rated PTSD symptoms (3 studies,</p>	<p>A clear research objective was stated and appropriate inclusion criteria were defined.</p> <p>Five bibliographic databases were searched for relevant studies and the bibliographies of retrieved articles and systematic reviews were screened for additional studies. Experts in the field were contacted to identify any unpublished studies. However, searches were restricted to</p>

			<p>n=127), anxiety (4 studies, n=127), depression (5 studies, n=161), or withdrawals (6 studies, n=284). There was a borderline significant reduction in the number of participants retaining a PTSD diagnosis post-treatment in the TFCBT group compared to the stress management group (RR 0.78 (95% CI: 0.61 to 0.99), 6 studies, n=284).</p> <p><i>TFCBT compared with other therapies (defined as including supportive therapy/non-directive counselling, psychodynamic therapies and hypnotherapy):</i></p> <p>There were no significant differences in anxiety (4 studies, n=197), or withdrawals (5 studies, n=290) between the two treatment group. There were significant reductions in clinician related PTSD symptoms (SMD -0.81 (95% CI: -1.19 to -0.42), 3 studies, n=120), self rated PTSD symptoms (SMD -1.18 (95% CI: -2.32 to -0.03), 3 studies, n=176), depression (SMD -0.65 (95% CI: -1.03 to -0.28), 3 studies, n=120) and the number of participants retaining a PTSD diagnosis post-treatment (RR 0.71 (95% CI: 0.56 to 0.89), 5 studies, n=286) in the TFCBT group compared to the group receiving 'other therapies'.</p>	<p>articles with an English language abstract and relevant, non-English language studies may therefore have been omitted.</p> <p>The review process (study selection, data extraction and quality assessment) was undertaken by multiple reviewers, with any disagreements resolved through discussion. The involvement of multiple reviewer reduces the potential for error and/or bias in the review process.</p> <p>The methodological quality of included studies was assessed against</p>
--	--	--	--	--

			<p><i>EMDR compared with stress management (method un-specified):</i></p> <p>There were no significant differences between these interventions on clinician-rated PTSD symptoms (2 studies, n=53), retention of PTSD diagnosis (3 studies, n=84), self-rated PTSD symptoms (3 studies, n=75), or withdrawals (3 studies, n=84). There were small reductions in anxiety (SMD -0.75 (95% CI: -1.36 to -0.13), 2 studies, n=45) and depression (SMD -0.67 (95% CI: -1.14 to -0.20), 3 studies, n=75).</p> <p><i>EMDR compared with other therapies (defined as including supportive therapy/non-directive counselling, psychodynamic therapies and hypnotherapy):</i></p> <p>No data were reported on clinician-rated PTSD symptoms and there were no significant differences in withdrawals between the two intervention types (2 studies, n=127). There were significant reductions self rated PTSD symptoms (SMD -0.84 (95% CI: -1.21 to -0.47), 2 studies, n=124), anxiety (SMD -0.72 (95% CI: -1.08 to -0.36), 2 studies, n=126), depression (SMD -0.67 (95% CI: -1.03 to -0.32), 2 studies, n=127) and the number of participants</p>	<p>the following criteria: randomisation; allocation concealment; blinding of outcome assessors; number of withdrawals; tolerability; adequate reporting of data and intention-to-treat analysis.</p> <p>Pooled estimates of relative risk (RR) were calculated for dichotomous outcomes and standardised mean difference (SMD) was used for continuous outcomes. A random effects model was used where heterogeneity was present, but the</p>
--	--	--	--	--

				<p>retaining a PTSD diagnosis post-treatment (RR 0.40 (95% CI: 0.19 to 0.84), 1 study, n=67) in the EMDR group compared to the group receiving 'other therapies'.</p> <p>The review also reported that one study (n=25) included only Vietnam veterans. In this study, the effect size (clinician-rated PTSD symptoms) for EMDR versus waiting list control was smaller than the overall pooled estimate (SMD -1.67 (95% CI: -2.03 to -1.04)). This study also found that biofeedback relaxation therapy (classified as TFCBT) had no significant effect (SMD -0.22 (95% CI: -1.03 to 0.58)). These results were taken from a three arm study comparing EMDR, biofeedback relaxation and usual care; results for the active comparison were reported in both the Steenkam 2015 review described above and the Ponniah 2009 review described below.</p>	<p>criteria used to determine whether a random effects or fixed effect model should be used were not fully described. Pooled estimates were calculated across a diverse range of populations (e.g. source of trauma not specified) and where the comparator included different types of intervention (e.g. 'other therapies'). The results of the assessment of the methodological quality of included studies were not reported and it was not clear which primary studies were included in each meta-analysis.</p>
Ponniah	01/2009	<i>Participants: Adults with diagnoses with PTSD or</i>	57	The review included 57 studies, of which	Inclusion criteria

(2009)		<p>acute stress disorder (ASD). <i>Intervention:</i> Clearly described psychological intervention, which focused on PTSD or ASD. <i>Comparator:</i> Waiting list, alternative control, or alternative treatment (psychological or pharmacotherapy). <i>Outcomes:</i> Change in PTSD or ASD symptoms and/or diagnosis. <i>Study design:</i> RCT</p>	<p>only four reported comparisons of active treatments in combat veterans.</p> <p>One study (n=35) compared EMDR (12 sessions) with biofeedback-assisted relaxation (12 sessions) or a waiting list control in combat veterans with a DSM-IV diagnosis of PTSD (time since trauma not reported). This study found that EMDR had a greater effect on PTSD symptoms than biofeedback-assisted relaxation at 3- and 9-month follow-up (numerical results not reported). 77.8% of the EMDR group and 22.2% of the biofeedback-assisted relaxation group no longer had a diagnosis of PTSD at 3-month follow-up. This study was also included in the Steenkam 2015 review described above.</p> <p>A second study (n=42) compared exposure therapy (ET) (18 sessions) with ET followed by behavioural family therapy (BFT) (34 sessions) or a waiting list control in combat veterans with a DSM-IV diagnosis of PTSD (time since trauma not reported). This study found that positive, but not negative, PTSD symptoms were significantly reduced in the ET and the ET+BFT groups compared to the waiting list control and that the effect sizes were similar for the two interventions</p>	<p>were specified, but the review lacked a clearly stated objective.</p> <p>Searches were limited to two bibliographic databases and English language studies; relevant studies may therefore have been omitted.</p> <p>No details of the review process were reported and it is therefore not clear whether any measures were taken to reduce error/bias.</p> <p>No assessment of the methodological quality of included studies was reported.</p>
--------	--	--	--	---

			<p>(numerical results not reported); improvements were maintained at 6-month follow-up.</p> <p>The third study (n=12) compared EMDR with ET (single sessions) in combat veterans with A DSM-III-R diagnosis of PTSD (time since trauma not reported). This study found that self-reported intensity of intrusions was markedly more improved in the EMDR group compared with the exposure group (numerical results not reported).</p> <p>The final study (n=360) compared trauma-focused group psychotherapy (TFGP) (35 sessions) with present-centred group treatment (PCGT) (35 sessions) in combat veterans with A DSM-IV diagnosis of PTSD (time since trauma not reported). Intention-to-treat analyses found significant and similar reductions in PTSD symptoms in both the TFGP and PCGT groups (numerical results not reported); drop outs were greater in the TFGP group. This study was also included in the Steenkam 2015 review described above.</p> <p>It was not clear whether PTSD symptom outcomes in this review were self-reported or clinician-assessed.</p>	<p>The authors' choice of a narrative synthesis appears appropriate, given the apparent clinical and statistical heterogeneity in the included studies.</p>
--	--	--	--	---

RCTs

Author (year)	Inclusion criteria	Number of participants	Summary of results	Risk of bias
Karatzias (2011)	<p><i>Participants:</i> Males and females, aged 18-65 years. Recruited from an NHS psychotherapy waiting list in Scotland. Must satisfy the PTSD criteria according to DSM-IV. Exclusion criteria: presence of suicidal ideation; history of psychotic illness,, concurrent severe depressive illness/substance use disorder or already receiving psychotherapy.</p> <p><i>Intervention:</i> EMDR. Mean 3.7 sessions.</p> <p><i>Comparator:</i> Emotional freedom technique (EFT). Mean 3.8 sessions.</p> <p><i>Outcomes:</i> Frequency and intensity of PTSD symptoms (Clinician-Administered PTSD Scale (CAPS), Blake et al. 1990), PTSD symptoms, PTSD Checklist, Blanchard et al. 1996), presence and frequency of symptoms (The Hospital Anxiety and Depression Scale (HADS), Zigmond and Snaith 1983), general life satisfaction (Satisfaction with Life Scale, Diener et al. 1985).</p>	n= 46, EMDR arm n=23, EFT arm n=23.	<p>The study aimed to compare the effectiveness of two psychological therapies (EMDR and EFT) for the treatment of PTSD.</p> <p>In accordance with NICE guidelines, up to eight treatment sessions were offered as part of the study. Videotapes of sessions indicated no differences between therapists delivering treatments. There were no significant differences between the two treatment groups in age, gender, education, employment, marital status, living arrangements, history of previous psychological interventions, current psychotropic medications, type of trauma, time since trauma, or time since onset of PTSD symptoms. Types of trauma experienced by participants were accident (n=17), assault/murder (n=20), other (n=9); it was not clear whether any participants were combat veterans.</p> <p>Ten participants in the EMDR group and nine in the EFT group withdrew from the study before post-treatment assessment. Participants in the EMDR group received a mean (SD) of 3.7 (2.3) sessions and participants in the EFT group received 3.8 (2.6).</p> <p>The treatment effect sizes (baseline/pre-treatment to post-treatment and follow-up) were large (Cohen $d \geq 0.80$) for</p>	<p>The study used a computer generated randomisation schedule, unknown to assessor, therapists, or patients.</p> <p>No details of allocation concealment were reported.</p> <p>The nature of the intervention and comparator precludes blinding of participants</p>

			<p>both treatments, across all outcome measures. Similar treatment effect sizes were observed in both groups for all outcome measures.</p> <p>A slightly higher proportion of participants in the EMDR group had clinically significant changes than in the EFT group: A clinically significant pre-treatment to post-treatment change in CAPS total scores was seen in 10 patients (43.5%) in the EMDR and 9 patients (39.1%) in the EFT group; a clinically significant pre-treatment to post-treatment change in PCL total scores was seen in eight patients (34.8%) in the EMDR and two patients (8.7%) in the EFT group; a clinically significant pre-treatment to follow-up change CAPS total scores was seen in eight patients (34.8%) in the EMDR and 9 (39.1%) patients in the EFT group; clinically significant pre-treatment to follow-up change in PCL total scores was seen in six patients (26.1%) in the EMDR and four (17.4%) patients in the EFT group.</p>	<p>and study personnel, however, outcomes were assessed independently and blind to intervention group.</p> <p>Results were reported for all specified outcomes and an intention-to-treat analysis was used.</p>
--	--	--	--	---

Risk of Bias: SRs

Author (year)	Risk of Bias				
	Inclusion criteria	Searches	Review Process	Quality assessment	Synthesis
Steenkamp (2015)					
Bisson (2007)					
Ponniah (2009)					

RCTs

Study	RISK OF BIAS					
	Random allocation	Allocation concealment	Blinding of participants and personnel	Blinding of outcome assessment	Incomplete outcome data	Selective Reporting
Karatzias (2011)						

 Low Risk

 High Risk

 Unclear Risk

Search Details

Source	Search Strategy	Number of hits	Relevant evidence identified
<i>Guidelines</i>			
NICE	PTSD	28	1
EMBASE	((posttraumatic adj2 stress) OR (post-traumatic adj2 stress) OR ptsd).ti,ab ((military OR veteran* OR soldier*).ti,ab (armed adj2 forces).ti,ab combat*.ti,ab exp VETERAN/ exp SOLDIER/ exp POSTTRAUMATIC STRESS DISORDER/ 24 OR 25 OR 27 OR 28 OR 29 1 OR 7 8 AND 9 (metaphor* adj3 movement).ti,ab (neuro-linguistic OR Neurolinguistic).ti,ab (hypnotherapy OR hypnosis OR hypnotic).ti,ab integral adj3 eye).ti,ab (emotional adj2 freedom).ti,ab (eye AND movement AND desen*).ti,ab (trauma AND focused OR trauma-focused).ti,ab (CBT OR cognitive).ti,ab (narrative adj3 exposure).ti,ab EMDR.ti,ab Tf-CBT.ti,ab exp HYPNOSIS/ 11 OR 12 OR 13 OR 14 OR 15 OR 16 OR 17 OR 18 OR 19 OR 20 OR 21 OR 22 10 AND 23 [Limit to: Publication Year 2013-2016]	455	

<p>PsycINFO/CINAHL</p>	<p>((posttraumatic adj2 stress) OR (post-traumatic adj2 stress) OR ptsd).ti,ab exp POSTTRAUMATIC STRESS DISORDER/ ((military OR veteran* OR soldier*).ti,ab (armed adj2 forces).ti,ab exp MILITARY PERSONNEL/ OR exp MILITARY VETERANS/ combat*.ti,ab 26 OR 27 28 OR 29 OR 30 OR 31 32 AND 33 (metaphor* adj3 movement).ti,ab (neuro-linguistic OR Neurolinguistic).ti,ab (hypnotherapy OR hypnosis OR hypnotic).ti,ab (integral adj3 eye).ti,ab (emotional adj2 freedom).ti,ab (eye AND movement AND desen*).ti,ab (trauma AND focused OR trauma-focused).ti,ab (CBT OR cognitive).ti,ab (narrative adj3 exposure).ti,ab exp HYPNOTHERAPY/ 35 OR 36 OR 37 OR 38 OR 39 OR 40 OR 41 OR 42 OR 43 OR 44 OR 45 OR 46 34 AND 45 46 [Limit to: Publication Year 2013-2016]</p>	<p>509</p>	
<p>MEDLINE</p>	<p>((posttraumatic adj2 stress) OR (post-traumatic adj2 stress) OR ptsd).ti,ab exp STRESS DISORDERS, POST-TRAUMATIC/ OR exp STRESS DISORDERS, TRAUMATIC/ OR exp STRESS DISORDERS, TRAUMATIC, ACUTE/ ((military OR veteran* OR soldier*).ti,ab (armed adj2 forces).ti,ab combat*.ti,ab exp MILITARY PERSONNEL/ 50 OR 51 OR 52 OR 53 48 OR 49 54 AND 55 (metaphor* adj3 movement).ti,ab</p>	<p>280</p>	

	<p>(neuro-linguistic OR Neurolinguistic).ti,ab (hypnotherapy OR hypnosis OR hypnotic).ti,ab (integral adj3 eye).ti,ab (emotional adj2 freedom).ti,ab (eye AND movement AND desen*).ti,ab (trauma AND focused OR trauma-focused).ti,ab (CBT OR cognitive).ti,ab (narrative adj3 exposure).ti,ab exp HYPNOSIS/ exp EYE MOVEMENT DESENSITIZATION REPROCESSING/ EMDR.ti,ab 57 OR 58 OR 59 OR 60 OR 61 OR 62 OR 63 OR 64 OR 65 OR 66 OR 67 OR 68 56 AND 69 70 [Limit to: Publication Year 2013-2016]</p>		
CENTRAL	<p>post traumatic stress disorder PTSD MeSH descriptor: [Stress Disorders, Post-Traumatic] explode all trees 1190#1 or #2 or #3 soldier* or veteran* or military or combat* armed forces MeSH descriptor: [Veterans Health] explode all trees MeSH descriptor: [Veterans] explode all trees MeSH descriptor: [Military Psychiatry] explode all trees #5 or #6 or #7 or #8 or #9 #4 and #10 NLP or neuro-linguistic hypnosis or hypnotherapy or hypnotic metaphor* and movement* emotional freedom EMDR eye movement desen* MeSH descriptor: [Eye Movement Desensitization Reprocessing] explode all trees MeSH descriptor: [Hypnosis] explode all trees #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19</p>	60	

	#11 and #20		
--	-------------	--	--

*Please see Q191 for previous search terms for evidence prior to 2013.

Disclaimer

BEST in MH answers to clinical questions are for information purposes only. BEST in MH does not make recommendations. Individual health care providers are responsible for assessing the applicability of BEST in MH answers to their clinical practice. BEST in MH is not responsible or liable for, directly or indirectly, any form of damage resulting from the use/misuse of information contained in or implied by these documents. Links to other sites are provided for information purposes only. BEST in MH cannot accept responsibility for the content of linked sites.

© *Best Evidence Summaries of Topics in Mental Health 2015*