

## BRIEF REPORT

### ***EYE MOVEMENT DESENSITISATION AND REPROCESSING (EMDR) IN TREATMENT OF POST-TRAUMATIC STRESS DISORDER (PTSD)***

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***Please note: this brief report summarises information on use of Eye Movement Desensitisation and Reprocessing in treatment of Post-Traumatic Stress Disorder. It has not been systematically developed according to a predetermined methodology. It is no intended to replace clinical judgement or to be used as a clinical protocol.***

#### ***EXECUTIVE SUMMARY***

This report examined the existing evidence on effectiveness of Eye Movement Desensitisation and Reprocessing (EMDR) in treatment of Post-Traumatic Stress Disorder (PTSD). A considerable number of publications was identified and perused, however the focus of the report is on four key documents based on a comprehensive evidence-based assessment. Although some controversy continues to exist around this therapy, the balance of evidence summarised in these reports suggests that EMDR is an effective treatment option for symptoms associated with PTSD.

#### ***1. BACKGROUND***

Evidence-based healthcare team was asked to provide an evidence-based review on the efficacy of EMDR in treatment of Post-Traumatic Stress Disorder (PTSD).

Extensive literature search identified numerous reports, systematic reviews and guidelines published on effectiveness of EMDR in treatment of PTSD.

Following the discussions with the Clinical Advisors in Psychology it was agreed that the published systematic reviews and guidelines are sufficient for making recommendations. Hence a brief report summarising the existing recommendations would be adequate for the purpose.

## **2. DESCRIPTION OF EMDR**

This therapy is a technique applied by trained EMDR practitioners to resolve symptoms of PTSD arising from exposure to distressing or traumatic events. This approach was developed by Dr Francine Shapiro in 1987. The technique was originally used for trauma survivors but its application has been extended to PTSD symptoms related to other traumatic episodes, such as sexual abuse, and to anxiety based disorders.

In the original method, during an EMDR session a patient is asked to recall the image and negative cognition associated with the traumatic memory, and to follow the EMDR practitioner's moving finger in front of the patient's eyes. The procedure is repeated until distressing memory is reduced and more adaptive cognitions appear in relation to trauma.

The dominant hypothesis underpinning the theoretical model is that EMDR treatment works by processing suppressed distressing memories. A number of other hypotheses have been postulated in an attempt to explain how EMDR works, however theoretical basis for its function has not been definitely elucidated.

EMDR remains to be a controversial treatment option, with some experts suggesting it is simply yet another form of cognitive desensitisation, and others questioning whether the eye movement component adds benefit to the reprocessing component of the therapy.

## **3. METHOD AND SEARCH STRATEGY**

The following databases and websites were searched:

- Scopus
- PsychINFO
- EBSCO: Medline, CINAHL, Comprehensive Psychology and Behavioural Science Collection, PsycArticles
- EMBASE
- EBM reviews – Cochrane Central Register of Controlled Trials
- EBM reviews – Database of Abstracts of Reviews of Effects
- EBM reviews Full text – Cochrane DSR, ACP Journal Club, DARE and CCTR
- Proquest
- Google and Google Scholar
- Websites of Australian Centre for Posttraumatic Mental Health<sup>1</sup>, National Institute for Clinical Excellence<sup>2</sup>, USA Institute of Medicine of the National Academies<sup>3</sup>, American Psychiatric Association<sup>4</sup>

The key words used for searching: Eye Movement Desensitisation and Processing, EMDR, Post-Traumatic Stress Disorder, PTSD, exposure therapy. The search was

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<sup>1</sup> <http://www.acpmh.unimelb.edu.au>

<sup>2</sup> <http://www.nice.org.uk/CG26>

<sup>3</sup> <http://www.iom.edu>

<sup>4</sup> <http://www.psych.org>

limited to the papers published from the year 2000. The last search was carried out in December 2007. The search yielded a significant number of publications.

Initially high level quality trials and clinical guidelines were selected. After further consideration it was decided that the robust assessment of evidence carried out by the credible professional research institutions was sufficient for making balanced conclusions. Hence this brief report summarised recommendations from the key four documents without conducting in-depth evidence-based review of the original studies.

#### **4. RESULTS**

This report has considered 4 key documents related to EMDR in treatment of PTSD:

- Treatment of Posttraumatic Stress Disorder: an Assessment of the Evidence released by the USA Committee on Treatment of Posttraumatic Stress Disorder (4)
- Post-traumatic Stress Disorder: the management of PTSD in adults and children in primary and secondary care commissioned by the National Institute for Clinical Excellence (5)
- Practice Guideline for the treatment of patients with Acute Stress Disorder and Posttraumatic Stress Disorder published by American Psychiatric Association (1)
- Australian Guidelines for the treatment of adults with Acute Stress Disorder and Posttraumatic Stress Disorder released by Australian Centre for Posttraumatic Mental Health (2).

These documents provide a balanced summary of the existing research and their recommendations are grounded in robust evidence-based reviews.

Three out of four papers found sufficient evidence in support of EMDR efficacy (1, 2, 5), with one paper grading the evidence as *'inadequate'* (4).

##### **4.1 USA Committee on Treatment of Posttraumatic Stress Disorder**

The USA Department of Veterans Affairs commissioned an evidence-based review of efficacy of treatment options for PTSD (4).

As a result of this commission, the USA Committee on Treatment of Posttraumatic Stress Disorder published an assessment of the evidence of pharmacotherapy and psychotherapy efficacy in treatment of PTSD. The review applied rigorous inclusion criteria, with only high quality RCTs assessed in the report.

A small section of the report referred to exposure therapies, including EMDR. The Committee assessed 10 RCTs on EMDR, and concluded that in light of the overall body of low quality scientific evidence, the efficacy of EMDR was uncertain. The Committee graded the evidence of EMDR efficacy in the treatment of PTSD as *'inadequate'*.

## **4.2 NICE guidelines**

The evidence-based review that underpinned the National Institute for Clinical Excellence (NICE) guidelines compared effectiveness of EMDR with the following treatment options:

1. Waiting list or usual care
  2. Trauma-focused Cognitive Behavioural Therapy (CBT)
  3. Stress management therapy (SMT)
  4. Other therapies
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1. Comparison between EMDR versus waiting list indicated some evidence of EMDR benefit in reducing severity of PTSD symptoms (self-reported and clinician-rated), in alleviating depression symptoms and in lessening likelihood of having PTSD diagnosis after treatment.
  2. Comparison of EMDR and CBT efficacy concluded limited evidence favouring EMDR over CBT in reducing the likelihood of PTSD diagnosis after treatment. Evidence of positive impact of EMDR on severity of PTSD symptoms and of reducing the likelihood of leaving treatment early was inconclusive.
  3. EMDR was performing better than stress management therapies on lessening the likelihood of a PTSD diagnosis after the treatment. The evidence was inconclusive on whether EMDR was more successful in reducing severity of PTSD symptoms.
  4. Limited evidence favoured EMDR over other psychological treatments in reducing the likelihood of a PTSD diagnosis after the treatment and in alleviating severity of PTSD symptoms.

Overall, the high quality evidence-based review concludes that EMDR is more effective in treatment of PTSD than waiting list or usual care, and at least as effective as other psychological interventions.

## **4.3 American Psychiatric Association Practice Guideline for the treatment of patients with Acute Stress Disorder and Posttraumatic Stress Disorder.**

On par with the NICE conclusions are the American Psychiatric Association guidelines that considered EMDR among other psychotherapeutic interventions (1).

The guidelines suggest that overall this technique is beneficial to PTSD patients. The additional value of this approach is that it may prove to be beneficial to some specific groups of patients, such as those who cannot tolerate prolonged exposure or find it difficult to articulate their traumatic experiences.

The summary statement indicates that EMDR is more effective than no treatment or supportive counselling, and may be as effective as cognitive behaviour therapy and other exposure-based techniques.

#### **4.4 Australian Guidelines for the treatment of adults with Acute Stress Disorder and PTSD**

Australian Centre for Posttraumatic Mental Health released in February 2007 Australian Guidelines for the Treatment of Adults with Acute Stress Disorder and Posttraumatic Stress Disorder (2). The guidelines supplemented the results of the NICE review 2005 and the USA Psychiatric Association (APA) 2004 guidelines with a comprehensive evaluation of clinical trials. The preface to the report stated that the guidelines were tailored to Australian needs and the country's healthcare system.

The guidelines were built on the NICE evidence-based report, and its recommendations were updated in light of the new publications. The evidence statements on comparison between EMDR and waiting list or usual care for treating PTSD suggest:

- Good evidence that EMDR is more effective than waiting list in reducing depression symptoms.
- Inconclusive evidence whether EMDR is more effective in having a PTSD diagnosis after the treatment.

In respect to comparison of EMDR with CBT, the evidence on difference in clinical outcome was classed as *'inconclusive'* on most of the variables considered in the review. The overall conclusion was that EMDR is at least as effective as CBT in treatment of symptoms associated with PTSD.

A similar conclusion was reached in relation to EMDR versus stress management therapy, with limited evidence favouring EMDR over SMT in reducing anxiety symptoms.

Limited evidence was found favouring EMDR over other therapies in reducing severity of PTSD symptoms and in reducing the likelihood of PTSD diagnosis after treatment.

The report recommends that adults with PTSD should be provided with trauma-focussed interventions, such as CBT and EMDR, in addition to in vivo exposure.

In line with the recommendations of the above papers is a recently published systematic review by Cochrane Depression, Anxiety and Neurosis Group. The review evaluated randomised controlled trials involving all psychological treatments of PTSD (3). The review assessed 33 studies, and concluded that there was evidence of EMDR efficacy in the treatment of PTSD. EMDR was found to be a more effective treatment than waiting list, usual care and stress management therapies in reducing traumatic stress symptoms and symptoms of depression and anxiety associated with PTSD.

## **5. DISCUSSION**

The assessment of evidence published up to date appears to suggest that despite some controversy around this treatment and the proposed need for further clinical trials, clinical benefits of EMDR in management of PTSD symptoms can be identified.

While acknowledging the view of the Institute of Medicine's Committee on Treatment of Posttraumatic Stress Disorder, the overall body of recommendations based on evidence-based assessment from other credible sources suggests that EMDR is an effective treatment option in management of symptoms associated with PTSD (1, 2, 5).

NICE guidelines, American Psychiatric Association Practice Guideline for the treatment of patients with Acute Stress Disorder and Posttraumatic Stress Disorder and Australian Guidelines for the treatment of adults with Acute Stress Disorder and PTSD (2) support the use of EMDR as a treatment option for PTSD.

## **6. CONCLUSION**

The balance of evidence-based assessments appears to suggest that EMDR is an effective treatment option for symptoms associated with PTSD.

## **7. ACKNOWLEDGMENTS**

To the ACC Clinical Psychologists Barry Kirker and Annie Maillard - for their help with scoping the report and for helpful comments.

## **8. REFERENCES**

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