EMDR in the Treatment of Posttraumatic Stress Disorder with Prisoners of War

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Abstract

The experience of captivity and exposure to psychophysical torture is a stress of the utmost degree that leads to posttraumatic stress disorder (PTSD) in the majority of cases and has the tendency to become chronic. Within the assistance programme for victims of torture in the IAN Centre for Rehabilitation of Torture Victims we utilise the cognitive behavioural method of Eye Movement Desensitisation and Reprocessing (EMDR), which has proven successful in treatment and constitutes a part of an integrative therapeutic procedure. This paper elaborates the theoretical concept of this method together with some specific features of working with torture victims, illustrated by a case study.

INTRODUCTION

Eye Movement Desensitisation and Reprocessing -EMDR

Discovered in 1987, the new psychotherapeutic technique of rapid eye movement desensitisation (Shapiro, 1989) was promoted in 1989. This fundamentally behavioural method, as well as the behavioural-cognitive method subsequently, after the introduction of the cognitive reprocessing, is based on the principle of reciprocal inhibition method (especially the systematic desensitisation and hidden desensitisation - "*imaginal flooding*"). It incorporates the experience of other therapeutic modalities: psychodynamic (early experience and content of dreams), significance of bodily sensations (body-oriented therapy), empowerment of the client (client-centred therapy) as well as a systematic approach until final integration of therapy effects (interactive therapy) (Shapiro & Forest, 1997: Shapiro, 2000)..

Despite a substantial quantity of studies and research, EMDR is still considered a highly controversial method. From the time it was discovered to date, over 25000 clinicians throughout the world have been trained in this method. Due to the conscious nature of empirical effectiveness and rapid impact on the PTSD symptoms (Perkins & Rouanzoin, 2002), these clinicians were often becoming uncritical advocates in favour of this method. On the other hand, the most important objections of the opponents to this method are prompted by pseudo-scientific explanations about how the method works, overestimation of eye movement significance, incomplete and often methodologically unfounded research, non-selective use of the method in a variety of psychiatric disorders and the commercialising of the method (Herbert et all., 2000).

Nevertheless, most of the works about all psychotherapeutic methods in treating the consequences of traumatic events come from the field of EMDR application. This has prompted the International Society for Traumatic Stress Studies, to point the EMDR as an effective modality in treatment of PTSD (Chemtob., Tolin, van der Kolk & Pitman, 2000), while some other studies have proven its higher efficacy compared to other psychotherapeutic modalities in treatment of PTSD (Van Etten & Taylor, 1998). Three controlled studies show the elimination of diagnosed PTSD in 77-90% of civilians after 3-7 sessions (Lee C. et al., 2002; Marcus , Marquis & Sakai, 1997; Rothbaum, 1997). Other studies show a significant reduction of PTSD symptoms after 2 or 3 sessions of active treatment (Ironson, Freund, Strauss & Williams, 2002; Scheck, Schaeffer. & Gillette 1998; Wilson, Becker &Tinker, 1995), while in follow-up studies reflect the good remission in 84% of the cases even after 15 months (Wilson, Becker &Tinker, 1997). Nevertheless, it is often needed to have more sessions; for instance Carlson and associates (1998) achieve the elimination of PTSD diagnosis with Vietnam veterans after 12 sessions.

Mechanism in which EMDR works

There are many speculations about the mechanism in which this controversial yet effective method works. Some of the things stated are: the induction of REM sleep; simultaneous bi-hemispheric activation; mechanism of dual attention and mechanism of counter-conditioning3. One of the most acceptable explanations of how the method works is based on therapeutic stimulation of Accelerated Information Processing Model, physiological system that under normal circumstances processes information until their adaptive resolution and integrates the experience so that it could be used in the future (Lipke, 1992). When trauma occurs, this system does not function adequately, thereby leaving information in the neurobiological track, i.e. in a disturbing unprocessed form.

The traumatic event is physiologically and neurologically disturbing to such an extent that it somehow damages the ability of the nervous system to process information up to the state of their adaptive resolution, which leaves perceptions, emotions, beliefs and meanings "locked" in the nervous system. The experience is "locked" (closed, encapsulated) and sensory memory becomes deeply rooted, while the recollection of the event provokes powerful sensations and the re-living of the same event.

In a specific way, dreaming represents the processing of information, while the REM sleep constitutes a physiological mechanism for establishing a balance between excitations and inhibitions in the central nervous system (CNS). REM sleep thereby "opens" the CNS, re-programmes the brain, enables learning of new material and processes information. Induced rapid movements used in the EMDR would theoretically correspond to eye movements during REM sleep, which possibly makes them accelerate and finalise the processing of the traumatic experience that had been "frozen" until that time. Psychological tension decreases, a sense of distance is created towards the traumatic experience and it becomes incorporated into experience. Negative thoughts about the event (such as irrational guilt, etc.) are re-processed and positive convictions are installed instead. One of the possible explanations is that the stimulation of rapid eye movement induces an inhibition of the related reflex mechanism arising in mammals, thereby leading to a physiological redirecting and enhancement of the sense of security.

It is assumed that EMDR method helps to enter into the node of "frozen" memory through one of four channels: image of memory about the traumatic event, emotions, cognition or bodily sensations related to the event. However, the neurophysiologic mechanism of restitution and re-establishing the equilibrium still remains unknown.

During the application of EMDR technique the effect of instant generalisation was observed, in other words, besides the memories that we heal all other similar memories are successfully desensitised. For example, during the treatment of a victim of violence, together with the most traumatic experience the inducing of anxiety related to other instances of violence also disappears.

Another advantage of this technique is that the clinician does not have to be fully acquainted with all details of the event, whereby he/she avoids own overburdening and the burnout syndrome, which often appears in psychotherapy of traumatised individuals.

THE PROCEDURE

The application of EMDR technique contains eight phases: anamnesis of the patient and planning the treatment, preparation of the patient, assessment, desensitisation, installation, scanning of the body, closure and re-evaluation.

1. Anamnesis of the patient and planning of treatment

The EMDR method requires readiness and motivation as well as stability of the patient. A careful assessment of physical health is necessary (absence of epilepsy, ophthalmologic diseases, evaluating earlier heart and respiratory conditions), as well as registering of dissociative episodes in the past and establishing a good rapport with the patient. In this phase the clinician determines specific "targets" (traumatic events) and the order in which they would be reprocessed.

2. Preparing the patient

It is necessary to prepare the patient for maintaining a dual consciousness of the current safety together with evoking the dysfunctional material from the past. In this phase we explain the basics of theory and test eye movements (direction most convenient for the patient). In this phase the clinician together with the patient explores the issue of secondary gain.

3. Assessment

In this phase the clinician determines the components of target memory and sets the basis of measurable assessment of reactions to the process of therapy expressed in scales that will be described later. After describing relevant elements of the traumatic event, the target, most traumatic image of the event is determined; follows the negative self-assessment related to the event and representing a verbalisation of the upsetting affect; positive cognition is identified as the verbalisation of desired state, including its level on the Validity of Cognition scale (VOC); negative feelings are named and their intensity validated against the Subjective Units of Distress (SUD) and the place is localised of most powerful bodily distress when thinking about the event (Wolpe, 1990).

4. Desensitisation

In this phase the client is induced with specific, rapid eye movements (or some other repetitive alternating movements such as tapping on the upper side of hands or auditive stimulation) with simultaneous concentrating of the patient on the mental perception of traumatic experience. Sets of eye movements are repeated as long as the processing of traumatic experience lasts, regardless of which channel of memory is open. Reprocessing is over once the SUD level is reduced to zero.

5. Installation of positive cognition (positive conviction)

In this phase the focus is on installing and enhancing the power of positive cognition that the patient chose instead of the existing negative self-assessment during the event. Installation of positive cognition is also done in sets of eye movements in the way that patient simultaneously keeps in his/her mind the most traumatic image and the positive cognition.

6. Scanning of the body

In this phase the imaginative scanning of the entire body is approached in order to localise the remaining somatised anxiety and desensitise it. Positive effect of the treatment is also evaluated on the bodily level, since after the traumatic event functional memory is stored in the system of declarative memory, while bodily sensations specific for this state are stored in the system of non-declarative memory.[9]

7. Closure

The patient must be brought back into the state of psychophysical balance regardless of whether the reprocessing has been completed. If the reprocessing is incomplete, in other words, if the full processing of the traumatic event has not been achieved during the session (i.e. a certain level of anxiety has remained or positive cognition has not been fully installed) it is necessary to apply some of the techniques of establishing self-control or relaxation.

8. Re-evaluation

The eight phase of the treatment, re-evaluation, is implemented at the beginning of each new session. The clinician requests the patient to go back to the previously processed material and determine whether the effects of the treatment have been preserved. The clinician decides to accept another content as the new EMDR target only after the

previously treated traumatic event has been fully integrated. Re-evaluation phase is the measure of success of the treatment.

SPECIFIC ASPECTS OF WORKING WITH DETAINEES TORTURE VICTIMS

In the Centre for Rehabilitation of Torture Victims we have treated over 160 clients with EMDR method. Detailed information as well as the research results on the success of this method shall be presented elsewhere.

Most of the clients have been treated by EMDR only once, in some cases two or three times, whereas only one client was treated four times. Most clients had an overall number of eight psychotherapeutic sessions. The duration of EMDR sessions (from third to seventh phase) varied between 20 minutes and one hour. There were only three incomplete EMDR sessions, in which cases the sessions ended with relaxation of the client. Reasons for this could be sought in severe headaches that would persist even after the change of direction or frequency of saccades or after changing the type of bilateral stimulation (sound, tapping).

In our centre the choice of patients for EMDR method was governed mainly by the criteria of exclusion and contraindication. In most cases of clients who had requested assistance in our Centre we have decided upon EMDR due to its empirically proven effectiveness, practical aspect when working with a large number of clients and rapid impact on persistent intrusive PTSD symptoms, which in some cases had lasted for 11 years; it has also proven useful in prevention of burn-out syndrome in clinicians working with the most severely traumatised population. On the other hand, presence of comorbidity disorders such as depression or alcoholism has made us postpone the EMDR with prior administering of psychopharmaceuticals or treating the patient for alcoholism. However, in several cases we have decided to apply EMDR even in the presence of severe organic disorders such as multiple sclerosis (with good results in PTSD symptoms reduction, primarily the intrusive ones) thereby including into therapy all those with relative contraindications. Absolute contraindications were therefore focused primarily around reduced cognitive capabilities as consequences of permanent cognitive damages disabling the simple understanding of instructions given by the clinician.

Before each EMDR treatment we have performed a diagnostic procedure through a battery of tests used by the Centre in order to verify or dismiss the clinical diagnosis of PTSD. The questionnaire on torture types gave us an insight into the types of traumatic experiences in detention camps; however, since the questionnaire covered only the traumatic events during captivity we requested the patient to state all traumatic events in his/her life before applying the method, which provided additional insight into previous traumatic experiences. This was necessary for planning the treatment and also prepared us for the possibility that the patient would open these traumatic experiences during an EMDR session. This indeed happened on a few occasions, especially during the installation of

positive cognition, when it was necessary to also desensitise primary traumatic events obstructing successful cognitive reconstruction.

Many of our patients came to the Centre without prior information about possibilities of positive therapeutic effects in treating their PTSD, but rather with an expressed wish for tertiary benefit (obtaining medical certificates for disability commissions, expertise for legal purposes, etc.). On many occasions we have been able to motivate these patients to also accept the treatment.

Success of EMDR as well as other psychotherapeutic methods largely depends on patient's motivation, while secondary gain and acceptance of the victim role represented the largest obstacle in the healing process. For this purpose we found it very effective to determine aims and define problems in all aspects of life, not only in health: employment and career, finances, family, partner relationship, friendship and social life as well as spirituality. At the same time we encouraged the patient to recognise his/her current achievements in all fields and to identify internal forces, his/her positive characteristics and points of reliance that would help him/her to regain self-confidence.

Patients frequently cited many traumatic events, which preceded captivity and happened during their time at the frontline, and the recurring memory through intrusive symptoms of PTSD that occurred even before their capture. It has proven useful to desensitise this material first if such memories would be a frequent contents of the current clinical picture of PTSD. In many cases the EMDR treatment of these traumas has proven an effect of generalisation, so that already after one or two sessions it has reduced PTSD symptoms, rendering the continuation of EMDR treatment unnecessary. If the contents of nightmares (and to a much lesser extent the flashback PTSD episodes) consisted of detention camp events, they were the first to be desensitised and the effect of generalisation was so evident that the dreams related to frontline experience were also reduced. There were only two cases when the target of EMDR session was a nightmare indirectly linked to the real event. We mainly left the decision about the EMDR target to the patients regardless of whether we worked on very severe or less severe traumas, but in most cases the patients have chosen the very act of their capture as the most traumatic event, especially those clients who became refugees from Croatia after the operation "Storm". This could be understood in the way that they experienced the fact of capture, after several years at the frontline, as an act of treason and uselessness of their entire fighting up to that moment, while at the same time intensifying their fear for the family, particularly if the family members have also been taken prisoners.

In the assessment phase the most frequent negative cognitions were: "I am helpless" and "I am weak". The most frequent positive ones were: "I am strong" and "I have things under control". There were no major problems in defining positive cognition.

A tendency towards somatisation and prolonged work on the bodily channel during desensitisation as well as during scanning was observed in a large number of clients.

Two of our clients had an abreaction during desensitisation manifested through hyperventilation, nausea and urge to vomit, once the session was cut short and ended with

relaxation, while another time the change in the direction of eye movement resulted in appeasement of the patient.

Almost all clients reported subjective improvement that was also verified by diagnostic instruments. Greater improvement occurred in those cases where intrusion symptoms dominated the clinical picture of a non-complicated PTSD, while EMDR showed less effect in those with avoidance symptoms.

CASE STUDY

DD, 47 years of age, construction worker from Knin, Croatia, married, father of four children, refugee in Serbia since 1996 when he was finally released from the camp in Knin after 160 days of captivity during which he was subjected to psychophysical torture. Prior to that he had spent 48 months at the frontline. The patient came to CRTV for the first time in February 2003. After preliminary examination, including a clinical interview and application of tests for diagnostic purposes, we have established the existence of posttraumatic stress disorder and gave indications for psychotherapy. Good therapeutic cooperation was established in the preparatory phase. The patient demonstrated high motivation for treatment, since for the past 7 years while his discomforts persisted he has had very few nights without nightmares related to traumatic events during his frontline experience and captivity. In addition, at the time of capture his father was killed before his eyes in the column of refugees; this was a frequent content of his nightmares and daily ruminations.

The choice of first event that was desensitised by EMDR method was left to the patient, who chose the death of his father for the first EMDR session. Target image was the moment when the patient recognises his father's clothes, watch and cigarette lighter on a pile of dead bodies, negative cognition (NC) was: "I am weak", positive cognition (PC): "I am strong", VoC=2, feeling – grief, SUDs level = 8, bodily anxiety - in his chest.

During desensitisation the anxiety grew and fell several times, bodily sensations migrated and finally full desensitisation was achieved.

Already after the first EMDR session the patient reported an improvement in his sleep, he felt better in the morning and calmer during the day. The next EMDR session processed the topic of capture. This was logical, because the capture followed very soon after his father's death. The target image was: "Pointed guns of several Croatian soldiers"; NC - "I am helpless"; SUDs - 8; bodily anxiety focused on the stomach. This time the entire session lasted shorter, very soon there was a reduction of anxiety to zero and quick installing of positive cognition.

The last, third EMDR session treated the scene of torture in prison. Target image was "I lick my own blood off the floor after they had beaten me up", NC- "I am helpless", positive cognition - "I am strong", VoC 1, feeling - fear, SUDs - 9 and bodily anxiety focused on the chest. During desensitisation the feeling of rage replaced the one of fear,

bodily sensations migrated towards arms and legs and finally to the head (through parts of the body that had been beaten). Positive cognition was successfully installed and VoC 7 was reached.

At the testing three month later, significant reduction of PTSD symptoms was achieved and psychosocial rehabilitation of the patient continued.

This paper is posthumously dedicated to the brave and humane Barbara Zelwer, psychologist from Berkley. Thanks to her knowledge and selfless assistance EMDR has helped many people in Serbia.

REFERENCES

American Psychiatric Association (1994) Diagnostic and Statistical Manual of Mental Disorders, Fouth Edition (DSM-IV). Washington, D.C.: American Psychiatric Press.

Chemtob, C.M., Tolin, D.F., van der Kolk, B.A. and Pitman RK (2000) Eye movement desensitization and reprocessing. In: Foa, E.A., Keane, T. and Friedman, M.J., (Eds.) *Effective treatments for PTSD: Practice Guidelines from the International Society for Traumatic Stress Studies*, pp. 139-154. New York: Guilford Press.

Herbert, J.D., Lilenfeld, S.O., Lohr, J.M., Montgomery, R.W., O'Donohue, W.T., Rosen, G.M. and Tolin, D.F. (2000) . Science and psesudoscience in the development of eye movement desensitization and reprocessing: implications for clinical psychology. *Clinical Psychology Review* **20**, 945-971.

Ironson, G.I., Freund, B., Strauss, J.L. and Williams, J. (2002) A comparison of two treatments for traumatic stress: A pilot study of EMDR and prolonged exposure. *Journal of Clinical Psychology* **58**, 113-128.

Lee, C., Gavriel, H., Drummond, P., Richards, J. and Greenwald, R. (2002) Treatment of post-traumatic stress disorder: A comparison of stress inoculation training with prolonged exposure and eye movement desensitization and reprocessing. *Journal of Clinical Psychology* **58**, 1071-1089.

Lipke, H. (1992) Manual for the teaching of Shapiro's EMDR in the treatment of combat - related PTSD. Pacific Grove, CA: EMDR Network .

Marcus, S., Marquis, P. and Sakai, C. (1997) Controlled study of treatment of PTSD using EMDR in an HMO setting. *Psychotherapy* **34**, 307-315.

Perkins, B. and Rouanzoin, C. (2002) A critical evaluation of current view regarding eye movement desensitization and reprocessing (EMDR): Clarifying points of confusion. *Journal of Clinical Psychology* **58**, 77-97.

Rothbaum, B.O. (1997) A controlled study of eye movement desensitization and reprocessing for posttraumatic stress disordered sexual assault victims. *Bulletin of the Menninger Clinic* **61**, 317-334.

Scheck, M.M., Schaeffer, J.A. and Gillette, C.S. (1998) Brief psychological intervention with traumatized young women: The efficacy of eye movement desensitization and reprocessing. *Journal of Traumatic Stress* **11**, 25-44.

Shapiro, F. (1989) Efficacy of the eye movement desensitization procedure in the treatment of traumatic memories. *Journal of Traumatic Stress* **2**, 199-223.

Shapiro, F. (1997) Eye movement desensitization and reprocessing: Basic principles, protocols and procedures. New York: Basic Books .

Shapiro, F. (2002) EMDR as an integrative psychotherapy approach: Experts of diverse orientations explore the paradigm prism. Washington D.C.: American Psychological Association Press.

Shapiro, F. and Forest, M.S. (1997) EMDR: The Breakthrough Therapy for Overcoming Anxiety, Stress and Trauma. New York: Basic Books.

Van Etten, M.L. and Taylor, S. (1998) Comparative efficacy of treatments for posttraumatic stress disorder: A meta-analysis. *Clinical Psychology and Psychotherapy* **5**, 126-144.

Wilson, S.A., Becker, L.A. and Tinker, R.H. (1995) Eye movement desensitization and reprocessing (EMDR) treatment for psychologically traumatized individuals. *Journal of Consulting and Clinical Psychology* **63**, 928-937.

Wilson, S.A., Becker, L.A. and Tinker, R.H. (1997) Fifteen-month follow-up of eye movement desensitization and reprocessing (EMDR) treatment for PTSD and psychological trauma. *Journal of Consulting and Clinical Psychology* **65**, 1047-1056.

Wolpe J. (1990) The practice of behavior therapy (4th ed.). New York: Pergamon Press.

Yehuda, R. (1998) Psychological Trauma. Washington: American Psychiatric Press.