Eye movement desensitisation and reprocessing therapy can help reduce mental health nurses’ emotional distress after being assaulted while at work.

Reducing distress following assault in the workplace

Keywords: Workplace assault/post incident support/EMDR/mental health

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In this article...

- An overview of the number of violent incidents aimed at NHS staff and psychological debriefing techniques
- An introduction to trauma-focused interventions
- Eye movement desensitisation and reprocessing therapy

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Background Nurses working in inpatient mental health settings report high rates of assault and psychological morbidity. Psychological debriefing is the main form of post-incident support, yet its efficacy has been widely questioned.

Aim To determine whether eye-movement desensitisation and reprocessing (EMDR) therapy is effective in reducing the psychological distress experienced by nurses after an assault at work.

Method Four participants experiencing post-traumatic stress symptoms following a workplace assault completed between three and five sessions of EMDR. A multiple-baseline, case series design was used, and quantitative and qualitative outcome data were collected.

Results The results showed a clinically significant reduction in the level of emotional distress associated with traumatic memories, avoidance and intrusion symptoms between the pre and post-treatment data collection points for all participants. There was also an increase in the strength of belief in positive coping cognitions concerning the event following EMDR therapy in all participants. These improvements were maintained at one-month follow-up for three of the four participants. The study results did not show a reduction in general psychological distress.

Conclusion The value of EMDR as a form of post-incident support lies in its alleviation of specific post-traumatic stress symptoms, rather than in improving general psychological wellbeing. The data must be interpreted with caution, but the positive outcomes suggest the need for further case series research, or a more controlled design with a larger sample.

Violence towards staff in mental healthcare settings in the UK has become an increasingly important challenge (Richter and Berger, 2006). Around 65,000 violent incidents towards NHS staff were reported in England in 1998-1999, with the average number of incidents in mental health trusts more than three times the average.

EMDR therapy is a trauma-focused psychological intervention designed to help alleviate the negative psychological impact of a traumatic event.

Severe distress can follow attacks.
Debriefing, has become one of the most used forms of psychological intervention. Critical incident stress debriefing (CISD), among other forms of psychological debriefing, presents the findings of the first investigation into the effectiveness of CISD therapy in reducing the psychological distress experienced by nursing staff following workplace assault.

Hospitality workers, such as nurses, are commonly exposed to traumatic events at work. Despite the introduction of the NHS Zero Tolerance campaign, this figure had risen to 84,273 by 2001 (Department of Health, 2002). More recently, the 2008 annual NHS staff survey indicated that one in five staff working in mental health trusts had experienced physical violence in the previous year (Healthcare Commission, 2008).

Around 90% of physical assaults in psychiatric hospitals are directed at nurses (Poster, 1996; Whittington and Wykes, 1994). According to MacDonald et al (2003), these types of assault result in high rates of post-traumatic stress disorder (PTSD) and general psychological distress in the staff concerned.

Eye movement desensitisation and reprocessing (EMDR) therapy is a form of post-traumatic support. This article presents the findings of the first investigation into the effectiveness of EMDR therapy in reducing the psychological distress experienced by nursing staff following workplace assault.

**Psychological debriefing**

Critical incident stress debriefing (CISD), along with other forms of psychological debriefing, has become one of the most widely practised and well recognised forms of early post-incident support over the past 15 years (Rose et al, 2002).

The debriefing is usually delivered in a single-session, group format within a week of a traumatic event taking place. It aims to reduce immediate distress and prevent the development of later psychological conditions (Van Emmerik et al, 2002; DH, 2000). CISD was originally identified as a component of Mitchell and Everly’s (1997) critical incident stress management model. It was intended as part of a multicomponent, integrated system rather than a standalone intervention (Richards, 2001).

Debriefing as the primary form of post-incident support has been widely questioned. A Cochrane Review on the efficacy of single-session psychological debriefing following traumatic events (Rose et al, 2002) said:

> “Psychological debriefing is equivalent to, or worse than, control or educational interventions in preventing or reducing the severity of PTSD, depression, anxiety and general psychological morbidity.”

This finding was supported by a meta-analysis of studies evaluating single-session debriefing after trauma. The analysis concluded that CISD was not effective in reducing symptoms of PTSD and other trauma-related symptoms, and may even have had a detrimental effect (Van Emmerik et al, 2002).

<table>
<thead>
<tr>
<th><strong>Hypothesis</strong></th>
<th><strong>Measure</strong></th>
<th><strong>Assessment point</strong></th>
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<tbody>
<tr>
<td>Hypothesis 1. Eye movement desensitisation and reprocessing (EMDR) therapy will lead to a reduction in avoidance and intrusion symptoms</td>
<td>Impact of Events Scale (Horowitz et al, 1979)</td>
<td>Pre and post baseline, post intervention, one-month follow-up</td>
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<td>Hypothesis 2. EMDR will lead to a reduction in the level of emotional distress associated with the traumatic memories</td>
<td>Subjective Units of Disturbance scale (Wolpe, 1990)</td>
<td>Start and end of each EMDR therapy session; administered twice weekly over the baseline phase. Pre and post baseline, post intervention and at one-month follow-up</td>
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<tr>
<td>Hypothesis 3. EMDR will lead to a reduction of general psychological distress.</td>
<td>General Health Questionnaire-12 (Goldberg, 1972)</td>
<td>Pre and post baseline, post intervention, one-month follow-up</td>
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<tr>
<td>Hypothesis 4. EMDR will lead to an increase in strength of belief in positive coping cognitions concerning the event</td>
<td>Validity of Cognitions scale (Shapiro, 1989)</td>
<td>Start and end of each EMDR therapy session; administered twice weekly over the baseline phase. Pre and post baseline, post intervention and at one-month follow-up</td>
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**Trauma-focused interventions**

In view of the concerns around debriefing as the first line of post-incident support, alternative interventions for alleviating psychological distress following workplace assault should be considered.

NICE guidance on the management of PTSD recommended two main forms of psychological treatment for people who have experienced a traumatic event: cognitive behavioural therapy (CBT) and EMDR (NICE, 2009b). Both treatment approaches have been applied successfully to a range of traumatic experiences, and EMDR has been used successfully with some types of work-related trauma. However, neither treatment has been evaluated with nurses following workplace assault (Högberg et al, 2007; Kitchiner, 2004; Page and Crino, 1993).

**EMDR**

Eye movement desensitisation and reprocessing is a trauma-focused psychological intervention developed by Francine Shapiro to help alleviate the negative psychological impact of having experienced a traumatic event. The standard eight-phase treatment protocol includes:

- Taking client history;
- Preparation;
- Assessment;
- Desensitisation;
- Installation;
- Body scan;
- Closure;
- Re-evaluation (Shapiro, 1995).

A range of theories attempt to explain...
The mechanisms underpinning EMDR, including potential links with rapid eye movement sleep, or the involvement of an orienting response or investigatory reflex.

The most widely accepted theory is the accelerated information processing model. This model proposes that EMDR works by engaging an information processing system that facilitates the integration of traumatic memories into existing memory networks. This helps the brain to reprocess the traumatic event in a more adaptive way, reducing the symptoms of PTSD (Shapiro, 1995).

**The study**

Four nurses from inpatient mental health settings who had experienced physical assault from a service user were self-selected. They were recruited from an independent sector provider of specialist mental health services for medium security inpatients. Box 1 shows the inclusion and exclusion criteria for participants.

**Method**

The study used a staggered baseline, case series design. This involved systematically varying the duration of the baseline phase across participants as this provides a more rigorous test of the intervention effect than using baselines of equal duration. Study participants were randomly allocated to one of four baseline durations, ranging from two and a half weeks to four weeks.

Following completion of the baseline phase, participants attended a maximum of five weekly EMDR therapy sessions. These were delivered by a consultant clinical psychologist with 17 years’ experience of using EMDR. All sessions were conducted in accordance with the eight-phase EMDR protocol, and each participant had a brief feedback interview.

To assess the effectiveness of EMDR in reducing psychological distress following workplace assault, the study tested four hypotheses using the outcome measures and collection points listed in Table 1.

Table 1: Baseline Pre-intervention Post-intervention Follow-up

<table>
<thead>
<tr>
<th>Participant</th>
<th>IES Score</th>
<th>GHQ Score</th>
<th>SUD Score</th>
<th>VOC Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>25</td>
<td>3</td>
<td>10</td>
<td>2</td>
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<tr>
<td>2</td>
<td>30</td>
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<td>4</td>
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Study participants also completed a log of any significant life events and rated their satisfaction with the post-incident support using a simple Likert scale. Three sessions were selected randomly and audio-recorded to monitor fidelity to the EMDR treatment protocol.

**Results**

Data inspection enabled the researchers to judge whether the patterns of change were consistent with the study hypotheses. The results indicated a clinically significant reduction in avoidance and intrusion symptoms (Fig 1) and in the level of emotional distress associated with traumatic memories (Fig 2) between pre and post-treatment data collection points for all participants.

There was also an increase in the strength of belief in positive coping cognitions concerning the event for all participants (Fig 3). These improvements were maintained at a one-month follow-up for three of the four participants.

However, the data did not support the hypothesis that there would be a reduction in general psychological distress following the intervention (Fig 4). Data on both the Subjective Units of Disturbance (SUD) scale (Wolpe, 1990) and the Validity of Cognitions (VOC) scale (Shapiro, 1989) demonstrated a reasonable amount of stability over the baseline phase, without any consistently large variations in distribution or trend. SUD and VOC data also showed an improvement from the initial rating at the beginning of the session to the last rating at the end of the session for all participants.

The mean rating of participant satisfaction was 9.5 out of a maximum 10. All participants indicated they thought it would be useful for nursing staff to be offered EMDR therapy following workplace assault.

Overall there was a 93% adherence to the EMDR treatment protocol.

**Discussion**

The study results suggest the value of EMDR in post-incident support is in alleviating specific post-traumatic stress symptoms, rather than improving general psychological wellbeing. This would explain why the improvements were less pronounced for participant four (P4), who expressed less trauma-symptom specific concerns at assessment than the other participants; rather P4 expressed concerns about legal disputes, low mood and relationship problems.

Other potential reasons why P4 did not experience the same gains as participants 1-3 include this participant having a higher rating of perceived physical severity – P4 reported sustaining greater physical injuries during the event than the other participants and more time had passed since the event had taken place.

As the study used a case series design, the data must be interpreted with numerous limitations in mind. For example, the data must be interpreted with numerous limitations in mind.
example, the small sample size and relatively similar demographics of the participants make the results difficult to generalise. The use of a single therapist also makes it harder to distinguish whether the effect was due to the intervention alone, or influenced by other factors such as the therapist’s experience. As the study did not include a measure of depressive symptoms, it is not known whether comorbid depressive symptoms affected the outcome.

A stepped-care model, with three stages, would avoid early formal intervention and interference with natural recovery, but ensure nurses who do require post-incident support at a later date are identified. The stages would be:

- Phase 1: early practical support in the immediate aftermath of an assault;
- Phase 2: monitor staff to identify those who may benefit from more intensive post-incident support, such as EMDR;
- Phase 3: monitor staff during phase two to identify those who may require longer-term psychological support, such as P4 in this study.

Conclusion
This article presents the findings of the first investigation into the effectiveness of EMDR as a form of post-incident support for nurses following workplace assault. The study was driven by the high rates of assault and subsequent psychological morbidity experienced by nursing staff, and the widespread reservation about debriefing as post-incident support.

The preliminary data demonstrated clinically significant reductions in the level of emotional distress associated with traumatic memories, and all participants after 3-5 sessions of EMDR therapy. There was also a trend of increased strength of belief in positive coping cognitions concerning the event.

The next step in using EMDR as a form of post-incident support would be to develop the empirical evidence base. This could include further case series studies, a more controlled design with a larger sample of participants, or comparing EMDR with other forms of post-incident support.

**References**


Whittington R, Wykes T (1994) Violence in psychiatric hospitals: are certain staff prone to...