TREATMENT OF POST-TRAUMATIC STRESS DISORDER USING TRAUMA-FOCUSED HYPNOSIS

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ABSTRACT

This paper describes practice-based evidence of treatment of post-traumatic stress disorder (PTSD) delivered in a normal NHS setting. Outcome audit data will be presented from 28 clients treated in a primary care mental health unit in the northwest of England. This will demonstrate that the use of dissociated imagery in the treatment of PTSD may lead to more rapid resolution of symptoms thereby demonstrating cost-effectiveness and a potential saving to the NHS of over £25,400,000 per annum.

*Key word*s: post-traumatic stress disorder, trauma-focused hypnosis, cinema, re-wind, National Institute of Clinical Excellence (NICE), treatment costs

INTRODUCTION

WHAT IS POST-TRAUMATIC STRESS DISORDER?

The label post-traumatic stress disorder (PTSD) has only been used since the mid-1970s. Pierre Janet, a contemporary of Sigmund Freud, first described this collection of symptoms in the early 1900s (Janet, 1904). It was called shell shock in the First World War (Shephard, 2000), combat fatigue in the Second World War (Saul, 1945), and then post-Vietnam syndrome (Friedman, 1981). The condition is defined in DSM-IV-TR (APA, 2000). PTSD can occur after experiencing or witnessing traumatic events such as in military combat, during natural disasters, following serious accidents, terrorist attacks, and violent deaths. It can also follow personal assaults such as rape and other situations in which the person felt extreme fear, horror, or helplessness. Police, fire brigade, or ambulance workers are more likely to have such experiences as they often have to deal with horrifying scenes.

There are three main elements to the symptomatology (DSM-IV-TR):

1. Re-experiencing as nightmares, flashbacks, and intrusive thoughts.
2. Avoidance and emotional numbing.
3. Hyperarousal.

Most people get over traumatic experiences in time without needing help; but for some, traumatic experiences may set off a reaction that can last for many months or even years. Symptoms of PTSD can develop immediately after the traumatic event or the onset of

symptoms may be delayed until triggered by another trauma. PTSD is common. Kessler et al. (2005) found that 5% of men and 10% of women in the United States suffer from PTSD at some point in their lives. Kinchin (2005) reports an incidence as high as 15% in members of the armed forces and emergency services. Several studies of individuals who have spent time in war zones found incidences of PTSD of around 30% (Kulka et al., 1990; Johnson & Thompson, 2008).

Holeva et al. (2001) reported a PTSD incidence of 23% four to six months following road traffic accidents in the UK. Even more worrying, Scragg et al. (2001) reported an incidence of 27.5% in those patients treated in intensive care units compared with 2.7% in the general population.

Psychotherapeutic resolution of PTSD involves re-processing the traumatic memory in some way. The past cannot be changed but the emotional reaction linked to the event can be altered, so the client can remember the incident without being overwhelmed by fear and distress. Different therapeutic approaches can help the client to re-process the trauma and hence move on. If the individual can start to feel safe again and in control of their feelings, they gain more control over the memory, so that they only think about the traumatic event when they want to, rather than having it erupt into their mind spontaneously. As a result they do not need to avoid certain trigger situations and can lead a 'normal' life.

Most clients are extremely anxious about their symptoms and have no understanding about PTSD. Some even believe they are suffering from a psychotic illness because of the nature of their flashbacks. Giving patients a simplified explanation of the mechanics of how traumatic events are remembered therefore may be reassuring to them. One useful analogy is that of a computer where programmes continue to run even when minimized. This could be likened to a sensitizing event in PTSD running in the background and being triggered to open up fully by certain sights, sounds, or smells.

In traumatic recall, two memory systems are operational: explicit and implicit (Schacter, 1987). Upon returning to the scene of an accident, for example, the context and other details about the experience will be remembered. These are explicit (conscious) memories mediated by the hippocampus and other aspects of the temporal lobe memory system. In addition, blood pressure and heart rate may rise, sweating may occur, and muscles may tense. These are implicit (unconscious or body) memories mediated by the amygdala and its neural connections. The conscious memory of the past experience and the physiological responses elicited thus reflect the operation of two separate memory systems that operate in parallel.

The pathway of sensory input from the thalamus to the amygdala is much faster than the route up to the cortex and back down to the amygdala. This means that the amygdala has acted instantly to alert an individual to danger by producing a physiological response before the moderating evaluative response fires from the cortex. Once an emotion has been turned on, it is difficult for the cortex to turn it off again (Muller, 1997). Nutt and Malizia (2004) have reported a positive relationship between PTSD symptom severity and amygdala activation.

IMAGERY

Images are created by all of our senses and can include visual, auditory, kinaesthetic, olfactory, or gustatory elements. If using imagery in hypnosis, it is essential that this range is incorporated.

The concept of association and dissociation is also very important in therapy (McDermott & O'Connor, 1996). An associated memory is as if one were actually there again re-living the experience. For example, if someone is having an associated recollection of a ride on a roller coaster they may see the view from the roller coaster, hear the sounds, feel the wind in their hair, the movement in their body, and possibly even smell candy floss or hot dogs. Association makes the experience more real and amplifies the effect of the event. Hence associated imagery should be used to access resourceful events.

A dissociated memory would involve seeing oneself on the roller coaster; like a film but with none of the experiential information or emotional impact from being on the ride. The authors believe that it is important to use dissociated imagery to resolve past trauma as this approach generates less negative emotion. Whilst taking a history, the therapist should encourage associated recollections of positive experiences and avoid associating the client into negative experiences.

When imagery is used in cognitive behavioural therapy (CBT) it is believed that the re-experiencing must be done in an associated way in order for the client to re-process their emotions. This can be effective if done correctly but there is a great danger of re-traumatizing the client, and the approach is often distressing to both client and therapist. It must be remembered that memory is reconstructive rather than reproductive and that the events the client 'remembers' may not be the historic truth. However, because this is how the client has 'represented' the event to themselves the memories have to be addressed therapeutically as if they were the truth.

The National Institute of Clinical Excellence (NICE) currently recommends two therapeutic approaches for the treatment of PTSD, trauma-focused CBT and eye movement desensitization and reprocessing (EMDR) (NICE, 2005a), but this does not mean that other approaches do not work; merely that sufficient evidence is not yet available to allow NICE to recommend them. According to NICE guidelines, the duration of trauma-focused CBT should normally be 8 to 12 sessions. They also state that when the trauma itself is discussed, longer sessions (for example, 90 minutes) are usually necessary, and that treatment should be regular and continuous, usually at least once a week (NICE, 2005a).

STUDY DESIGN

All clients included in this study met the criteria of PTSD using the DSM-IV-TR criteria. Of the 28 clients 12 were male. In all cases the symptoms had been present for more than five months. The age range was from 21 to 73 years with an average age of 41 years. As is often found, some of the clients in this study had associated problems. One was consuming large quantities of alcohol at the start of therapy. One was suffering from persistent depression and two had previously suffered from traumatic events in childhood.

All clients completed a clinical outcomes routine evaluation (CORE) 34 (Evans et al., 2002) and an impact of event scale (IES) at the start and end of therapy (Horowitz et al.,

1979; Schwarzwald et al., 1987). The final IES is unfortunately not available for two of the clients.

Each clinical session lasted for one hour, normally at intervals of one or two weeks. The aim of the pilot was to treat clients, if possible, in three sessions. However, if that was not possible they were treated for as long as was clinically indicated.

THERAPEUTIC APPROACH

Resolution of traumatic memory has three stages; stabilization, taking control, and re-processing or re-integrating the memory. Firstly, the client has to be stable enough to cope with re-processing the trauma. In complex cases this stabilization phase—which includes building rapport, teaching self-hypnosis, and ego strengthening—may take considerable time. Secondly, the client needs to take control in some way by helping/comforting the younger self or by altering the traumatic images. For example, a client with PTSD following a bank raid changed her image of the gun to a banana. Thirdly, they need to integrate the emotion of the event into the present by 'knowing' emotionally as well as intellectually that they survived the incident; that the event is in their past.

The author (GI) has developed various hypnotic techniques using imagery and meta-phor. One example utilizes a wood, a stream, and a pool. It is first established that there are no contraindications to the use of such imagery. Visualization is then used to allow the client to discharge negative feelings (dropping leaves into a stream) and to ego strengthen (stones and a pool of resources). Clients are taught self-hypnosis which they are encouraged to use on a daily basis.

In subsequent sessions hypnosis can be induced by asking the client to close their eyes, take three deep breaths, and give a nod when they are ready to commence the therapeutic intervention. This empowers the client and reinforces that it is they themselves who induce hypnosis, as well as saving a considerable amount of time.

SILENT ABREACTION

If we were working on a dam-retaining wall we would first lower the level of water behind the dam as a safety measure. In the same way, it is useful to lower negative feelings such as anger before using trauma-focused hypnosis. A safe technique is silent abreaction, which was first described by the co-founder of ego state therapy, Helen Watkins (Watkins, 1980). In hypnosis, imagery is used to symbolize, externalize, and discharge the anger (attaching it to a dead tree, felling it, and maybe having a bonfire) and then connect with calm feelings.

TRAUMA-FOCUSED HYPNOSIS

Once stabilization has been achieved the author (GI) uses dissociated imagery in a technique he has developed called the cinema technique. This was adapted from a visual–kinaesthetic dissociation reported by Fromm (1965), who described the procedure as separating or dis-sociating the observing ego from the experiencing ego. Although the technique also uses re-winding it is not the same as the re-wind technique described by Muss (1991), as it involves a range of other interventions during the imagery.

THE CINEMA TECHNIQUE

This technique was described in detail by Ibbotson in Degun-Mather 2006. The client is asked to imagine going into a cinema. They are alone in the cinema, sitting in the second row, watching a blank screen. They are asked to describe the colour of the seats in order to confirm that they have the degree of visual imagery necessary for the technique to be used successfully. They are then asked to leave themselves in the second row and allow part of themselves to float up to the back of the cinema into the projection room. They are the projectionist and, as well as being able to operate all the machinery, they can see the back of their head in the second row watching the empty screen. This gives double dissociation from the action on the screen.

The client is asked, in hypnosis, to confirm that they are prepared to work on the traumatic event. A visual safety anchor is set up for the client to use if they become associated with the trauma or too distressed. The client is asked to project a happy film of a good experience that they remember onto the screen. They play this as a 'film' over a couple of minutes. They are then asked to start the film and float down into the action (i.e. associate with it) and enjoy the action for a while and then float back up to the projection room. They then create a special button which, when pressed, starts the happy film and floats them down into the action. The client is instructed that if the therapist asks them to press this special button they should do so. Also, if they feel too distressed they should press the button and inform the therapist that they have done so.

They are then asked to project on the screen a still picture of just before an event that would be helpful in the resolution of the trauma. Whilst this will usually be the expected trauma it is not invariably the case. They can make the image as they wish: black and white or colour, in or out of focus. This gives the client control of the image and may serve to reduce the negative affect. They then play the 'film' of the event over a couple of minutes, remembering that they are in the projection room and not in the action. They are asked to score the experience on a scale of 0–10 (with 10 being the worst imaginable experience). They then re-wind the film quickly, being reminded that this may give a bizarre look to the experience. For instance, after a car crash the client may be sitting in a damaged car, perhaps surrounded by broken glass. When the film is rewound the glass 'magically' becomes intact and the cars reverse apart and finish without damage. They are then asked to play the film forwards and backwards three times and then state the score of the last play forwards. Generally the score will have reduced.

Further therapeutic interventions are then used and their effect judged by the change in score. Interventions include 'payback' if the client thinks it is appropriate: getting the older self to go into the action (protected from the events) to comfort and support the younger them (reminding them that they survived), and saying whatever is necessary to those involved. The imagery of the film can be changed, as long as the event is still recognizable. It is no use, for example, to change a car crash to a film of the cars missing each other. The review of the scores ensures that adequate resolution has been achieved. The final film can then be stored and the client floats back down to the second row and re-integrates. They are asked to take whatever time they need to process the change and then come back to the here and now in their own time.

RESULTS

Effect sizes are included in the results using the Gene Glass calculation (Glass et al., 1981). Effect sizes are classified as small (0.2), medium (0.5), and large (0.8) (Cohen, 1988). For treatment of depression in primary care NICE takes an effect size of > 0.5 as the threshold for clinical significance (NICE, 2004). For mental health clients an effect size of 1.0 would mean that the average treated client would be better than 80% of the untreated population. The benchmark for mental health clients is taken as an effect size of 0.8 (Rosenthal, 1990). Confidence intervals are also shown.

Figure 1 shows that all clients had an improvement in CORE results. The effect size is 1.47 which is well in excess of the benchmark of 0.8 for improvement as a consequence of mental health treatment. The non-clinical range is < 1. The average reduction was 1.12 with a confidence interval of 0.28.
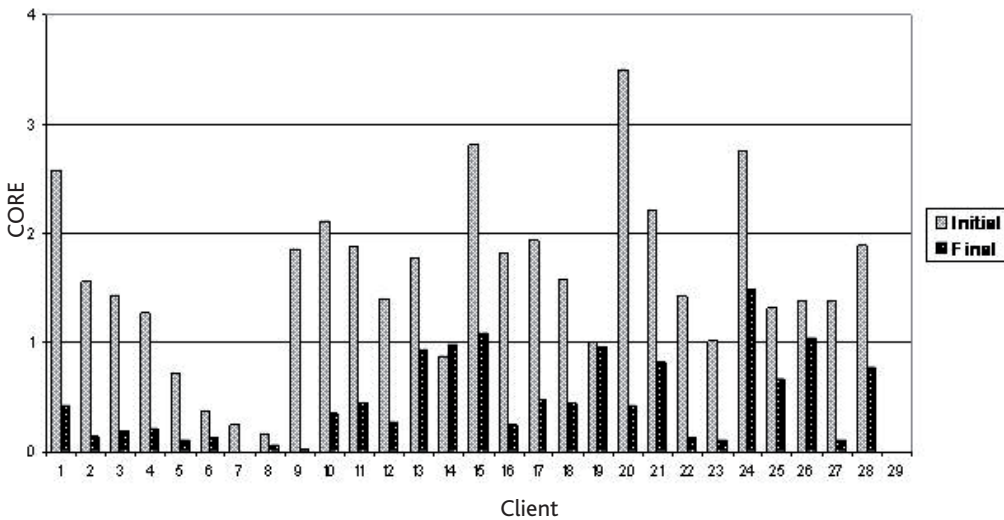

Figure 1. PTSD CORE results

Note: Effect size = 1.47. Average reduction = 1.12. Confidence interval = 0.28.

The IES is a specific instrument to evaluate PTSD. It gives results in two domains: intrusion and avoidance. The normal value for intrusion is < 21 (the maximum possible is 35), and for avoidance < 18 (the maximum possible is 40). Figure 2 demonstrates that all clients showed improvement in IES intrusion and all final results were in the normal range. In this case the effect size was even higher at 2.95.
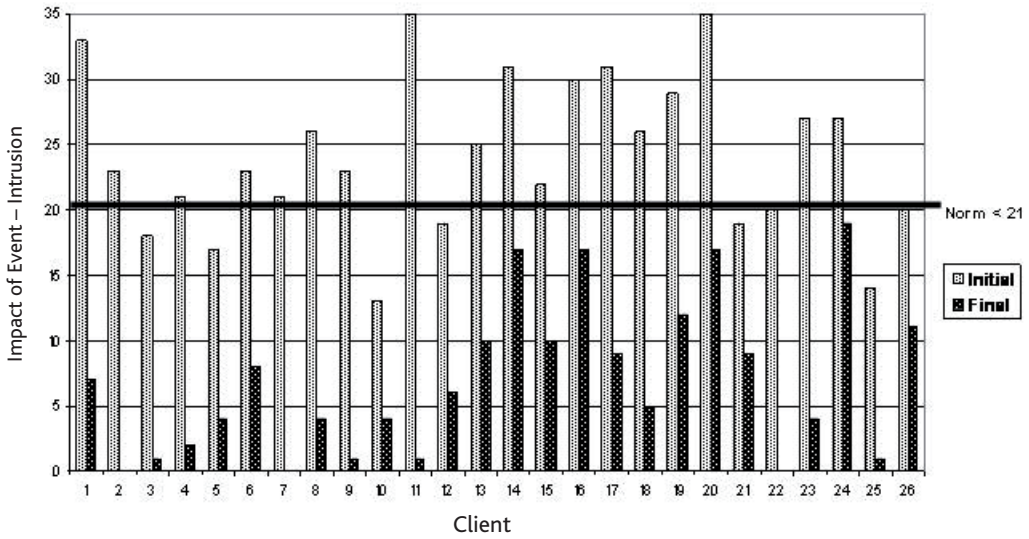
Figure 2. Impact of Event – Intrusion

Note: Effect size = 2.95. Average reduction = 17.27. Confidence interval = 2.25.

Figure 3 reveals that 81% of the clients showed an improvement in IES avoidance. Again the effect size, average reduction, and confidence intervals are acceptable.
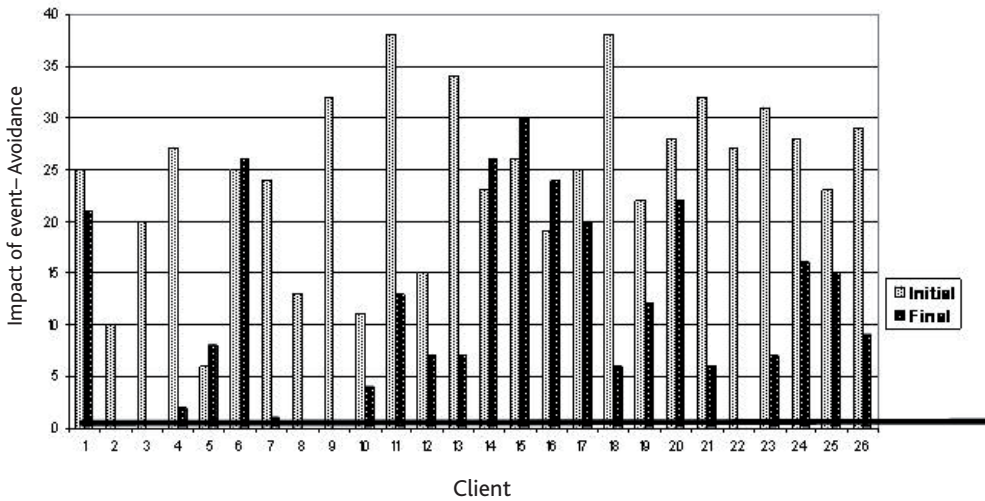

Figure 3. Impact of event– Avoidance

Note: Effect size = 1.70. Average reduction = 13.42. Confidence interval = 3.04.

Figure 4 shows that all clients had treatment (including assessment) within nine sessions of one hour and that 82% were treated within six or fewer sessions. The average number of sessions was 4.8.
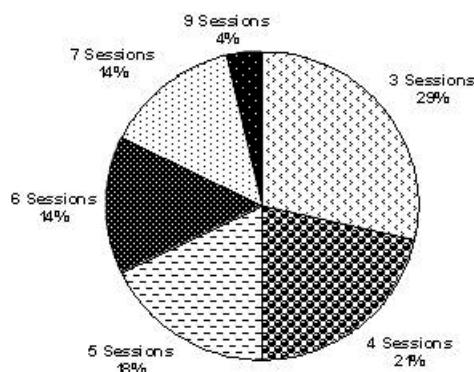

Figure 4. Number of sessions
Note: Average 4.8.

DISCUSSION

This study shows an outcome audit of the treatment of clients suffering from PTSD using trauma-focused hypnosis. All clients fulfilled the diagnostic criteria for PTSD as shown in DSM-IV-TR. It is observed that the treatment, evaluated using CORE 34 and IES, showed excellent results in an average number of 4.8 one hour sessions. This ranged from three to nine sessions depending on the time needed for stabilization.

It is noted that the results on the IES for avoidance are not as good as for the impact. However, the study was designed to demonstrate that rapid treatment of PTSD is possible and effective. It is the opinion of the author (GI) that if treatment had been extended then it would have been likely that the avoidance results could have been improved further. Some long-term follow-up was attempted but the numbers responding were poor and also there was pressure on appointments in the NHS facility where the treatment was part of the clinical process. However, it appeared that those with high residual avoidance did not suffer relapse. Some of the clients responding to follow-up questionnaires had further symptoms but none of these were recurrence of the initial problem, and they probably represented a demonstration of the low resilience of the clients in the study. It is proposed that a further study with long-term follow-up is indicated.

NICE guidelines recommend 8 to 12 sessions of one hour, and 90 minutes when the trauma is being addressed. If we were to postulate that the trauma was addressed in four of these sessions this would give a total duration of treatment of 10 to 14 hours.

Symptoms of PTSD are driven by the traumatic memory. The main therapeutic intervention used by the author (GI) was dissociated trauma-focused hypnosis. In this technique, the sensitizing event is reviewed in a dissociated way and then the images and perceptions are modified in order to break the link between the traumatic memory and PTSD symptoms. It is the authors' opinion that therapists could be trained in the use of dissociated trauma-focused hypnosis in as little as two days. The training cost implications are the same as or even less than those postulated by NICE.

NICE published the national cost-impact report on the management of PTSD in adults and children in primary and secondary care (NICE, 2005b). This postulates the number of patients requiring 5, 8 to 12, and 17 sessions. For the purpose of this calculation '8 to 12' sessions is taken as 10 sessions on average. They postulate a total of 1,568,950 sessions for 150,378 patients which is an average of 10.43 sessions per client. They postulate that the cost of this treatment would be £47,220,000 per annum. If the protocol described above were followed, with an average number of 4.8 sessions, the cost would be £21,793,846 per annum. Hence the saving to the NHS would be £25,426,154 per annum.

Can the NHS afford to simply accept the NICE protocol as it stands, or should further studeies of dissociated trauma-focused hypnosis be encouraged and considered?

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All clients were treated by the first author. He was a general medical practitioner for 22 years and then left to work as a psychological therapist in a clinical psychology department (later labelled a primary care unit) where he worked on a part-time basis for 14 years.

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