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Sexual Violence: Psychiatric Healing With Eye Movement Reprocessing and Desensitization

BOBBIE POSMONTIER,
College of Nursing and Health Professions, Drexel University, Philadelphia, Pennsylvania, USA

TIFFANY DOVYDAITIS, and
School of Nursing, University of Pennsylvania, Philadelphia, Pennsylvania, USA

KENNETH LIPMAN
Private practice, Highland Park, New Jersey, USA

Abstract

Sexual violence, which affects one in three women worldwide, can result in significant psychiatric morbidity and suicide. Eye movement desensitization and reprocessing (EMDR) offers health care providers the option of a brief psychiatric intervention that can result in psychiatric healing in as few as four sessions. Because health care providers often hear stories of sexual violence from their patients, they are in an ideal position to make recommendations for treatment. The purpose of this article is to introduce health care providers to the technique of EMDR, review safety and appropriateness, and discuss clinical and research implications.

Sexual violence, a major public health problem, is defined as any sexual act that is perpetrated against someone's will (Basile & Saltzman, 2002). Sexual violence can result in both acute and long-term debilitating consequences, including sleep disturbances, emotional detachment, post-traumatic stress disorder (PTSD), depression, anxiety, interpersonal disturbances, and revictimization (Brown, Testa, & Messman-More, 2009; Draucker, 1999a, 1999b; Draucker et al., 2009; Peterson, 2009; Vickerman & Margolin, 2009). According to Amnesty International, at least one out of every three women worldwide has been a victim of sexual violence, physical abuse, or both at some point in her lifetime (Agnihotri, Agnihotri, Jeebun, & Purwar, 2006; Edston & Olsson, 2007). In some countries the rates of violence against women approaches 70%. Since health care providers build trusting relationships with their clients over time, they are in a unique position to identify and refer victims of sexual violence for counseling services. Most women are referred for conventional psychotherapy, consisting of a variety of modalities such as psychodynamic, cognitive behavioral, or supportive therapies. Although effective, many of these modalities require months to years for psychiatric recovery to occur, and many women do not achieve full recovery due to high drop-out rates, and high costs of care (Chrisler & Ferguson, 2006).

Eye movement desensitization and reprocessing (EMDR) is a therapeutic option targeted for clients who develop psychiatric symptoms resulting from traumatic events, such as sexual violence (Shapiro, 2001; Shapiro & Forrest, 1997; Shapiro & Maxfield, 2002). In contrast to traditional psychotherapeutic modalities, psychotherapists can use EMDR to facilitate rapid, cost-effective psychiatric recovery in as few as three to four 90-minute sessions for appropriately screened clients (Davidson & Parker, 2001; Devilly & Spence, 1999; Edmond

Address correspondence to Bobbie Posmontier, College of Nursing and Health Professions, Drexel University, 245 N. 15th Street, Mailstop 1030, Philadelphia, PA 19101, USA. bp98@drexel.edu .

& Rubin, 2004; Edmond, Rubin, & Wamback, 1999; Edmond, Sloan, & McCarty, 2004; Ironson, Freund, Strauss, & Williams, 2002; Peterson, 2009; Rothbaum, 1997; Rothbaum, Astin, & Marstellar, 2005; Scheck, Schaeffer, & Gillette, 1998; Shapiro & Forrest, 1997; Shapiro & Maxfield, 2002; van der Kolk et al., 2007; Vickerman & Margolin, 2009; Wilson, Becker, & Tinker, 1995). The purpose of this article is to assist health care providers to understand the methodology of EMDR and to consider this modality when referring victims of sexual violence for psychiatric counseling.

WHAT IS EMDR?

During a walk, Francine Shapiro, MD, noticed that distressing thoughts dissipated while watching geese take flight over a period of time (Shapiro, 2001). She noticed she was experiencing saccadic eye movement, where her eyes moved rapidly back and forth in a mode similar to rapid eye movement (REM) during sleep. After experimenting on 70 patients with symptoms of PTSD, she hypothesized that saccadic eye movement or any bilateral stimulation of the brain, causes activation of an adaptive information processing (AIP) system, which facilitates reprocessing of distressing thoughts into positive thoughts. Saccadic eye movements may mimic REM sleep, which serves to reprocess disturbing memories during sleep (Greenwald, 1994).

Examples of AIP include how individuals experience riding on a train and riding a bicycle (Shapiro, 2001). A passenger on a train looks out the window and sees a continuing stream of visual scenes such as a series of buildings. As her brain utilizes the AIP, each scene begins to fade from memory and consequently holds no particular emotional importance for her once the scene has passed. One of the goals of EMDR is for the client to utilize this principle of fading memory to lessen the negative emotional and behavioral impact of a traumatic event.

In contrast, AIP can also occur after a child learns to ride a bicycle for the first time. Her memory of the sensation of balance, steering, rotating pedals, and joy of riding becomes stored in her neural memory network. Even if 20 years have passed without riding a bicycle, memories stored in her neural memory network facilitate her riding the bicycle without having to relearn the technique. An EMDR psychotherapist capitalizes on this type of experience to instill long-lasting positive emotional and behavioral reactions in her client’s neural memory network in place of negative cognitions associated with her original traumatic event.

When a woman experiences psychiatric symptoms after sexual trauma, memories of the experience can become locked in her neural memory network (Shapiro, 2001). Subsequently, these locked memories become inaccessible to her AIP and may result in experiencing self-defeating beliefs and symptoms of PTSD. A woman with locked memories in PTSD often experiences flashbacks that include the sights, sounds, smells, tastes, and touch of the original event. If the original traumatic event becomes the lens through which she perceives the world, she may fear going outside or engaging in intimate relationships, and she may suffer decreased self-esteem and powerlessness. A woman who experiences sexual violence may turn to substance abuse to lessen the psychological pain, or she may form relationships with violent partners in order to resolve the original trauma.

Shapiro (2001) hypothesized that engaging a woman’s brain in activities that access her right and left hemispheres while recalling details of a traumatic event would accelerate her psychiatric healing through AIP. A woman undergoing EMDR may experience unlocking of her neural memory networks so that her traumatic memories can be reprocessed into positive cognitions. Shapiro (2001) compared psychiatric healing with wound healing, where the body’s natural defenses are activated and called to the site of trauma. Thus, just as the

immune system is called into action for wound healing, the woman's AIP is called into action for psychiatric healing. The work of the psychotherapist is to provide bilateral brain stimulation to her client and encourage AIP without getting in the way of her natural healing processes.

Although the mechanism for psychiatric healing is not completely understood, the coupling of bilateral stimulation of the brain and recalling the traumatic event are key factors in the success of EMDR (Greenwald, 1994; Pitman et al., 1996). By engaging the AIP system, women who have experienced psychiatric symptoms from sexual violence can learn from the negative experience, become desensitized to the traumatic memory, and utilize newly learned adaptive belief schema to become successful in future interpersonal relationships. Since the original experiment, Shapiro (2001) and others have found that other mechanisms of bilateral stimulation of the brain with lights, sound, and touch are equally effective as saccadic eye movements.

COMPONENTS OF EMDR

Components of each session of EMDR include the target image, negative and positive cognitions, level of emotional disturbance, body sensations, bilateral brain stimulation, and cognitive rating scales (Shapiro, 2001).

Target Image

Identifying the correct target image is an essential part of EMDR efficacy (Shapiro, 2001). A woman's target image may consist of the entire scene of her sexual trauma or it may consist of fragments or blurred images. Her image also may be identified as current situations that trigger her emotional disturbance. The EMDR psychotherapist assists the woman in identifying her target image in order to link her consciousness with the memory stored in her neural memory network so that it can be available to her AIP. The woman, however, is not required to divulge the details of her target image to the psychotherapist.

Negative Cognitions

The psychotherapist asks her client to identify her negative cognition associated with her target image (Shapiro, 2001). A negative cognition is considered an incorrect belief or maladaptive self-assessment. The woman's negative cognition is defined as how she currently views or interprets herself. Statements such as "I am dirty" or "I am powerless" are examples of negative cognitions. Even if the sexual trauma occurred years ago, the psychotherapist needs to know how the woman feels about herself now in relationship to the traumatic event.

Positive Cognitions

Once her negative cognition is identified, the psychotherapist asks the woman to identify a desired and realistically achievable positive cognition and to rate its believability on a 7-point Validity of Cognition scale (VOC; Shapiro, 2001). The higher the rating, the more she believes that her positive cognition is true. Examples of positive cognitions include "I'm a good person" or "I am powerful" or "I did the best I could." The statement needs to begin with the word "I" because it helps the woman have control over her own cognitions rather than to depend on others for positive feelings. Her positive cognition will be used in the installation phase of EMDR to replace her negative or self-denigrating cognition in her neural memory network.

Level of Emotional Disturbance

The psychotherapist asks her client to think of her negative cognition along with her memory of the traumatic event, identify her associated negative emotion, and rate it on a 10-point Subjective Units of Disturbance scale (SUDS; Shapiro, 2001). The higher her rating, the more her negative emotion is related to the traumatic event.

Body Sensations

Often physical sensations accompany the woman's negative emotions and negative cognitions surrounding the traumatic event such as feeling tightness in her chest or feeling out of breath (Shapiro, 2001). These physical sensations also will become targets of EMDR therapy.

Bilateral Stimulation

The most common form of bilateral brain stimulation in EMDR and elicited by the psychotherapist is saccadic eye movements (Shapiro, 2001). The psychotherapist holds two fingers up 12 to 14 inches from her client's face and asks her to follow the motion of her fingers over a 12-inch visual span. While the client holds her negative cognition and traumatic memory in her consciousness, the psychotherapist moves her fingers back and forth 24 times. Once the set is over, the psychotherapist asks her client what images, insights, physical sensations, or emotions she is experiencing now. Other forms of bilateral stimulation include bilateral finger snapping just outside the client's ears, finger tapping on the client's open palms, or some form of digital sound or electronic hand stimulation with a specialized EMDR device. The number of sets that the psychotherapist performs during a session depends on the woman's ability to tolerate the procedure and the speed of bilateral brain stimulation at which the woman is most comfortable. The average number of total sessions is three to four, but it may vary based on the client's level of trauma.

SAFETY AND APPROPRIATENESS OF EMDR

Because AIP may occur between sessions, it is critical that psychotherapists assess readiness and the appropriateness of EMDR in women who have experienced PTSD related to sexual violence (Shapiro, 2001). Women may reexperience images, thoughts, and physical sensations that are almost as strong as the original event. In addition, their new memories may trigger the onset of other associated distressing memories.

Some of the methods that psychotherapists use to increase safety include orientation toward a dual focus where they ask their clients to attend to their distressing events while staying in the safety of the present therapy session. In addition, psychotherapists also teach their clients to use relaxation techniques to provide a safe mental haven should they experience distressing memories between sessions (Shapiro, 2001).

Despite the success of this psychotherapeutic technique, not all women who have experienced sexual violence are candidates for EMDR (Shapiro, 2001). Appropriateness of EMDR is evidenced by the presence of a strong positive rapport between client and psychotherapist, the client's ability to use relaxation techniques and maintain self-control to regain emotional balance between sessions, and her ability to ask for help if needed. The client should have no evidence of additional crises in the present that needs to be dealt with before the start of EMDR, no need to do a legal deposition in a crime case, and no current need to make important decisions. The ideal client should have access to a nurturing support system such as family and friends, and no evidence of an unsafe social environment or resistant social network. In addition, the client should have no evidence of eye pain during sessions (unless alternate EMDR techniques are used such as hand tapping), long-term drug

and alcohol abuse, current sedation with medications such as benzodiazepines, dissociative identity disorder (e.g., multiple personality disorder), organic brain damage, epilepsy, heart disease, or other medical conditions that would preclude the somatic experience of stress. Finally, she should have no evidence of resistance to treatment because of competing concerns.

Even though clients are not required to divulge details of their sexual violence experiences, they need a positive rapport with the psychotherapist so they are comfortable telling the truth about feeling out of control or revealing suicidal ideation (Shapiro, 2001). Psychotherapists practicing EMDR usually ask their clients to sign a truth agreement to disclose thoughts such as suicidal ideation or lack of control before beginning any sessions. Because they cannot predict what images or sensations may occur between sessions, it important that psychotherapists assess their clients' abilities to exert self-control and use relaxation techniques within the session before initiating EMDR.

Psychotherapists employing EMDR need to assess their clients' abilities to ask for help and access the support of a nurturing social network in the event that AIP becomes overwhelming between sessions (Shapiro, 2001). Women should undergo a physical exam to rule out medical conditions such as epilepsy, where seizures may be triggered by EMDR, and heart disease, where cardiac decompensation can occur with high levels of stress. Because eye pain may occur in women with weak eye muscles, the psychotherapist should immediately stop EMDR and refer her client to an eye specialist. In women with current drug and alcohol abuse, EMDR can trigger increased agitation. Because sedatives may decrease AIP effectiveness in EMDR, additional sessions may be needed for full processing to occur. Psychotherapists practicing EMDR should assess all women who have experienced sexual violence with the Dissociative Experiences Scale (DES) and the Mental Status Exam (MSE) to rule out dissociative disorder (Cummings, 1993; Wiener, 1992). Although women with dissociative identity disorder may undergo EMDR, they require a highly experienced EMDR psychotherapist to conduct sessions.

If a woman who has experienced sexual violence needs to attend a legal deposition for the crime, EMDR should be postponed until after the trial because her vivid memories of the event may fade (Shapiro, 2001). In addition, EMDR may need to be delayed, for example, for anyone who is about to make a critical decision or give a presentation at work. When a woman is in an unsafe or resistant social environment, she may be at risk while she is processing her trauma between sessions. The woman needs to be in an environment where she feels safe in order for EMDR to be effective. Finally, some women may be inappropriate candidates for EMDR because of competing concerns that might make them more resistant to treatment such as needing a disability check or desiring to maintain a strong identity with other sexual violence survivors.

EIGHT PHASES OF EMDR

The EMDR psychotherapist assists her client to progress through a series of eight phases during her sessions, including obtaining a history and formulating a treatment plan, preparation, assessment, desensitization, installation, body scan, closure, and reevaluation.

Phase 1: History and Treatment Plan

Mary was 40-year-old woman who confided that when she was 10 years old her mother tried to kill her by putting a pillow over her face in the middle of the night while she was asleep in bed. Although Mary's mother told her not to tell anyone, she confided her story to her minister. At first the minister seemed to be very caring and helpful, but after a short time he began to sexually assault her. After the sexual assault, the minister choked Mary and

threatened to kill her if she told anyone about these encounters. The minister's sexual assaults escalated and continued for 4 years until her family moved away. Mary never told her parents about what had occurred. Despite a year of psychodynamic therapy, Mary complained about difficulty sleeping since the sexual assaults occurred. During the evaluation, Mary reported that she had no significant past psychiatric history, medical/surgical history, social history, family history, legal issues, current crises, pressing concerns at work, use of sedatives, or upcoming legal depositions that would preclude EMDR. Her MSE and DES were normal and she denied any suicidal ideation.

During phase 1 the psychotherapist obtains a client history, determines safety of EMDR, identifies troubling behaviors and emotional symptoms, and formulates a treatment plan (Shapiro, 2001). Because the experience of EMDR may elicit high levels of emotional disturbance, the psychotherapist needs to assess her client for a history of medical conditions such as heart disease that would preclude treatment. During this phase the psychotherapist assists her client to identify negative target images from the past or present that will require reprocessing. In addition, the psychotherapist facilitates the client's exploration of desired positive cognitions.

Phase 2: Preparation

The psychotherapist told Mary that she might be suffering from PTSD related to her two traumatic life experiences and that she might benefit from three to four sessions of EMDR that could help decrease the memories of the experiences. In addition, the psychotherapist explained to Mary that her role was to facilitate rather than lead her in processing her traumatic experiences. She also warned Mary that she might experience disturbing thoughts or dreams between sessions as her brain was learning to reprocess her traumatic experiences. Finally, the psychotherapist asked Mary to raise her hand to stop the session any time EMDR became emotionally overwhelming for her, and to keep a written log of her thoughts and feelings between sessions. Mary used the log to maintain objectivity and a sense of control over disturbing thoughts or feelings.

Before beginning the EMDR procedure, the psychotherapist asked Mary to visualize a beautiful place she had experienced in the past. The psychotherapist encouraged her to picture the place, hear the sounds, smell the smells, and feel the feelings—both physical and emotional. Mary stated that she felt more relaxed after this visualization. After the preparation period, Mary agreed to sign a truth agreement where she would ask for help if needed and would let her psychotherapist know immediately if she felt suicidal and or experienced distressing thoughts that were overwhelming for her.

The psychotherapist prepares her client for EMDR by establishing a therapeutic alliance, explaining the process of EMDR, answering questions, and introducing her to relaxation and safety procedures (Shapiro, 2001). In addition, the psychotherapist explains to her client that she might experience disturbing emotions between sessions and that this experience is a normal part of reprocessing and healing. The client uses relaxation techniques, such as visualizing a beautiful scene, when disturbing emotions arise during and between sessions. By utilizing the relaxation techniques, the client experiences a sense of confidence and control. The psychotherapist also teaches the client to use a hand signal, such as raising her hand, if she feels she needs to stop reprocessing at any time during the session.

Phase 3: Assessment

Mary chose her experience of sexual assault as her target for EMDR. The psychotherapist asked her to recall the worst part of her memory. For Mary, this was the feeling of choking and complete terror. According to Shapiro (2001), it is important to understand the belief

that the client has about herself now that comes from the memory of the original event. Mary believed that she “was dirty” and that she must have done something wrong to create the sexual assault with her minister (negative cognition). Physically, she felt pain in her stomach. When the psychotherapist asked her to rate how emotionally disturbing this memory was for her (SUDS) now, she answered that it was an 8 out of 10, with 10 being the most disturbing she could imagine. When the psychotherapist asked her what she desired to believe about herself (positive cognition or VOC), she replied that she wanted to feel significant, good about herself, and worth something. Mary then rated her positive beliefs on the VOC as a 1 out of 7, with 7 representing the most positive.

During the assessment phase the psychotherapist asks the client to identify the target disturbing image and its associated negative cognition (Shapiro, 2001). The client also identifies the desired positive cognition that will be used during the installation phase. Clients also rate their level of emotional disturbance with the SUDS and the positive cognition using the VOC scale.

Phase 4: Desensitization

The psychotherapist asked Mary to recall her memory with the minister, including the worst part, her negative beliefs, emotions, and physical feelings associated with the scene. The psychotherapist then performed bilateral brain stimulation. After Mary reported what she was feeling and experiencing, the psychotherapist then performed additional sets of bilateral brain stimulations while asking her to focus on whatever she experienced at the end of the last set of bilateral brain stimulation.

During this phase, the client holds her negative cognition and target image in her consciousness, while the psychotherapist performs the sets of bilateral brain stimulation procedures until the SUDS is 0 or 1, to indicate that the emotional disturbance has been cleared from the neural memory pathway (Shapiro, 2001). This is the heart of the EMDR experience. A client may go from her initial memory to experiencing a wide range of disturbing physical sensations, visual images, and feelings, all moving from the most disturbing to an emotional neutral memory. This process may occur over a few or many sessions. Clients often bring up seemingly incongruous pleasant experiences between disturbing ones in an effort to experience islands of relief.

Phase 5: Installation

During phase 5, the psychotherapist assists her client in strengthening the positive cognition associated with the target image in order to replace the negative cognition (Shapiro, 2001). Installation can begin only when the SUDS has reached 0 to 1. The psychotherapist repeats the sets of bilateral brain stimulations until the VOC reaches 6 to 7. While negative images should become less, positive cognitions should become more vivid and valid. The goal of this phase is to link the client’s positive cognition and target image, so that future target triggers will elicit positive cognitions/emotions and empower the client.

Phase 6: Body Scan

During the next session, Mary went back to the sexual assault scene, but this time she pushed the minister away. After the next series of sets, she said that the minister could no longer hurt her. She then visualized a scene where she and her favorite cousin were taking a walk by a stream on a beautiful day. The psychotherapist asked Mary to hold the positive image in her mind while performing another set of bilateral brain stimulations. She reported feeling real freedom. When the psychotherapist asked her to scan her body, Mary reported that she no longer felt the choking sensation and terror. Mary reported that her SUDS was now 1 and her VOC was now 6.

During this phase, the psychotherapist asks the client to hold the positive cognition and the target image in consciousness and then to scan her body for physical sensations (Shapiro, 2001). If there are remaining physical sensations related to the traumatic memory, they may be residual areas of tension that become the target of further desensitization and reprocessing in future sessions.

Phase 7: Closure

By the fourth session, Mary's SUDS was 0 and her VOC was 7. Mary and the psychotherapist discussed the new images of self-empowerment. Closure is an important element of EMDR because it is during this phase that the psychotherapist returns the client to a sense of equilibrium even if reprocessing is incomplete.

Phase 8: Reevaluation

Reevaluation occurs at the beginning of each new session to determine if treatment effects have been maintained since the last session. The psychotherapist asks the client how she feels about previously reprocessed material and also examines the client's log. She also assesses family and social network reactions during this phase. After the psychotherapist is satisfied that previous targets have reached adaptive resolution, new targets are identified and reprocessed.

Mary was an ideal candidate for EMDR because she was able to develop a positive rapport with the psychotherapist, was able to perform relaxation techniques, had a willingness to ask for help, had no evidence of other crises in her life, had a nurturing support system, and had no evidence of medical or psychiatric contraindications.

CLINICAL IMPLICATIONS

Sexual violence, including both childhood sexual abuse and adult sexual assault, is a crime that affects many women worldwide and can have profound psychological consequences. Survivors of sexual violence have the highest levels of PTSD compared with any other group, in part due to the extreme physical, psychological, and spiritual violation inherent in the crime (Chivers-Wilson, 2006). Health care providers often are privileged to hear women's narratives of sexual violence, and they have the opportunity to recommend psychological treatment. Many women with sexual-violence-induced PTSD could benefit from EMDR therapy (Peterson, 2009; Rothbaum, 1997). A short-term psychotherapeutic tool, EMDR can be used by psychotherapists to release locked negative memories of sexual violence from neural networks and empower appropriately screened women to feel more control and self-esteem in their lives.

CONCLUSIONS

Since Shapiro's first publications, EMDR has become an accepted treatment for PTSD related to sexual trauma and is listed as a psychotherapeutic intervention in the American Psychological Association's "Practice Guidelines for the Treatment of Patients With Acute Stress Disorder and Posttraumatic Stress Disorder" (Ursano et al., 2004). Although it is now a common therapy, researchers still have much to learn about its mechanisms of action. Areas for future research should include additional studies of neurobiological models of action (Stickgold, 2002). In addition, little is known about which women are more likely to respond to various therapeutic modalities such as EMDR, traditional psychotherapy, psychopharmacology, or how the modalities may be best used in combination. Other areas of study could include exploring the feasibility of nonpsychiatric health care providers safely and effectively administering EMDR to their patients with sexual-violence-induced PTSD.

Although there is still much to learn, EMDR is an effective, low-cost, brief intervention therapy for treatment of acute and chronic PTSD in victims of sexual violence. Health care providers caring for women are in an ideal position to identify the symptoms of sexual-violence-induced PTSD in their patients and to recommend EMDR to promote psychiatric healing.

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