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#### CASE REPORT

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# Eye movement desensitization and reprocessing as a therapy for rape victims: A case series

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#### Abstract

A case series was conducted on three rape victims who were hospitalized with a diagnosis of major depressive disorder (MDD). Eye movement desensitization and reprocessing (EMDR) was employed to reduce their risk of suicide or suicidal ideations. EMDR can be an effective treatment to reduce the level of suicidal ideation in rape victims.

#### K E Y W O R D S

eye movement desensitization and reprocessing (EMDR), major depressive disorder (MDD), rape victims, suicidal ideation

# 1 | INTRODUCTION

Major depressive disorder (MDD) is the most common psychiatric illness that is characterized by recurrent thoughts of death or suicide, in addition to multiple symptoms.<sup>1</sup> Rape occurs when one is forced, intimidated, or deceived to have sex due to fear of death or injury.<sup>2</sup> Half of the victims of rape suffer from post-traumatic stress disorder (PTSD).<sup>3</sup> As studies have shown, there is a significant relationship between sexual abuse and suicide attempt and victims of rape are more prone to depression and suicidal ideation.<sup>4</sup>

Eye movement desensitization and reprocessing (EMDR) is one of the methods that may reduce the intensity of suicidal ideation in patients.<sup>1</sup> As a safe method without complications and independent of drug therapy, EMDR only uses regular and fast eye movements to process unpleasant memories and traumatic events.<sup>5</sup> This

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study aims to employ EMDR for reducing the intensity of suicidal ideation in three victims of rape.

#### CASE PRESENTATION 2

A case series study was conducted on three persons who were raped (two women and one men) diagnosed with MDD. The standard EMDR was performed for each patient individually in a safe and quiet environment in 6-8 sessions of 90 min.

#### 2.1 **Measurement tools**

The data were collected with a form for demographics, Subjective Units of Distress Scale (SUDS), and Beck Scale for Suicidal Ideation (BSSI) questionnaire. The SUDS is a self-reporting scale developed by Joseph Wolpe in 1969. The patients filled out this scale before and after each intervention session with the help of the author. BSSI was employed to measure suicidal ideation. BSSI was completed for each patient before and after the intervention.

#### 2.2 **EMDR**

EMDR was performed in 8 phases. In the first phase, they mention the traumatic experiences, and therapeutic planning was performed.<sup>6</sup> The second phase was dedicated to the description of the process, effects, therapeutic expectations, and preparation of the patient for the intervention. The third phase includes the negative and positive cognition and the VOC level, and the body sensations. The

most disturbing memories, images, symbols, and visual images related to the rape memory, and the patient's beliefs about the accident, and physical feelings related to post-traumatic beliefs were identified, and then, previous damaging beliefs were replaced by a positive belief.<sup>5</sup> The fourth phase focused on the desensitization of the traumatic memory. In this step, the patients were asked to follow the therapist's finger within their vision and repeat it until their subjective distress reaches one or zero.<sup>7</sup> The fifth phase was related to cognitive restructuring and strengthening the patient's positive beliefs. In the sixth phase, the remaining physical discomfort and pressures were controlled until they were disappeared. At the 7th phase, patients are asked to express that they could notice images, thoughts, emotions, dreams, and memories after the session and it was ensured that the patient was in a stable mood, had finished the intervention, and was ready to quit the intervention. In the eighth phase, the patients were asked to concentrate on preprocessed objectives and evaluate the extent to which they had achieved therapeutic goals.<sup>8</sup> One of the components of EMDR is visually tracking the therapist's finger movement when visualizing the traumatic scene sequentially. Accordingly, the patient was asked to follow fast movements of the therapist's finger in their visual field with fast eye movements. The therapist's finger was moving from right to left and vice versa within the patient's visual field and at a distance of 30 cm from their eyes. This movement involved twice sweeping the sides in one second as a cycle and every 12-24 cycles were considered a set. Depending on the patient's motivation and need, this was repeated until the level of subjective distress was minimized. In the last session, BSSI was filled out by patients once again. EMDR standard protocol is shown in Table 1.

| Client history  | <ul> <li>Obtain background information</li> <li>Identify suitability for EMDR treatment</li> <li>Identify processing targets from positive and negative events in the client's life</li> </ul>             |
|-----------------|--|
| Preparation     | • Prepare appropriate clients for EMDR processing of targets   |
| Assessment      | • Elicit the image, negative belief currently held, desired positive belief, current emotion, and physical sensation, and filling Validity Of Cognition (VOC) and Subjective Unit Disturbance (SUD) scales |
| Desensitization | • Process experiences and triggers toward an adaptive resolution (0 SUD level) by directing left-to-right horizontal eye movements with two fingers  |
| Installation    | Recalling the best positive cognition  |
| Body scan       | Concentration on any residual physical sensations and assessing  |
| Closure         | • Ensure client stability at the completion of an EMDR session and between sessions  |
| Reevaluation    | • Evaluation of treatment effects by filling VOC and SUD scales  |

TABLE 1 EMDR standard protocol

### 2.3 | Introduction of patients

Patient 1 is a 39-year-old married woman. She was a housewife and had three children. She was living in a village, and her literacy was as an elementary school student. She married when she was 20 years old, and she has no history of smoking or drug and alcohol abuse. The economic status of her family was also moderate. A couple of years ago she ran into a relative at a wedding party and was raped by him several times. She did not report the case because of the fear of her husband's reaction and separation. She consequently developed fear, depression, and suicidal ideation. Although she attempted suicide several times with drugs, she found it difficult to forget the rape. The patient was dissatisfied and frustrated with the drug treatment due to the prolonged use of drugs (1 mg risperidone and 75 mg maprotiline tablets). She would isolate herself most of the time. She reported that her suicidal ideation intensified during the night but fluctuated during the day. The patient participated in seven EMDR sessions with each session lasting 90 min. In the first session, the patient's history and information were collected in a safe and quiet place, the patient was briefed on the EMDR process, and she was asked to remember the scene of rape and express her fear of and anger at the scene. She was asked to recall a pleasant scene and an unpleasant one. She stated that the first childbirth and fear of the rape scene were her most pleasant and unpleasant memories, respectively. During the third and fourth sessions, she noticed that the unpleasant memory was fading away. At the last session, she stated that she was more hopeful about the future of life and that unpleasant scene had disappeared from her mind, and she was calmer.

Patient 2 is a 24-year-old female university student. She is the second child in the birth order of her family and married. She has a family with a poor economic status. Her parents are divorced, and she is now living with her stepfather. She had a history of both smoking and alcohol abuse. Both her mother and stepfather were addicted to narcotics, and the family environment was not safe for her. She was physically abused by her stepfather and mother. When she was 12 years old, and she was raped by a close relative of her stepfather. She informed her mother of the case, but her addicted mother did not care about it. She stated that despite having a good economic status and a successful marital life with her husband, remembering the rape scene was always annoying to her and she had been hospitalized several times for depression and suicide attempts. Although she had been prescribed 75 mg maprotiline and 10 mg risperidone tablets, she had stopped taking them after a while, and she complained that she had suicidal ideation caused by a recollection of the rape scene. The patient participated in six 90-min

EMDR sessions. In the first session, the patient's history and information were collected in a safe and quiet place, the patient was briefed on the EMDR process, and she was asked to remember the scene of rape and express her fear of and anger at the scene. She recalled the scene and extremely got anxious during the process. She was asked to recall a pleasant scene and an unpleasant one. She stated that her marriage and fear of the rape scene were her most pleasant and unpleasant memories, respectively. At the end of the intervention, she reported that the unpleasant scene had faded from her mind and she would never think of suicide after remembering that scene. She was satisfied with the intervention and stated that a heavy burden had been lifted from her shoulders.

Patient 3 was a male 18-year-old prisoner with a high school diploma. He was the sixth child of an 11-member family from his father's second wife. He lost his mother when he was 8 years old and has since then lived with his stepmother. He was always affected by the tragedies of life and physical abuse. He lost his father when he was 12 years old and then moved on to live with his elder sister, who was married and had a child. His sister had an illegal relationship with one of her relatives. As a smokescreen, his sister took him to the house of the man she was. He stated that he had observed scenes of his sister's intercourse with her boyfriend that were unpleasant to him and caused mental disorders (feeling sad or down, extreme feelings of guilt, and a strong nervous feeling). Because of fear of his sister and being rejected by her, he kept silent about the scenes he had observed. When he was 13 years old, he was hospitalized several times due to suicidal ideation and was prescribed antidepressants (75 mg maprotiline twice a day, half of a risperidone tablet every night, one 5 mg Librium every night, and sodium valproate tablet twice a day). The patient stated that despite taking antidepressants until the end of the treatment, he still had suicidal ideation when remembering those unpleasant scenes. One day, he confronted the sister's boyfriend and a brawl broke that ended up with him injuring him with a knife. He was consequently imprisoned where he has attempted suicide several times. The patient stated that the worst memory of his life was his sister's intercourse with her boyfriend, and the best memory would be the time when he forgets those unpleasant scenes. He was not willing to be interviewed at first because he believed that remembering those memories would bring suicidal ideation to his mind. Eventually, he accepted to begin the intervention. The patient participated in eight 90-min EMDR sessions. In the first session, the patient's history and information were collected in a safe and quiet place, the patient was briefed on the EMDR process, and he was asked to remember the scene of rape and express her fear of and anger at the scene. He recalled the scene and extremely got anxious and restless during the

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They have no history of depression before the rape and have not received relevant past interventions before.

#### 2.4 | Results

The demographic information of the 3 patients is shown in Table 2. The mean severity of suicidal ideation, SUD, and VOC (validity of cognition) pre- and post-intervention and at 6-month follow-up is shown in Table 3.

# 3 | DISCUSSION

Individuals that have been raped suffer from numerous psychological problems which, if not sensitively handled, can confront them with serious challenges such as thinking about and attempting suicide. In this study, 3 raped victims suffering from depression and suicidal ideation were treated using EMDR. The results of all three patients were so promising that all of them were significantly relieved of suicidal ideation and distress after the treatment.

EMDR seems to be a good treatment for reducing or eliminating unpleasant and harmful thoughts.<sup>1</sup> Shapiro (2014) states that EMDR can be used as a valid psychotherapy method for the treatment of psychological trauma and negative life experiences.<sup>9</sup> EMDR can treat unprocessed

**TABLE 2** Demographic information of patients

memories and undesirable experiences of life.<sup>10</sup> The results of another study (Gauhar, 2016) showed that EMDR is effective in treating depression symptoms in patients with MDD and can eliminate unpleasant thoughts,<sup>9</sup> which are consistent with the results of this study.

Edmond et al (2004) examined the effectiveness of using EMDR in the treatment of adult female survivors of childhood sexual abuse. Similar to the results of this study, they showed that the use of this method can significantly reduce the psychological symptoms related to this trauma.<sup>10</sup> Rothbaum et al. (2005) also showed in their study that the use of the EMDR method to treat cognitive disorders among rape victims had beneficial effects on this group of people.<sup>3</sup> EMDR allows the frontal lobes to act as a filter and, as a result, cause the cognitive defusion of traumatic and unpleasant events from the mind and reduce or neutralize emotional distress related to traumatic events. This method gives a positive insight and perspective to patients that enable them to replace negative beliefs and expectations related to unpleasant events with positive and promising emotions.<sup>8</sup>

A noteworthy point about the use of EMDR therapy in the treatment of victims of rape is its high acceptance among patients. All three patients in the present study had been treated and followed for months by different therapies, and almost all three were not very satisfied with the treatments received and the results. However, after using the EMDR method in this study, all three patients who participated in the study reported high satisfaction with this method of therapy. The results of Edmond et al (2004) study, which examined the experience of sexual abuse survivors in relation to the use of EMDR and eclectic therapy, showed similar results. Patients experienced better feelings during EMDR therapy compared to eclectic therapy.<sup>10</sup> EMDR can treat unprocessed memories and undesirable experiences of life.<sup>11</sup> It seems that the use of the EMDR

| Case | Sex    | Age | Educational level | Employment<br>status | Place<br>status | Economic<br>status | Married<br>status |
|------|--------|-----|-------------------|----------------------|-----------------|--------------------|-------------------|
| 1    | Female | 39  | Primary school    | Employed             | Rural           | medium             | Married           |
| 2    | Female | 24  | High school       | Employed             | Urban           | Low                | Married           |
| 3    | Male   | 18  | Bachelor          | Unemployed           | Rural           | Low                | Single            |

TABLE 3 The mean of the severity of VOC, SUD, and suicidal ideation pre- and post-intervention and at 6-month follow-up

|      |                 | VOC      |           |                      | SUD      |           |                      | Suicidal thoughts |           |                      |
|------|-----------------|----------|-----------|----------------------|----------|-----------|----------------------|-------------------|-----------|----------------------|
| Case | Number sessions | Pre-test | Post-test | 6 month<br>follow-up | Pre-test | Post-test | 6 month<br>follow-up | Pre-test          | Post-test | 6 month<br>follow-up |
| 1    | 7               | 7        | 1         | 0                    | 9        | 3         | 1                    | 30                | 13        | 8                    |
| 2    | 6               | 7        | 1         | 1                    | 10       | 1         | 0                    | 28                | 5         | 4                    |
| 3    | 8               | 7        | 1         | 1                    | 10       | 1         | 1                    | 36                | 10        | 6                    |

method in the treatment of raped people with suicidal ideation should be considered as an effective method and with high acceptance by patients in this regard. Other positive features of EMDR therapy compared to other treatments include its availability, ease, and cost-effectiveness of this method.<sup>6</sup> In this study, this method was performed by the psychologist of the medical center of the study setting in one clinic without the need for special facilities, and the desired results were achieved without additional cost for the patient and the service center.

One of the limitations was the small sample size; therefore, the findings cannot be generalized to a large population.

# 4 | CONCLUSIONS

Eye movement desensitization and reprocessing therapy as a low-cost and available method was able to significantly reduce the suicidal ideation and distress of the three patients treated in this study. Therefore, it is recommended to use this method along with other therapies in the treatment of this group of patients. Randomized control studies are required to further investigate the efficacy of EMDR for rape victims.

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# CONFLICT OF INTEREST

The authors declare that they have no competing interests.

# AUTHOR CONTRIBUTIONS

AR and MB contributed to study design and concept and performed the study; ZF contributed to literature review and supervising the study; AJ and MB contributed to literature review and writing, AJ contributed to statistical analysis; MA performed the study. All authors approved the study.

# ETHICAL APPROVAL

The study was launched after obtaining permission from the Fasa Medical University's Ethics Committee (Ethics number: REC.1396.280.IR.FUMS). An informed consent form was obtained from patients.

# CONSENT

Written informed consent was obtained from the patient to publish this report in accordance with the journal's patient consent policy.

# DATA AVAILABILITY STATEMENT

Additional data are available upon request from corresponding author.

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