

Eye Movement Desensitization and Reprocessing (EMDR) Therapy on a Patient with Schizophrenia and Clinical Effects: A Case Study



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SUMMARY

Being exposed to traumatic experiences is rather common in patients with schizophrenia. Adverse experiences may induce the onset of psychotic symptoms or trigger current symptoms to be exacerbated. Eye Movement Desensitization Reprocessing (EMDR) is an effective therapy in the treatment of incidences with underlying traumatic experiences, thereby it can be conducted on various cases in addition to other treatments such as psycho-medication or another therapy method. Although desensitization is widely applied on patients with Post-Traumatic Stress Disorder, it is unusual for EMDR therapy to be safely and effectively performed in the treatment of psychotic disorders or symptoms. In the present case study, EMDR treatment process and course of psychiatric state in a patient with history of childhood abuse and forced psychiatric residency will be discussed.

Keywords: eye movement desensitization and reprocessing (EMDR), psychotic disorders, schizophrenia, forced hospitalization, traumatic events

INTRODUCTION

Being exposed to traumatic life events is prevalent (between 50 and 98%) among patients with schizophrenia (de Bont et al. 2016). Indeed, 69% of female schizophrenia patients and 59% of male schizophrenia patients reported either childhood sexual abuse or childhood physical abuse (Larkin and Read 2008). Particularly, adverse childhood experiences almost triples the occurrence of psychotic disorders. The prevalence of Post-Traumatic Stress Disorder (PTSD) and psychotic disorders comorbidity is ranging from 12 to 29% (de Bont et al. 2013). PTSD symptoms have a negative effect on level of arousal and coping mechanisms. Additionally, it raises possibility of being abused and reduces self-confidence of individuals. All those components are triggering factors for psychotic symptoms (de Bont et al. 2016).

Eye Movement Desensitization and Reprocessing (EMDR) has been invented by Shapiro in 1980s for treating PTSD. EMDR treatment is an effective and safe intervention on PTSD that accompanies psychotic disorder; moreover, it shows effect in a short time. Auditory and verbal hallucinations, delusions, anxiety symptoms, and depressive symptoms could fade away and self-confidence can be enhanced through PTSD treatment on psychotic patients (van den Berg et al. 2012).

Prolonged exposure and EMDR therapy help reduce side effects of PTSD among individuals diagnosed with schizophrenia and schizoaffective disorders. The present case study indicates effects of EMDR therapy on a patient with paranoid schizophrenia comorbid PTSD.

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Table 1. Definitions of EMDR Terms Used in the Passage

Definitions
Image: The most disturbing picture or scene for the patient about traumatic event
Emotion: The feeling that the patient feels with this image or scene
Negative Cognition: The negative thought that has been believed about self when focused on the picture
Positive Cognition: Positive thought that has been possessed to have about self and traumatic event at the end of treatment
VoC (Validity of Cognition): The numerical value of positive validity when the patient focuses on the picture of the traumatic moment (scored by 7)
SUD (Subjective Unit of Disturbance): The numerical value of the patient's subjective feeling of discomfort when the focus is on the subject related to the traumatic moment (scored by 10)
Body (or Bodily) Sensation(s): Where the subjective discomfort that occurs when the designated image is focused is felt in the patient's body
Safe Place Exercise: Focused imagination of a place that generates feelings of calm and safety, in order to relieve stress during therapy and in daily life

CASE

(In that part, EMDR terms will be used to explain the therapy procedure, for these terms in italic see Table 1)

A 43-year-old, female, mother of a daughter, divorced architect applied to our clinic with complaints of inability to sleep, and paranoid thoughts claiming that she is followed and is in danger of being poisoned or murdered. Mental health examinations implied lack of self-care, irritable mood and blunted affect. There were indications of paranoid delusions such as the belief that people with blue bags were commissioned by the secret services (MIT) to spy on her. Also, she was devoid of insight.

The patient has been transferred for admission to our clinic. She had been being treated as a patient with a diagnosis of schizophrenia since 2009. The patient had been treated

thrice in epicenters and two times in our clinic as an inpatient. As a result of her familial problems, her complaints increased. Her medical treatment continued with intramuscular Zyklopiptol dekonat as 200 mg once every 15 days, Olanzapine 20 mg per day, Biperiden 2 mg per day, and Haloperidol 5 mg per day. Dose of Haloperidol had been increased to 20 mg per day because her psychotic symptoms did not decrease. There were no changes made in the prescription and doses of the remaining medications. Furthermore, she had history of traumatic events such as childhood sexual abuse and being forced to psychiatric hospitalization by her sibling using police force. The patient was treated for 31 days as an inpatient. After her complaints decreased and her functionality increased, she was discharged from the clinic on the condition to continue the prescription of antipsychotic medication. While she was on antipsychotic medication, EMDR therapy had been applied to the patient on the 24th day of her residency and 2 days later of her discharge. Standard EMDR Protocol was followed during EMDR therapy application (see Table 2).

In the first EMDR session, a sexual abuse trauma was studied based on her memory of a case in which she was 9 years old. The perpetrator was her blue eyed and 6 years older cousin. The *image* that represents the worst moment of memory was identified. The patient declared that the negative effects of her memory was triggered by her initiation to a sexual awareness education at the age of 13. She also expressed that she remembers the scent of sperm vividly and has feelings of disgust because of it. She was re-experiencing parts of the event visually and she had avoidant behaviors under the influence of that memory. Focusing on the image, her *negative cognition* was "I am in a hopeless situation". In association with the traumatic event, her *emotion* was "anger" and the *body sensation* she had was "wetness on her legs. As a *positive cognition* "I did my best" was decided. In the beginning, the *VoC (Validity*

Table 2. Standard Protocol of EMDR

EMDR Protocol	
Phase 1 Consultant Story	The clinician detects the problems associated with the past, the difficulties in focusing on the general physiological background, the current triggers and the future positive gains.
Phase 2 Preparation	The process explains the following sessions that teach client calming techniques and dual awareness development.
Phase 3 Evaluation	The clinician elaborates the target anchor. The existing negative cognition, the desired positive cognition, current feeling and physical feelings are defined by various basic scales.
Phase 4 Desensitization	The clinician follows the processing of the current or past disturbing moment. The next step is to process the patterns of positive behavior in the future. This process includes sensory, cognitive, emotional and somatic information. The aim of this phase is to relate the disturbance as little as possible to the event, to make internal development, and to gain a new perspective on themselves and the world.
Phase 5 Installation	The clinician helps identify positive beliefs associated with the memory, consolidate them, and ensure integration with a compatible memory network.
Phase 6 Body Scanning	The clinician determines the presence of any residual somatic sensation and aims to resolve it completely.
Phase 7 Closing	The clinician provides feedback on the session, explains the anticipated outcomes, and if necessary, uses relaxation techniques when the session is terminated.
Phase 8 Reassessment	The previous session is reevaluated.

Table 3. Scales Administered for Assessment**Scales Used**

Clinician-Administered PTSD Scale (CAPS): PTSD is a test that includes diagnostic criteria and evaluates the severity of PTSD. The score ranges between 0 and 136. Turkish validity and reliability was made by Aker et al. in 1999.

Calgary Depression Scale for Schizophrenia (CDSS): A measure developed by Addington and his colleagues. Reliability and validity studies were conducted by Aydemir et al. (2000).

Positive and Negative Syndrome Scale (PANSS): It is a semi-structured interview scale with thirty articles and seven-point rating of violence. The Turkish validity and reliability study of the scale was conducted by Kostakoglu and colleagues (1999).

Impact of Event Scale - Revised (IES-R): A 22-item self-deliberative scale developed in order to measure subjective tension and strain caused by the traumatic event. It was adapted by Çorapçıoğlu and colleagues (2006).

Peritraumatic Dissociation Scale (PDS): It is a measure aimed to retrospectively measure dissociation during trauma. Turkish validity reliability was applied by Geyran and colleagues (2005).

Beck Anxiety Inventory (BAI): That is a scale questioning subjective anxiety and somatization. It consists of 21 items; 0-3 Likert type. It is a measure completed by the patients themselves. The score range is 0-63. Validity and reliability studies for Turkey was conducted by Ulusoy and his colleagues in 1998.

Beck Depression Scale (BDS): It is a measure that assesses the level of depressive symptoms and the change in intensity, which determines the risk of depression for individuals. The score range is between 0-63. Turkish validity and reliability study was done by Hisli (1988).

Brief Psychiatric Rating Scale (BPRS): It measures the severity and change of psychotic and depressive symptoms in schizophrenia and other psychotic disorders. The primary goal is to be sensitive to change in the measure of pharmacological treatment. Scores vary between 0-30. There are 16 items. Its Turkish validity and reliability has been established (Kahraman Soykan, 1990)

of Cognition) score was “1”, and the SUD (Subjective Unit of Disturbance) score was 10. During the therapy session, vividness of visual re-experiencing faded away, auditory memories diminished, and disturbance of the event disappeared. At the end of the session, VoC score was “7” and the therapy session was completed after when SUD score had reached “1”.

One week later, at the next therapy session, the patient communicated that she was ready for making job applications, but, she would wait until this healing effect becomes long term. Although she was in denial that she had a mental problem, she acknowledged that the feelings of fear relevant to her paranoid thoughts disappeared. The patient remembered her cousin in some occasions of encountering someone with blue eyes, however, this was not disturbing for her as much as it was in the past, and the patient declared her intrusive thoughts, emotions and bodily sensations about the event

disappeared even though she said she still had dreams of her cousin for a few days more.

The patient’s insistently restrictive behaviors she used to perform in response to her daughter’s talking to blue eyed friends, were also no longer existing. Paranoid thoughts she had at the time of arrival to the clinic, regarding people holding blue colored nylon bags, were thought to be related to her past traumatic memory.

After individual EMDR sessions and termination of the treatment process, there has been control interviews in which scales taken before treatment were re-conducted partially or fully (see “Scales Administered for the Evaluation of Case” in Table 3). At the first control interview her scores on Brief Psychiatric Rating Scale (BPRS) indicated that specifically guilt, hostility and anxiety has decreased. In the second EMDR session, the patient whose forced residency

Table 4. Applied Scale Scores

	21.12.15	22.12.15	29.12.15	30.12.15	15.1.16	15.5.16
Applied Scale	1) Evaluation	2) EMDR 1st session	3) Control Interview	4) EMDR 2nd session	5) Control Interview	6) Control Interview
BAS	37		25		24	4
BDS	30		17		16	11
BPRS	37		18			3
CAPS	96		34			12
CSDS	16		6			6
IES-R	53		19		25	15
PANNS	78		52			34
PDS	28					
SUDS I (1st Event)	10		2			2
SUDS II (2nd Event)	10		10			2
VoC	1		7			7

experience was being examined expressed “I am helpless and weak” as *negative cognition*, “anger” as emotion, and “palpitation” as bodily sensation. As a *positive cognition* “I am safe” was elected. *SUD* score was determined as “10”. In the session, a moment in which she was on road for forced psychiatric hospitalization by her sister and police was scrutinised. Cognitions concerning helplessness, lack of control over the situation, and not having been given credence was addressed. Lately in the session, *SUD* score declined to “4” and positive memories started to spring to her mind, therefore, following *safe place exercise* the session was terminated.

In the control session of six month later, clinical scale scores were improved and drug compliance was seemingly increased. She expressed being affected by recent news in media, regarding a bus company and an abuse, yet, she could then cope with the disturbance.

Scores of the Clinician Administered Post-Traumatic Stress Disorder Scale (CAPS), Calgary Depression Scale for Schizophrenia (CDSS), Positive and Negative Syndrome Scale (PANSS) Brief Psychiatric Rating Scale (BPRS), Psychotic Depression Assessment Scale (PDAS), Beck Anxiety Inventory (BAI), Beck Depression Inventory (BDI), Impact of Event Scale-Revised (IES-R) scales administered, and EMDR *SUD* (Subjective Unit of Disturbance) and VoC (Validity of Cognition) points are shown in the table (see Table 4).

DISCUSSION

Similarities between the contents of paranoid ideation and traumatic life experiences of the patient are considered to be salient. For instance, there were paranoid ideations suggesting blue bags of a clothing brand to imply enquiry agents and a blue eyed perpetrator in the past abuse. In publications, there are some data indicating auditory hallucinations in psychosis patients to be related with past traumatic life events (Longden et al. 2012). Realization of beliefs and behaviors about her daughter to not communicate with friends to be signs of traumatic avoidance is of crucial importance in showing the close relationship between traumatic symptoms and psychotic symptoms. Also in concordance with the literature is that after treatment, the patient’s insight about this ideations significantly improved (de Bont et al. 2013).

In studies, it is detected that psychiatry patients who experienced forced psychiatric residency during treatment have characteristics significant for traumatic experience and PTSD symptoms (Hainsworth et al. 2011). As though many patients with psychotic disorders, the patient had experienced forced residency and had been feeling associated disturbance. Therefore, in the second EMDR session this traumatic event was addressed.

There were significant declines in all scores when scales of before EMDR therapy were compared to those of after treatment (see Table 4). Considering publications, in a pilot study about psychotic disorder and PTSD comorbid patients by treating PTSD symptoms patients’ auditory hallucinations, delusions, anxiety and depression symptoms were reduced whereas self-esteem was positively influenced. In the meantime, there was no exacerbation caused by the treatment in the symptoms observed (de Bont et al. 2016). In another study, 27 patients with psychotic disorder and PTSD were applied up to six sessions of EMDR treatment, after which only five patients met the criteria for PTSD (van den Berg et al. 2012). Similarly, in this case after treatment there was considerable recession in the patient’s PTSD, depression and anxiety symptoms while self-esteem and compliance with the treatment increased.

The relief in psychiatric symptoms of the patient might be correlated with the evanescence of trauma-related intrusive thoughts and halucinations, or increased sleep quality. On the other hand, the ignition in the amygdala that says the person is in constant danger might have recovered. Yet another explanation is that sense of confidence accompanying recovery of the patient’s trauma-related symptoms possibly contributed to restoration in negative cognitions.

CONCLUSION

During the assessment of patients with psychotic disorders traumatic events such as forced residency and childhood traumas should be considered. EMDR can be administered for psychosis patients with traumatic memory to increase functionality. The place of EMDR among therapeutic interventions for patients with psychotic disorders should be further investigated.

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