EMDR FOR BIPOLAR DISORDER: A SYSTEMATIC REVIEW OF THE EXISTING STUDIES IN LITERATURE

Ludovica Bedeschi

Abstract

Objective: Bipolar disorder, also known as manic-depressive illness, is a mental disorder that causes unusual shifts in mood, energy, activity levels, and the ability to carry out day-to-day tasks. Up to 60% of patient with bipolar disorder (BD) present a history of traumatic events which is associated with greater episode severity, higher risk of comorbidity and higher relapse rates. Growing evidence suggests that incidences of childhood trauma are quite frequent in bipolar disorder and probably affect the clinical expression of the disease. The relationships between childhood trauma and bipolar disorder suggest several interpretations, mainly a causal link, a neurodevelopmental consequence, or the intergenerational transmission of traumatic experiences. Then is no surprising to diagnose in comorbidity with BD, also a PTSD for which the EMDR has been elected among the more appropriate treatment by the WHO (World Health Organization 2013).

The purpose of this work is to examine the existing literature about Bipolar Disorder and EMDR treatment, and to point out its strengths and limits for a further and more efficient application of the EMDR on this severe disease.

Method: A literature search was undertaken using all the available resources, on the web (PubliMed) and on the Journals that treated such topic, including contacting directly the authors of the studies and the Francine Shapiro Library.

Results: Due to the few material available, it has been not possible to do a meta-analysis. The review is based on the all available sources (four articles) and study results.

Conclusions: Although the available studies regarding EMDR application on bipolar disorders are at the moment really few, the outcome of each presented study seem to agree about some points:

EMDR seems to be a promising treatment in terms of related trauma affective symptoms, and in terms of relapse prevention; EMDR, in fact, seems to elicite some positive effects in bipolar patients, including the treatment compliance and the disease awareness, so relevant in the therapeutic process of this psychopathological condition.

Key words: bipolar disorder, EMDR, PTSD, adverse childhood experience, traumatic events, systematic review

Declaration of interest: none

Ludovica Bedeschi
Psychologist, Psychotherapist, Sport Psychologist, Centro Clinico de Sanctis Roma

Corresponding author
E-mail: ludovicabedeschi@gmail.com

Introduction

After several decades of denying the correlation between adverse childhood experiences and mental diseases, finally nowadays these connections have been recognized. Bipolar disorders are included among those severe mental diseases.

Bipolar disorder is a psychiatric disorder, characterized by more or less severe mood swings, from the highest of high (manias) to the lowest of lows (depression). In its various forms, it affects about 4.5% of the American population (Miklowitz 2008). Despite the demonstrated high heritability, few genes have been identified, and this search for susceptibility genes is hampered by several methodological limitations, and environmental risk factor for the disease remain misunderstood. Child Trauma is probably the most promising factor for further investigation. Individuals with severe mental illness (including bipolar patients) are more likely to experience trauma over their lifetime than people in the general population. Traumatic events are so frequent in bipolar patients, and can worsen the course of the disease. Then is no surprise to diagnose in comorbidity with BD, also a PTSD for which the EMDR has been elected among the most appropriate treatments by the WHO (World Health Organization 2013).

EMDR therapy is guided by the Adaptive Information Processing (AIP) model (Shapiro 2001). According to this model, the traumatic memories are dysfunctionally stored and not fully processed and could be the cause of several mental disorders. The usefulness of EMDR has been not so far investigated in Bipolar Disorder, so the purpose of this review is to generally determine whether this technique can have mood stabilizing effects in bipolar disorder patients, although the majority of the available studies have been implemented on patients with subsyndromal symptoms (mild depression or hypomanic symptoms) (Tohen et al. 2009). This aspect will be taken into account among the strengths-limits part of this article.

General Studies characteristics

Studies that have been taken into account are mostly single-blind, randomized and controlled studies. The total number of the studies is 4.

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- Study n. 1: Novo et al. (2014). *Psychiatry Research* 219, 122-128.
- Study n. 2: Moreno-Alcàzar et al. (2017). *Trials* 18, 160.
- Study n. 3 Landin-Romero et al. (2013). *Neuropsychobiology* 67, 181-18.
- Study n. 4 Daeyoung, Daeho (2014). *Psychiatry Investig* 11, 3, 340-341.

Review

Study n. 1

Population group n 20 bipolar patients I and II DSM-IV diagnosed. 10 patients received EMDR treatment while other 10 received usual treatment. The treatment group received between 14 and 18 Eye Movement Desensitization and Reprocessing sessions during 12 weeks. Evaluations of affective symptoms, symptoms of trauma and trauma impact were carried out by a blind rater at baseline, 2 weeks, 5 weeks, 8 weeks, 12 weeks and at 24 weeks follow-up. Patients in the treatment group showed a statistically significant improvement in depressive and hypomanic symptoms, symptoms of trauma and trauma impact compared to the treatment as usual group after intervention. This effect was only partially maintained in trauma impact at the 24 weeks follow-up visit. One patient dropped from Eye Movement Desensitization and Reprocessing group whereas four from the treatment as usual group. This pilot study suggests that Eye Movement Desensitization and Reprocessing therapy may be an effective and safe intervention to treat subsyndromal mood and trauma symptoms in traumatized bipolar patients.

Study n. 2

Single-blind, randomized controlled, multicenter trial in which 82 patients with BD and a history of traumatic events will be recruited and randomly allocated to one of two treatment arms: EMDR therapy or supportive therapy. Patients in both groups will receive 20 psychotherapeutic sessions, 60 min each, during 6 months. The primary outcome is a reduction of affective episodes after 12 and 24 months in favour of the EMDR group. As secondary outcome we postulate a greater reduction in affective symptoms in the EMDR group (as measured by the Bipolar Depression Rating Scale, the Young Mania Rating Scale and the Clinical Global Impression Scale modified for BD), and a better performance in cognitive state, social cognition and functioning (as measured by the Screen for Cognitive Impairment in Psychiatry, The Mayer-Salovey-Caruso Emotional Intelligence Test and the Functioning Assessment Short Test, respectively). Traumatic events will be evaluated by The Holmes-Rahe Life Stress Inventory, the Clinician-administered PTSD Scale and the Impact of Event Scale.

Study n. 3

Reports of functional Magnetic Resonance Imaging (fMRI) findings during performance of the n-back working memory task in a bipolar patient who showed a marked improvement in subsyndromal affective symptoms after receiving Eye Movement Desensitization and Reprocessing (EMDR) therapy in the context of a clinical trial.

Study n. 4

Successful administration of EMDR to two cases of PTSD in patients with bipolar disorder.

A 25-year-old Korean woman hospitalized for recurrence of a manic episode that initially began three years earlier and a 39-year-old Korean woman with a 20-year history of bipolar disorder was diagnosed with comorbid PTSD, according to DSM-IV criteria, resulting from several traumatic experiences including an accident, sexual assault, and involuntary hospitalization that happened years ago around the time of onset of her bipolar illness. In the present cases, both patients began EMDR during hospitalization and achieved complete remission within 10 sessions. We did not observe any differences in course or response to EMDR, compared to other PTSD patients without bipolar disorder. However, for the second patient who started EMDR while still in a hypomanic state, a difficulty with clinical judgement existed whether processing of memory was complete or she was just optimistic. In this regard, we suggest that EMDR be given after affective symptoms become stabilized.

EMDR Protocol for Bipolar Disorders

In order to give a more comprehensive overlook to the methodology of the Bipolar Disorder EMDR Protocol, below they will be listed the principal 5 subprotocols that have been used to implement the research studies.

The Eye Movement Desensitization and Reprocessing (EMDR) Protocol for Bipolar Disorder (EPBD) — with its five subprotocols — is based on the results of a controlled randomized, single-blind pilot study of 20 bipolar I and II patients with subsyndromal symptoms and a history of various traumatic events (Novo et al. 2014). Patients who were included in this study had to have experienced at least three documented traumatic events over their lifetime that were still causing distress (subjective units of disturbance or SUD $\geq$ 5), without necessarily fulfilling a current diagnosis of PTSD.

Patients were excluded if they had a neurological disease, suicidal thoughts, substance abuse, or dissociative symptoms evaluated by the Dissociation Experience Scale or DES >20 (Bernstein & Putnam 1986). The objective was to evaluate the efficacy of the EMDR Standard Protocol, as an adjunctive treatment to their habitual mood stabilizers, in reducing the impact of trauma and in improving affective symptoms. After 3 months of 14 to 18 sessions of EMDR Therapy, patients in this group showed a statistically significant improvement in the reduction of the impact of their trauma and a more stable mood when compared with the control group.

This effect was maintained after 6 months follow-up. After the EMDR intervention, none of the patients in the EMDR group relapsed with an affective episode. In conclusion, following the data of this pilot study, EMDR preliminarily seems an effective and safe intervention for traumatized patients diagnosed with bipolar I and II disorders.

1. THE EMDR MOOD-STABILIZING PROTOCOL FOR BIPOLAR DISORDER

The aim of the EMDR Mood-Stabilizing Protocol for Bipolar Disorder (EMPBD) is to rein-

force the positive experiences of affective stability and self-control in bipolar patients. The major goal in the treatment process of bipolar patients is long-term normalization in mood. We propose that bipolar patients can benefit from EMDR as a mood stabilizer,

as it provides an elegant way to access the neuronal networks in order to control and stabilize mood states. Initially, the method is to use positive cognitions to strengthen the adaptive system of beliefs. When this installation is reinforced many times, patients experience an improvement in their self-esteem and affective stability, which, in turn, is connected with positive body sensations. Hypothetically, this will produce a homeostasis of neurotransmitters and/or a normalization of activations and deactivations in relevant brain regions (Landin et al. 2013), resulting in a more stable mood with easier access to positive memories. Therefore, we recommend applying the EMPDB protocol during every visit and over the long term as a preventive intervention.

2. THE EMDR ILLNESS AWARENESS PROTOCOL

Insight has several dimensions, such as insight into symptoms or disease and insight into need for treatment. Insight decreases with more psychopathology but it does not necessarily improve when psychopathological symptoms do. It is mainly associated with medication compliance, prognosis, voluntary versus involuntary admission, and the cultural concepts of disease (Ghaemi & Pope 1994). Interventions to improve insight into bipolar disorder are scarce; therefore, this group created the EMDR Illness Awareness Protocol (EIAP). The aim is to help clients become more aware of the disease. Good awareness is associated with less affective symptoms and risk behavior, better adherence to treatment, and a healthier lifestyle. Being aware of bipolar disorder can help the patient do the following: take medication more reliably, act more consistently concerning eating and sleeping habits, reduce risky behaviors, and ask for professional help when necessary.

3. THE EMDR ADHERENCE ENHANCER PROTOCOL

An important risk factor for affective relapses is that of poor adherence. Poor adher-ence in bipolar patients is mainly caused by the feeling of being controlled by drugs, (hypo)manic episodes, lack of insight, a negative view on pharmacological treatment, substance abuse, lack of treatment response, and side effects, such as weight gain and sedation. The EMDR Adherence Enhancer Protocol (EAEP) aims to identify and improve these issues and strengthen adherence to avoid further affective relapses.

4. THE EMDR PRODROMAL SYMPTOMS PROTOCOL

The recognition of prodromal symptoms is crucial to relapse prevention. The most often reported prodromal symptoms in bipolar disorder patients include sleep disturbances, mood changes or lability, psychotic symptoms, agitation, restlessness, increased anxiety, changes in appetite, or suicidal ideas (Jackson et al. 2003). The aim of the EMDR Prodromal Symptoms Protocol (EPSP) is to help bipolar patients identify early prodromal symptoms so that they can request rapid therapeutic intervention to avoid an affective relapse.

5. THE EMDR DE-IDEALIZATION MANIC SYMPTOMS PROTOCOL

Often, bipolar patients in diagnostic interviews are more focused on their depressive episodes and tend to idealize (hypo)manic episodes. Pleasant aspects of euphoria frequently cause a negation of devastating high-risk behavior during manic episodes. The latter include severe conflictive behavior, engaging in unrestrained buying sprees, impulsive sex and sexual indiscretions, or foolish business investments. The aim of the EMDR De-Idealization Manic Symptoms Protocol (EDMSP) is to assist patients who are aware of manic episodes but still idealize specific pleasant euphoric symptoms to avoid poor adherence and further affective relapses. The EDMSP is designed for patients who idealize pleasant manic symptoms but ignore the devastating results of these symptoms during a manic episode. Often, clients with bipolar disorder are barely aware of their manic and impulsive symptoms or underestimate them, as they are under the influence of the expansiveness and extroversion of the manic episode, and the mood sensations are pleasant. When asked to do an introspective exercise on their general symptomatology, they usually place more importance on their depressive symptoms than on those of euphoria. While in Phase 2: Stabilization and Preparation, do not focus on the emotional and somatic aspects, as this could lead to more complex reprocessing. Instead, aim for the cognitive understanding of "realization" and "becoming aware" that manic symptoms are symptoms of illness and not something desirable in the long run.

Conclusion

Although the available studies regarding EMDR application on bipolar disorders are at the moment really few, the outcome of each presented study seem to agree about some points:

1) All the patients that have been treated with EMDR technique among the different studies have shown a significant improvement in terms of related trauma affective symptoms, and in terms of relapse prevention.
2) The EMDR treatment seems to elicite some positive effects in bipolar patients, including the treatment compliance and the disease awareness, which are often the neuralgic point of bipolar disorder treatment.
3) The drop-out rates during the experimental studies was almost null, in opposition to some patients of the control group who were treated with ST (Supporting Therapy). That might indicate a better compliance to a treatment, as the EMDR, which seems to be less invasive than a psychotherapy.
4) On the purpose of giving more support to the study results obtained so far, it would be useful to recruit more patients in future, since the results shown are encouraging. A partial limit could be referred to the fact that the majority of the available studies have been implemented on patients with subsyndromal symptoms (mild depression or hypomanic symptoms), so that could open the question about implementing the EMDR on active phase of the bipolar disorder to evaluate its effectiveness during the severe depression or mania peaks.

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