

# Psychoeducation for Bipolar Mood Disorder

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## 1. Introduction

There has been significant improvement in available treatments for Bipolar Mood Disorder (BMD) during the past few years. However, this disorder still causes difficulties for the patients, their families, and the society (Kleinman et al., 2003). Overall studies have demonstrated that this disease affects patients' entire family and may weaken its strengths and adaptive abilities (Barry, 2001). Unavoidable poor outcome of this illness and their recurrent nature have put BMD among the most debilitating disorders, and has lead researchers to pay more attention to its treatment (Miklowitz et al., 2004). Based on the results of different studies, this disorder stands at the 6<sup>th</sup> or 7<sup>th</sup> place among other debilitating disorders worldwide (Calabrese, et al. 2003; Chisholm, et al. 2005; Simon et al., 2006). According to World Health Organization (WHO), mood disorders are one of the most important worldwide health issues of the 21<sup>st</sup> century (Boyd, 2007).

Chronic and recurrent nature of BMD impacts several aspects of patients' lives, from their interpersonal relationships to the quality of their work. As an example, divorce rate is reported to be higher in this patient population (Ghoreishizadeh et al., 2008). Additionally, this disorder is costly to the society and its average yearly cost is 45 billion dollars in the United States (Rouget & Aubry, 2007). This yearly cost is reported to be 2055 million pounds in the UK, 86% of which is indirect costs (Gupta & Guest, 2002). Pharmacological treatment alone has not been successful for complete improvement in the symptoms (Bassili, 2009). Compliance is an issue in the treatment of BMD due to patients' lack of understanding of the disease process and its consequences, as well as the disorder itself in some cases disrupting patients' judgment. This along with the nature of the disorder, may lead to multiple relapses (Keck et al., 1997; Parikh et al., 1997). The relapse rate has been reported to be 30%-40% in one year, 60% in two years and 70% in five years (Otto et al., 2003; Rouget & Aubry, 2007).

Furthermore, quality of life in bipolar patients is impaired even during remission, and the suicide rates are higher. Suicide rate is reported to be as high as 20%-30% in bipolar patients (Bellivier et al., 2011; Valtonen et al., 2005). Therefore, maintenance pharmacological treatment is highly recommended for these patients, as well as other forms of treatments (Ghaemi et al., 2004). Adjunct treatments along with pharmacotherapy are found to be effective in improvement of prognosis and helping patients in better adjustment with the disorder (Beynon et al., 2008).

## 2. Nonpharmacological treatments for BMD

Various non-pharmacological therapeutic approaches have been suggested for treatment of patients with BMD. One of these methods is Psychoeducation (PE). There are various programs focusing on education which have been found to be helpful in reducing relapse rate, burden of illness as well as improving symptoms and patients' function. Some of these programs are long term and some are short in duration. They all cover topics such as patients' awareness of the illness (which is recurrent and chronic), knowing more about the triggers of a new episodes, necessity of treatment and different treatment options, confronting mood swings, attaining better control over symptoms, awareness about the side effects of medications, effects of coffee and nicotin intake and importance of regular habits and life style (Colom & Vieta, 2006; Dashtbozorgi et al., 2009; Fayyazi et al., 2009; Sadock et al., 2009; Wheeler, 2010a). Psychoeducation may be done in a variety of ways, such as individual treatment, group therapy, multi-family therapy, and patient - family dyadic therapy (Wheeler, 2010a). These methods will be discussed in details below.

Another reportedly successful treatment method is cognitive behavioral therapy (CBT). Originally CBT was used for treatment of unipolar depression, but it was later used for BMD patients and many therapeutic programs and techniques were introduced to treat these patients. These programs mainly focus on relaxation strategies, cognitive restructuring, psychoeducation, problem solving strategies and therapeutic interventions to treat patients with co-morbidities (Colom & Vieta, 2006; Miklowitz et al., 2007; Wheeler, 2010b). Some studies have demonstrated efficacy in relapse prevention. However well designed studies with longer follow-up are needed to assess effectiveness of CBT in improvement disease outcome. What seems to be the main core of therapeutic elements in CBT is psychoeducation (Scott et al., 2006).

Interpersonal therapy (IT) is another type of non-pharmacological treatment for BMD which focuses on interpersonal aspects of patients. One type of IT is called interpersonal and social rhythm therapy (IPSRT) which is designed to help BMD patients with their daily activities such as exercise, eating and sleeping, as well as their social relationships (Colom & Vieta, 2006; Miklowitz et al., 2007; Sadock et al., 2009). This type of treatment includes four steps. First, patient's history is taken. Then, general information regarding bipolar disorder and its effects on interpersonal aspects of patient's life is discussed. This is followed by therapist's focus on special techniques for mood stability and gaining control over symptoms. Once patient's symptoms are under control, they will be helped to recognize important factors affecting mood stability (Stresing, 2010).

These treatments can be used in group therapies. Also, researchers have found families' involvement to be important and effective, especially in psychoeducational therapies, since bipolar mood disorders affect both patients and their families. Research done by Dore and colleagues, focuses on the influence of relatives and family members on patient's occupation, financial and residential status, marital status, child care, social and even recreational activities. (Dore & Romans, 2001) It was found that burden of the disease on family members may affect outcome of the disease (Perlick et al., 2008). Several long term and short term programs have been designed for family members of patients. According to Fayyazi and colleagues, one session of educational intervention at the time of patients' discharge from the hospital can increase pharmacological compliance, as well as decreasing one year relapse rate of the disease (Fayyazi et al., 2009). Additionally, two-session

educational therapy for families has shown to help patients (Miklowitz et al., 2000) although most therapeutic educational programs designed for family members take longer duration (Colom & Vieta, 2006).

### 3. Psychoeducation

In 1998 Goldman defined psychoeducation as “education or training of a person with a psychiatric disorder in subjects that serve the goals of treatment and rehabilitation”. According to Goldman, the goal of psychological education is to enhance patients’ acceptance of their disease, as well as their participation in therapy and improvement of coping mechanisms when facing problems caused by their disease (Goldman, 1998 as cited in Atri & Sharma, 2007). In 2006, National Institute for Health and Clinical Excellence (NICE) introduced the following definition for psychoeducation (PE):

*“Any structured group or individual program that addresses an illness from a multi dimensional viewpoint including familial, social, biological and pharmacological perspectives, as well as providing service users and carers with information support and management strategies”*  
(The National Institute for Health and Clinical Excellence [NICE], 2006 as cited in Getachew et al., 2009).

Based on this definition, psychological education for more than one session seems to increase patients’ knowledge of their disease. These sessions are structured and may be done in groups. Many programs suggested by research groups are designed in group format (Colom & Vieta, 2006). The goal is for patients to learn about their diseases and increase awareness, by learning self management techniques and adaptation to psychosocial problems caused by their illness. In this method, the focus is on improving patients’ strengths, resources and adaptation skills (Beynon et al., 2008).

Psychoeducation is not only applied to use for patients with bipolar and other psychiatric disorders, but also for chronic medical diseases such as diabetes and ischemic heart disease in which there is a significant necessity for changing lifestyle and patients’ habits in order to control disease and attain better outcome (Colom & Vieta, 2009). Experimental evidence has demonstrated that psychoeducation could be a part of recovery for patients suffering from psychiatric disorders such as schizophrenia and bipolar disorder (Getachew et al., 2009). In 2009, Colom and colleagues found that six- month group psychoeducation for euthymic bipolar patients has long lasting prophylactic effects after 5 years of follow up (Colom et al., 2009). The effects of this treatment on recovery are independent of its influence on compliance with pharmacological treatment (Colom et al, 2003; Atri & Sharma, 2007).

The core elements leading to the therapeutic effects of these structured psychoeducation sessions for patients and their families are subject to further exploration. These factors may include the following:

1. Level of expressed emotions and hostility, as well as extreme exertion of control by the families may lead to relapse (Lefley, 2009). Therefore, educational sessions for family members can be effective in providing support of the patients by their family members (Miklowitz et al., 2003; Miklowitz, 2008a).
2. Participation in group psychoeducational sessions may help patients to experience less social isolation. Patients may have a perception that they are the only one suffering

from the disease and therefore, have no place in the society. Meeting others with similar concerns may lead to experiencing stigmatization and isolation in these patients. (Colom & Vieta 2006; Colom & Vieta 2009)

3. Patients' continuous participation provides them with more opportunity to stay in contact with their therapy team. Hence, they spend more in treatments which leads to better adherences to the medication treatment, and lowering of the relapse risk (Colom & Vieta 2006; Colom & Vieta 2009).
4. These sessions can also encourage patients to be more actively involved in their own treatment and experience better control over the situation (Colom & Vieta 2006; Colom & Vieta 2009).
5. It is important for patients to accept their therapists and approve the quality of care they received (Howard et al., 2003). Their participation in structured sessions may result in increased satisfaction about therapy and alliance with their therapists because of improvement in their perception of better quality of care (Colom & Vieta 2006; Colom & Vieta 2009).
6. Participating patients will interact with one another, which also helps them learn from each other and exchange their experiences, creating a sense of cohesion among them as well as acquiring new coping mechanisms. This may function as a new support network for both patients and their families (Colom & Vieta 2006; Colom & Vieta 2009).
7. Teaching stress management methods to patients and their families could help them in dealing with their illness and reducing interepisodic symptoms and improving individual's mental health (Miklowitz et al., 2003).
8. Changing the behaviors and life style may also help patients. Gaining healthier habits and quitting destructive ones, such as drug use, may lead to decrease in manic relapses by reducing precipitators of episodes. In 1980, Green and colleagues explained these sessions as, "Any combination of learning experiences designed to facilitate voluntary adaptation of behavior conducive to health." (Green et al., 1980 as cited in Atri & Sharma, 2007).
9. Participation of family members in these sessions may inform caregivers of the early warning signs of relapse, and therefore, encouraging patients to seek treatment in the right time (Miklowitz et al., 2003).

#### **4. Psychoeducation for bipolar mood disorder**

With presence of lithium in 1950s, hopes are increased for controlling and curing bipolar disorder or manic-depressive psychosis. In controlled clinical trials, the efficacy of this medicine as well as other mood stabilizers like valproate, carbamazepine, olanzepine, lamotrigine, etc. was proved. They are proved effective in controlling mood symptoms in acute episodes of the disorder plus in maintenance therapy to prevent further relapse of episodes (Vieta et al, 2011). Many of these medications have been medically proved to be effective based on evidences and they belong to level A of evidence which is to say there are many randomized clinical trials (RCT) studies proving their efficacy (Geddes & Briess, 2006). Yet, these studies are criticized regarding their external validity as to whether they are as effective in everyday clinical setting to help prevent relapse of episodes or the interfering factors reduce their efficacy in daily clinical practice (Simon, 2006; Ketter, 2008). It seems that the effectiveness of treatments is not as high as the efficacy the studies report (Amini et al., 2010). although medical treatments has efficacy on symptom relief, but not completely

effective in reducing disease burden and patients are not able to regain their functions (Cakir & Ozerdem, 2010). In RCT studies, volunteering patients are of different characteristics from those who are encountered in daily clinical setting (McComb, 2011). It appears that next to RCT studies and clinical trials, naturalistic studies like cohort are needed to measure the medication's effectiveness in the daily clinical practice. One of the effective elements in everyday clinical trials is the extent of treatment compliance on behalf of the bipolar disorders. Treatment compliance is one of the prognostic predictors in bipolar disorder (Velligan, 2010). The influencing elements in low compliance are alcohol and drug abuse consumption, severity of symptoms, young age, negative attitude to treatment, insufficient information about the problem and inaccessibility of medical services (Sajatovic, 2011).

Sure enough, success in curing the disorder is bound to factors other than the efficacy of mood stabilizers. Non-pharmacological strategies in order to increase treatment compliance on the part of the patient and better psychosocial compatibility are also needed (Vieta, 2005; Velligan, 2010). These pressing needs were the reason why lithium clinics were established during the 1970s in Europe and America to discover the effect of lithium in maintenance therapy of bipolar disorder. Drug prescription and medical monitoring were not the only things done in these clinics as patients were also receiving psychoeducation, rehabilitation, cognitive therapy, and job counselling and systematic care was performed for the patients (Osher et al., 2010).

In the early 1990s, Peet and Harvey presented their empirical studies of the effect of psychoeducation regarding bipolar disorder. They proved that presenting the patients in the experimental group with a video tape and a handout can significantly increase their knowledge and their attitude toward the treatment compared to the patients in control group (Peet & Harvey, 1991). They demonstrated that increased knowledge and positive attitude toward treatment improved compliance (improvement was defined as the number of forgotten taking drugs and the level of lithium in erythrocytes) (Peet & Harvey, 1991). Prior to implementing psychoeducation as an independent realm in cognitive therapy and psychological interventions for patients diagnosed with bipolar disorder, the patients had received supportive group therapy in lithium clinics. In the 1980s, a number of studies showed the effect of group therapy on increasing the understanding of the patient about the problem, lowering the stigma and reducing the times getting hospitalized. In Van Gent's study, patients reported increased self confidence and problem solving ability (Van Gent et al., 1988). In Volkmar's research, 47 sessions of group therapy and a two-year follow up resulted in a reduction in getting hospitalized (Volkmar et al., 1981). Still, the number of studies done in the 1980s was limited and they were mostly methodologically flawed with no control groups or very small research populations.

Little by little, the format of the groups has been driven closer to groups with more specific targets and structures; for instance, in 1986, Kripke and Robinson held group therapies to improve problem solving and measured the level of lithium as an indicator of patients' compliance. The outcome factors included the relapse rate, and the level of social compatibility which were considered as signs of recovery (Kripke & Robinson, 1986 as cited in Colom & Vieta, 2006). Creating homogenous groups aiming at improving self management skills of the patients diagnosed with the disorder was the way that replaced the classic supportive group therapy in the early 90s. In 1993, Pollack suggested patients'

group therapy getting started from the very first moment of getting hospitalized, the groups' being homogenous and the focus being on self-assistance and self management skills (Pollack, 1993; Pollack, 1995). It seems that, when paired with psychoeducation, group therapy approach can result patients to obtain benefits of both interventions to the point that they are able to manage their disorder, improve their interpersonal relations, alter their attitude toward the disorder and manage their sense of stigma (Colom & Vieta, 2006). In Garves's research on outpatients in 1993, He reported an increase in treatment adherence, a decrease in denying the problem, and a higher control over internal and external stressors (Garves, 1993).

#### **4.1 Systematic care models**

In the 1990s, planning of structured programs for patients' management which include group therapies based on psychoeducation was aimed by a number of research groups, some of which are introduced below.

##### **4.1.1 Life goals program**

Life Goals Program (LGP) is a manual based structured group therapy that is focused on systematic education and problem solving skills so that patients become able to manage the illness (Sajatovic et al., 2009). It is found that bipolar patients, who took part in this program, became more knowledgeable about the disorder and had better adherence (Bauer & McBride, 2003). This program, which was introduced by Bauer & MacBride in 1998, had two major goals in two phases: "to improve patient participation in medical model treatment (phase 1) and assist patients in meeting functional status goals (phase 2)" (Bauer et al., 1998). The first study in this field was carried out as an open trial on 29 patients (Bauer et al., 1998). In the following randomized clinical trials, the program proved to be effective on the disorder's outcome, patients' function and quality of life (Bauer et al., 2006a, 2006b). In these studies LGP was performed on the patients as one of the components of a systematic care model for patients (so called collaborative care model [CCM]). Although Sajatovic used LGP as stand-alone intervention in a randomized controlled trial on 164 outpatients and she found no effect on treatment attitude during a one year of follow up; moreover, the depressed patients were less benefited from this intervention (Sajatovic et al., 2009).

LGP consists of two phases. In the first phase, psychoeducation is held for the patients in 6 interactive weekly sessions. The groups are of 6-8 members. During the first phase, the importance of good compliance, the effect of non-adherence on the course of the disorder as well as the effect of maladaptive behaviours on the symptoms' relapse is discussed. Also, participants try to identify their own symptom profiles, early warning signs and triggers of previous relapses. In the second phase of treatment, which is optional, monthly group sessions are held in an unstructured format which aims on goal setting and problem solving (Bauer & McBride, 2006).

##### **4.1.2 Systematic care program**

It was designed by Greg Simon and his colleagues as a systematic disease management program which consists of a number of components: 1. Evaluating and programming care, 2. Structured monthly phone calls, 3. Providing feedback for the treatment team, 4.

Structured group psychoeducation on the format of LGP, discussed in the previous chapter 5. Providing supportive interventions, education and care coordination. Depending on needs, the program can last for 2 years and nurses and case managers in addition to psychiatrists are involved. In a randomized study, this program was effective in reducing relapses of manic episodes, but not for depressive episodes (Simon, 2005).

## **4.2 Psychoeducation without systematic care**

In the late 1990s and the first decade of the 21st century controlled trials started to prove the efficacy of psychoeducation on course and prognosis of bipolar mood disorder. This section reviews those trials which have investigated efficacy of individual and group psychoeducation without a systematic care model.

### **4.2.1 Individual psychoeducation**

In 1998, Perry designed the first (and up to now the only) randomized clinical trial to investigate the efficacy of individual psychoeducation for bipolar patients. 69 patients were randomly allocated to two drug-receiving groups with routine care and drug-treatment plus 7-12 psychoeducational sessions. The sessions were aimed to help patients diagnose the early warning signs and know how to manage these signs. During a 18 month follow up, a decrease of 30% in relapses of manic (but not depressive) episodes were reported (Perry et al., 1999).

### **4.2.2 Barcelona bipolar disorder project**

Colom, Vieta and their colleagues organized the structured 90-minute weekly group psychoeducational sessions, held in a 6 month period (21 sessions). The sessions are interactive and are facilitated by a psychologist under the supervision of a psychiatrist. Colom & Vieta have suggested 9-12 patients for each group but it can be raised to 15, considering the dropout of participants (Colom & Vieta, 2006). Patients in the euthymic phase are eligible to take part in sessions. The first controlled trial by the research group got published in 2003 as a double blind randomized clinical trial in which 120 bipolar patients in euthymic phase were randomly allocated to two groups of 21 sessions of structural psychoeducation or unstructured supportive group therapy. The psychoeducation group experienced fewer relapses both regarding manic and depressive episodes at the end of 2-year follow up (in previous trials psychoeducation was more effective on preventing relapses of mania and mixed episodes rather than depressive episodes) (Colom et al, 2003). 99 patients out of the 120 who received group psychoeducation in previous study completed the whole 5 year-follow up. The number of relapses, time to the first relapse, days spent acutely ill, days of hospitalization and the number of being hospitalized all significantly decreased compared to the control group. These findings show continuation of prophylactic effect of the sessions on patients (Colom et al., 2009a). In post hoc subanalysis, prophylactic effect of psychoeducation sessions in subgroup of patients with Bipolar II disorders was also demonstrated (Colom et al., 2009b). The surprising fact of the first Barcelona study is that the number of drop-outs in the group treated with structural psychoeducation was more than the group receiving unstructured supportive group therapy (11.6% vs. 26.6%) while the level of lithium in patients during the 2-year follow up was higher among those being treated with psychoeducation (Miklowitz, 2008a).

### 4.2.3 The content of psychoeducation program for the patient

Based on the patients' needs and clinical experiences of skilful clinicians, most of patient-oriented psychoeducational packages are focusing on 5 important components in order to help patients cope effectively with their illness. The difference among various programs often lies in the number of sessions allocated to each component (Colom & Vieta, 2009):

1. **Illness awareness.** It aims to increase patient's insight, illness acceptance and decrease the stigma and humiliation felt by patients. In this phase, the patient is presented with a biological model of bipolar disorder as a brain disease (Colom & Vieta, 2006).
2. **Adherence enhancement.** Considering the fact that the most important cause of relapse in bipolar patients is non-adherence (Guscott & Taylor, 1994; Silverstone et al., 1998) and common reasons of non-adherence are incorrect information, fear of side effects and dependency, and lack of information about the illness and the necessity of treatment (Sajatovic et al., 2011), adherence enhancement is one of the main points of psychoeducation sessions.  
Many patients are not capable to follow the correct instruction of taking medicine and this has been pointed out as the main cause of non-adherence (Sajatovic et al., 2011); thus it is necessary that patient is kept informed about different kinds of drugs for bipolar disorder, the ways of monitoring their effects, and the side effects of each, so that they would know how to manage side effects and also gain insight to disadvantage of discontinuation of medication.
3. **Detection of early warning signs.** Recognizing the early warning signs can help patients to prevent full-blown episode and subsequent probable hospitalization.
4. **Substance misuse avoidance.** Considering that substance and drug misuse can worsen the course of bipolar disorder.
5. **Lifestyle regularity.** Regular habits and stress management constitute the core components of Interpersonal and Social Rhythm Therapy (IPSRT), in which the patient is educated how to regulate their sleep hours and daily functions, eating and taking medication along with stress management, so that relapse triggers would reduce (Colom & Vieta, 2009).

The content of Barcelona's psychoeducational program inspired research groups in differing countries to run the program in ways to meet their needs and cultural obligations. For instance in Familiarizing Bipolar Disorder program in Poland the content was summarized into 8 group sessions. The program was reported to be effective based on an observational study (Maczka et al., 2010). Tabatabaie and Mottaqhipour in Iran, also, designed 8 psychoeducational sessions with a systematic care program of family education sessions along with occupational therapy. The content of the sessions are listed in Table 1. The research on the program's efficacy is going on.

1-The group members' introduction and familiarity with the task
2-Knowing the illness's signs
3-Etiology, the disorder's onset and course
4-Treatment and follow up
5-Relapse and its prevention
6-Adaptation to the illness
7-Stress management and problem solving
8-Recovery

Table 1. Session of suggested psychoeducational program by Tabatabaie - Mottaqhipour in Iran



It is worth mentioning that in all these packages and in Barcelona Model, learning process is based on adult learning model in which people talk about their experiences and learn from other, so they can receive peer support from the group members. The ultimate goal of psychoeducational group to change maladaptive behaviour, because providing information, by itself, cannot lead to any behavioural change (Colom & Vieta, 2006).

#### **4.2.4 The systematic illness management skills enhancement programme-bipolar disorder (SIMSEP-BD)**

This program is a dyadic psychoeducational group (companion-patient dyad) where the patient takes part with companions. It takes twelve 90-minute weekly sessions. This program was introduced by D'Souza & Rich (D'Souza & Rich, 2002) based on which a randomized controlled trial research was published in 2010 by D'Souza and his colleagues. In this trial 58 patients who had recently experienced remission after an acute episode were randomly assigned to two treatment as usual (TAU) and SIMSEP-BD groups and followed up for 60 weeks. During the follow up, SIMSEP-BD group showed fewer relapses, higher treatment adherence and less manic signs (D'Souza et al., 2010).

#### **4.3 Who would benefit psychoeducational group therapy the most?**

Such as pharmacotherapy and other methods of psychotherapy, there are factors which can predict the patient's response to psychoeducational program. In Even and his colleagues' trial in 2007 it was observed that younger age, shorter illness period, higher levels of education, more information on Lithium and less external locus of control are predictive factors of more cooperation in psychoeducational sessions. Especially with logistic regression it is viewed that external locus of control is an independent factor in determining the amount of patient's participation in the treatment (Even, 2007).

In 2010, in a post study by Even, it is showed up that patients' participation in psychoeducational sessions results in a change in locus of control and this change pertains for 24 months beyond the sessions being over which can be one of the main effective components of psychoeducational on bipolar patients (Event, 2010).

In a trial by Cakin and colleagues in 2009, the existence of mixed episodes, drug treatment adherence and blood levels suitable for mood stabilizers and limited number of mood episodes are the predictive factors of cooperation and higher motivation of patients and more participation on sessions (Cakir, 2009).

### **5. Psychoeducation with the family**

Bipolar disorder is a relapsing illness and even using the appropriated pharmacotherapy relapse chances are still there. These relapses can cause occupational problems, patient's distorted interpersonal relationships, and conflicts with relatives (Coryell et al., 1993; Gitlin et al., 1995; Perlis et al., 2006). Among bipolar patients a severe role impairment related to depression is observed in 90% of patients in such a way that half of them are incapable of working and carrying out their activities (Suppes et al, 2001). The existence of bipolar mood signs leads to an increase in excitement and financial aspects of family. It is expected for this illness to be the main reason of lost years of healthy life, after cardiovascular disorders (Murry & Lopez, 1996).

On the other hand, stress factors within the family life can exacerbate bipolar disorder. Expressed Emotion (EE) is one of the best predictors of mood swing (Miklowitz et al, 1998, 2000). Expressed Emotion is an scale for the extent of the family and caregivers emotional attitudes to patient's psychiatric disorder. When talking of high EE, it is meant to be lots of critical comments, hostility-arising situations, or showing emotional over-involvement (like over protection, exaggerated emotional responses, or inordinate self-sacrifice) (Miklowitz, 2008b; Morris et al, 2007). Numerous trials have reported intense relationship between EE and poor outcome in schizophrenic patients, mood bipolar and other psychiatric disorders. In a trial in 2010 it was observed that family's levels of conflict in bipolar patients was higher than families of normal people and also impairment in cohesion and adaptability was higher in such families and things with families with high EE is even worse (Sullivan & Miklowitz, 2010). In a meta-analysis, EE had a high effect size in predicting psychosis in schizophrenic patients. But the mean effect size of EE in mood disorder patients was even higher (Butzlaff & Hooley, 1998). The risk of a relapse or re-hospitalization in patients with high EE is 5-9 times more than those with low EE (Miklowitz et al., 1998; Priebe et al, 1989).

Thus, it can be concluded that bipolar disorder affects family relationships and vice versa. When looking at bipolar disorder from biopsychosocial view point, drugs seem necessary to control biological aspects of the illness, but psychological interventions are quite mandatory specially when working on the family to control the psychological and family-social aspects of the illness. Mood disorder treatment has got 3 phases (Prien, 1993). Acute treatment phase in which the acute signs of illness are mostly controlled with pharmacotherapy and psychosocial interventions and these are mostly done in a hospital. In this phase, especially in the first and second episodes, the patient and their family experience a trauma, are shocked and should be understood so that they can cope with the situation. The next phase is stabilization or continuation phase in which drug therapy and psychological treatment simultaneously help the patient leave the critical phase behind so that the illness can be stabilized. And finally maintenance phase, the main goal of which is making the patient continue with the drug therapy and returning them to their family and their own activities in the long run. Although severe signs are rare in this phase, some depression signs do not leave the patient for a long time. In this phase many of families need help to enable them to maintain the patient's fine situation and help them return to their normal career and life. Differing types of family therapy programs have been designs for mood disorders and in most trials their role is defined as to regulate high adherence and relapse prevention. Some of these programs are briefly defined here:

### 5.1 Family focused therapy (FFT)

This treatment program was first designed for schizophrenic patients based in psychosocial interventions model. In this program patient's caregivers, who could include their father, mother, sister, brother, spouse, children or those people who leave close to them like friends, accompany the patient participate in treatment. The program has three main parts:

1. **Psychoeducation about bipolar disorder.** In this part the patient's family receive intensive training on three areas. a) The illness signs and course which include signs and symptoms of bipolar disorder, the way the last episode of illness has progressed in the patient, the recent events of patient's life, a description of patient's hospitalization experiences and different types of illness prognosis as well as its course. b) Etiology of

- bipolar disorder including explanation on stress-diathesis model and the role of stress and life events, genetic preparation and biological factors, protective and risky factors.
- c) Intervention based on stress-diathesis model including drug and the mechanism of their influence, psychosocial interventions, how the family supports and helps with it, the pattern of patient’s self-management and the relapse drills.
2. **Communication Enhancement training (CET).** In this phase the patient and their family are helped to make or rebuilt effective relationship patterns. In most major psychiatric disorders, the capacity of patient and their family in making relations faces deterioration and this problem is very intense when an acute episode of disorder blocks all normal relations and even in the recovery phase people do not know how much they can trust patient. In this phase, along with an interactive relation, it is taught how to make direct and clear positive or negative emotional connections. Verbal and nonverbal strategies of active listening are discussed and it is practice how to positively ask a family member to change a behavior of theirs.
  3. **Problem solving Skills training.** During the last session of treatment, problem solving is practiced. The family members define a problem and brain storm different solutions to it, discuss the advantages and disadvantages, choose a way and operationalize the chosen solution and finally reassess different aspects of the problem. They start off with simple tiny examples which do not emotionally engage them and finally discuss the main issues (Miklowitz, 2008b; Morris et al, 2007).

Where these sessions are held depends on the patient and their situation, and can be the patient’s house or a clinic. The program consists of 21 session with the first 7 sessions being psychoeducation, the following 7-10 session revolve around CET and the last 4-5 sessions are allocated to problem solving and finally the last session is planned to terminate the program. It goes without saying that booster sessions can be designed if needed. The sessions are held every week (for three months), then biweek (for three months) and finally they are held monthly (Miklowitz, 2008b; Morris et al, 2007). In these sessions six goals are programmed which are listed in the Table-2.

Assist the patient and relatives in:
1- Integrating the experiences associated with mood episodes in bipolar disorder
2- Accepting the notion of a vulnerability to future episodes
3- Accepting a dependency on mood-stabilizing medication for symptom control
4- Distinguishing between the patient’s personality and his/her bipolar disorder
5- Recognizing and learning to cope with stressful life events that trigger recurrences of bipolar disorder
6- Reestablishing functional relationships after a mood episode

Table 2. The Six Objectives of Family-Focused Treatment

Following trials have sought to know if this treatment is effective or ineffective. The first study is Miklowitz and Goldstein’s in 1990. He treated 9 adult patients for 9 months and compared the results with 23 other patients. His experimental group showed far fewer relapses than the control group (11% vs. 61%) (Miklowitz & Golsenstein, 1990). Other controlled trials also aimed to control the effect of FFT on bipolar patients’ outcome. In a study in 2000 which followed up BMD patients being treated with FFT for 2 years, fewer relapses and more periods of remission

were traced compared to a group receiving crisis intervention (Miklowitz et al, 2000). Yet another study showed more compliance in patients treated by FFT compared to the control group (Miklowitz et al, 2003). Another study by Miklowitz in 2009 on adolescents with bipolar disorder showed that FFT intervened by reduction of EE leads to a significant reduction in depression and manic signs (Miklowitz et al, 2009). A study in Turkey was conducted to investigate the effect of FFT in a non-American society and showed that adding FFT to pharmacotherapy leads to more clinical recovery (Ozerdem et al, 2009).

Apart from the main illness signs, the amount of compliance, and relapses prevention, other goals have been aimed when practicing FFT. In a trial published in 2006 it was declared that FFT along with educating the family to recognize suicidal behaviors in bipolar patients and to control some of the environmental factors can reduce the suicidal risk. Further probation in this research area is suggested (Miklowitz & Taylor, 2006). As well, in a trial in September 2010, FFT interventions had led to a reduction in depression and healthy risk behavior in both caregivers and patients (Perlick et al, 2010).

## **5.2 Multifamily psychoeducational group therapy (MFPGS)**

This type of intervention includes fewer sessions (6 sessions) in which semi-structural interventions are applied to a small group of patients and their families. These interventions are focused on educating people and improving their coping strategies. Patients and their families are encouraged to improve and increase their family interactions.

Not much information is in hand regarding the effect of this treatment. In a trial in 1995, four groups were intervened by MFPGS and compared to nine other groups. Although the amount of EE was less in MFPGS groups, this difference was not statistically significant (Honig et al, 1995). In another trial in 2004, 92 patients with BMD received the treatment in 3 groups: MFPGS plus pharmacotherapy, psycho-social interventions plus pharmacotherapy, and just pharmacotherapy. Time of recovery was set as the comparison scale and no significant difference between the groups was reported (Miller et al, 2004). In yet another trial on 165 adolescents with BMD and their families, who had been treated with MFPGS, the quality of utilized services, by modulation of the improvement of parents' beliefs about the treatment, showed a significant increase. Also, severity of mood signs in patients was improved which is due to utilize better services (Mnedenhall et al, 2009).

## **5.3 Psychoeducational family intervention**

Other forms of psychoeducational interventions, specifically in families alone, have been presented. An example can be the case of a trial in Iran in which families received training on mood disorders, causes and signs, therapeutic approaches to prevent relapses, patterns of relation with the patient, managing the patient's crisis and expanding mental health in the family, all during 6 educational sessions. Family adaptation was significantly better in intervention group while the severity of symptoms of the patient's and global functioning showed no difference (Dashtbozorgi et al, 2009). Also, in another study, in which families were subject to twelve 90-minute educational sessions, recurrence of manic phase (and not depression) showed a significant decrease in a year (Reinares et al, 2008).

Some trials implemented even shorter forms of psychoeducational interventions. In a trial, the intervention of a 2-hour educational session for bipolar patients' families at the time of

hospital discharge focusing on educational content of bipolar illness, treatment methods, risk factors, and open discussions about the illness showed that patients have a better compliance with the treatment in a year and experience fewer manic episodes (Fayyazi et al, 2009).

Despite the load of reports about the effectiveness of the intervention on families of bipolar patients, there is a major limitation that decreases its efficiency. Almost 40-60% of bipolar patients, depending on their differing cultures, are not living with their families and this deprives them of receiving this treatment.

## **6. Psychoeducation in special groups**

### **6.1 Integrated group therapy for comorbidity of substance dependency**

Weiss and colleagues arranged integrated group therapy program for patients with comorbidity of substance dependency and bipolar mood disorder which includes 20 weekly sessions in which cognitive behavioral model is integrated with recovery programs to help with prevention of substance use relapse for bipolar mood disorder. The reason behind this integration is the similarity of the two disorders in substance use relapse process and recovery from mood episodes. It seems that the behavioral and cognitive interventions for each disorder have an impact on the other one. During the sessions the shared subjects of the two disorders (like the effect of taking drugs on the process of bipolar disorder) are also discussed. In these sessions, patients' monitoring and checking in, including drug taking monitoring, treatment adherence, methods of coping with high risk situations and mood charts are also talked over (Weiss et al., 2007). In a randomized control trial on this group, fewer substance uses were reported in drug counseling group which was exposed to integrated group therapy, although other outcome factors had no significant differences (Weiss et al., 2007). In the next trial on the same group, the number of sessions were reduced to 12 which were conducted by a counselor specialized in substance use disorders. In this trial previous findings including lower substance uses and good clinical outcome were confirmed (Weiss et al., 2009).

### **6.2 Psychoeducation in children and adolescents**

About 13-28% of patients with bipolar disorder experience their first episode before age of 13 and 50-66% have disease onset before age of 18 (Merikangas et al., 2007; Perlis et al., 2004). Early onset of disorder causes higher risk of suicide, poor function, and poor quality of life (Geller et al., 2000; Geller et al., 2004). Diagnosis and pharmacotherapy for bipolar disorder in children and adolescents have been the focus of attention in the past decade but few studies have investigated psychological interventions in this group. Two programs for family therapy, focused on psychoeducation, have been suggested for children and adolescents:

#### **6.2.1 Family-focused treatment for adolescents (FFT-A)**

Family-Focused Treatment for Adolescents (FFT-A), which has been designed based on adults' FFT and includes twenty one 50-minute sessions (12 weekly, 6 biweekly and 3 monthly sessions) in which patients, family and siblings attend. Just like adults' FFT, three phases are done during the sessions:

1. Encouraging the adolescents and their family to reach a better understanding of the disorder, including etiology and the course of disorder in children and adolescents.
2. Encouraging adherence to pharmacotherapy.
3. Guiding the patient and their family to prevent recurrence through detecting early signs of relapse and having quick contact with a psychiatrist.

In a randomized control trial in 2008 and through a 2-year follow up by Miklowitz and colleagues, 30 adolescents being treated with FFT-A were compared to 28 adolescents treated with Enhanced care. Although the groups revealed no statistical differences, the group receiving FFT-A experienced less depression during follow-up (Miklowitz et al., 2008).

### **6.2.2 Multifamily psychoeducational psychotherapy**

In this intervention, 8 sessions are held with both the patient and their parents with three main goals being followed: social support, information and skill building. In a trial, 78 children got multifamily psychoeducational psychotherapy, compared with 87 children being treated as usual. Results suggested that simultaneous use of brief psychoeducational group therapy plus pharmacotherapy would lead to better outcome in children aged 8-12 with major mood disorder (Feristad et al., 2008).

## **7. Web-based programs**

Education regarding the disorder and self-management methods is important and influential for patients but various psychoeducational programs are not accessible for everyone and some patients are not able to take part in all weekly sessions. Due to such issues and along with widespread usage of internet by many people all around the world, the idea of online psychoeducation has been offered so that patients, caregivers, and mental health workers are provided with necessary information (Proudfoot et al., 2007). To actualize the goal, educational programs are being designed on the web. For instance, beating bipolar program has been offered by Barnes and Simpson, as an online psychological package ([www.beatingbipolar.org](http://www.beatingbipolar.org)) (Barnes et al., 2011). In 2009, this program was investigated under the title of Bipolar Interactive Psychoeducation Study. Almost 100 patients, diagnosed with bipolar disorder in euthymic phase were randomly allocated into two groups, received web based education or treatment as usual. The research was to compare the two groups on lifestyle along with present mood symptoms, the number of episodes, global function, functional impairment and insight. The results of the study has not yet been published to the best of our knowledge (Simpson et al., 2009).

Since 2008, Goudarzi, Mahdavi and colleagues have also entered educational information for patients on [www.ismd.ir](http://www.ismd.ir) for three groups of caregivers, patients and mental health workers but no study has been conducted to determine its efficacy yet.

## **8. Conclusion**

Experiencing acute mood episodes in bipolar mood disorder may lead to serious individual, interpersonal and social dysfunction. In the past decades development of pharmacotherapy has significantly improved control of depression, mania, and mixed episodes and great

advancement has been achieved. However, patients with bipolar disorder still suffer from several instances of illness relapse, one important cause of them be stopping pharmacotherapy. Research has shown that psychological interventions especially psychoeducation can lead the to patients' better knowledge of the reality of this disorder and better grasp on the importance of treatment adherence. Through psychoeducation, they will also learn about the early signs of relapse and consequently will be more open to appropriate interventions. They will also learn to avoid triggers of relapse such as use of illicit drugs. Many controlled trials have assessed psychoeducational interventions. Although this research line is still ongoing in terms of study of the details of these interventions and their efficacy, most studies have confirmed the role of such interventions in prevention of relapses and reduction of the negative effects of the illness on patients' function.

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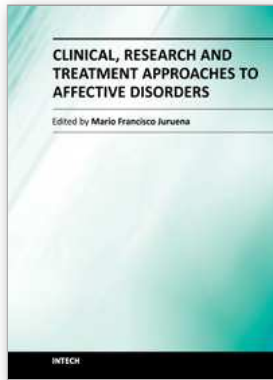
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## **Clinical, Research and Treatment Approaches to Affective Disorders**

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The causes, development and outcomes of disorders are determined by the relationship of psychological, social and cultural factors with biochemistry and physiology. Biochemistry and physiology are not disconnected and different from the rest of our experiences and life events. This system is based on current studies that report that the brain and its cognitive processes show a fantastic synchronization. Written by the foremost experts on Affective Disorders worldwide, this book is characterized by its innovative, refreshing, and highly sensitive perspective on current knowledge of diagnostic, neurobiology, early life stress and treatment of Mood Disorders. The authors share a deep understanding of unique challenges and difficulties involved in Affective Disorders, and have achieved a balance among clinical, research and new treatment approaches to Affective Disorders. The chapters are written in a comprehensive, easily readable, and highly accessible style, stimulating readers, clinicians and researchers.

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