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**Disorder:** A review

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Psychosocial interventions in Bipolar

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**Introduction.** Multiple psychosocial interventions for bipolar disorder have been proposed in recent years. Therefore, we consider that a critical review of empirically validated models would be useful.

Methods. A review of the literature was conducted in Medline/PubMed for articles published during 2000-2010 that respond to the combination of "bipolar disorder" with the following key words: "psychosocial intervention," "psychoeducational intervention" and "psychotherapy."

**Results.** Cognitive-behavioral, psychoeducational, systematic care models, interpersonal and family therapy interventions were found to be empirically validated. All of them reported significant improvements in therapeutic adherence and in the patients' functionality.

**Conclusions.** Although there are currently several validated psychosocial interventions for treating bipolar disorder, their efficacy needs to be specified in relation to more precise variables such as clinical type, comorbid disorders, stages or duration of the disease. Taking into account these clinical features would enable a proper selection of the most adequate intervention according to the patient's specific characteristics

Key Words: Bipolar disorder, Psychosocial intervention, Psychoeducational intervention, Psychotherapy

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# Intervenciones psicosociales en el Trastorno Bipolar: una revisión

**Introducción.** En los últimos años han sido propuestas múltiples intervenciones psicosociales para el tratamiento del trastorno bipolar. Una revisión crítica de los modelos validados empíricamente resultaría de utilidad.

Método. Se realizó una revisión bibliográfica de artículos publicados en Medline/PubMed durante los años 2000-2010 que respondieran al cruce de trastorno bipolar con las siguientes palabras claves: "*psychosocial intervention*", "*psychoeducational intervention*" y "*psychotherapy*".

**Resultados.** Cuentan con validez empírica intervenciones provenientes de los modelos cognitivo-conductual, psicoeducativo, cuidado sistemático, interpersonal y familiar. Todas ellas dan cuenta de mejoras significativas en la adhesión a las indicaciones terapéuticas y un incremento en la funcionalidad

**Conclusiones.** Si bien se utilizan diversas intervenciones psicosociales validadas para el abordaje del trastorno bipolar, su nivel de eficacia debería precisarse en base a variables más específicas como ser las formas clínicas, tipo de comorbilidad, fases o duración de la enfermedad. Estas delimitaciones permitirían seleccionar la intervención más adecuada según las características del paciente.

Palabras claves:

Trastorno bipolar, Intervención psicosocial, Intervención psicoeducacional, Psicoterapia

## INTRODUCTION

Bipolar disorders (BDs) are a group of severe chronic conditions that can reach a prevalence in the community of approximately 4%, presenting comorbidity with other organic psychiatric conditions and high mortality indexes.<sup>1, 2</sup>

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It is estimated that about 1% of the population has BD-I, 1% would have BD II and approximately 2% has cyclothymia or Bipolar Disorder Not Otherwise Specified (BP-NOS). The World Health Organization maintains that BDs would be the first cause of years lived with discapacity for persons 15 to 44 years and the ninth cause of years lived with discapacity among persons of all ages.<sup>1</sup>

In view of the relatively early age of its onset, BDs generally undermine social, educational and occupational development of the patients, considering the low levels of education and higher rates of unemployment they have compared to the general population. Furthermore, patients with BD generally have, although euthymic, sub-syndromic symptoms that entail deterioration in their functionality and quality of life on a global level.<sup>3, 4</sup>

Therefore, the availability of simple treatment guidelines, which are easy to use and practical for the health care professionals and intervention programs that prepare the patients in pursuit of the adoption of an increasingly more active and preventive role regarding the disease, are necessary. Although identification of specific neurobiological alterations<sup>5-7</sup> and high heridability<sup>5</sup> associated to BD has begun, psychosocial type variables may precipitate or, on the contrary, protect against new affective episodes.<sup>9-11</sup> In recent years, diverse systematized and validated psychosocial intervention programs for the treatment of bipolar disorder have been designed.

The present article has aimed to provide an introductory review of the different psychosocial models that used randomized groups for the validation of their interventions in the treatment of BD through the articles published during the years 2000-2010.

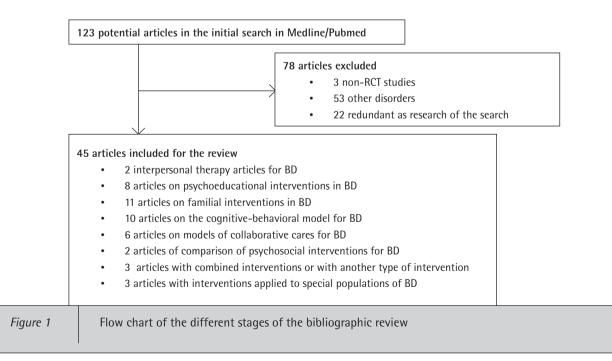
## **METHODS**

A search in the literature was made using the Medline/ PubMed database for the years 2000-2010. This responded the cross data search of bipolar disorder with the following key words: "psychosocial intervention," "psychoeducational intervention" and "psychotherapy." Articles published in English regarding psychosocial interventions for bipolar disorder that were empirically validated (RCT) were included for review. The exclusion criterion used was the absence of control groups in the validation of the results.

## RESULTS

The bibliographic search obtained 123 studies found on psychosocial interventions for bipolar disorder (Fig. 1). Included for review were 45 articles and 78 articles were excluded because a) there was no control group (3), b) redundancy as a result of the search (22) and c) they dealt with other conditions or objectives (53).

The samples used in the different studies and included in this review had variable size (generally not more than 200 subjects per group, mainly patients with BD-I). The results obtained in one experimental group, which participated in one of the treatment groups, were compared with those from the control group, which had only received pharmacological treatment plus the necessary medical cares.



The intervention formats used were group, familial, or individual according to the psychoeducational models, family focused therapy, of *systematic care* type, cognitive behavioral therapy, interpersonal and social rhythm therapy (IPSRT).

Although these schools of thoughts entail different study methodologies, they share similar therapeutic objectives. Among other goals, the coadjuvant psychosocial approaches pursue, the achievement of better general efficacy of the treatment through the protection and prevention against new relapses and therefore improvement of the patient's quality of life.<sup>9</sup> Improvements in the patient's social functioning and adequate management of the possible physical and psychiatric comorbidities are also promoted.<sup>9, 10</sup>

Variables such as reduction of sub-syndromic symptoms, decrease in total days of disease, treatment adherence, improvement in psychosocial functioning, reduction in economic costs, decrease in number of episodes, hospitalization and number of medications were taken into consideration to evaluate the impact before and after the implementation of the interventions. The follow-ups, once the intervention was administered, lasted 1 to 2 years with some exceptions as in the Colom et al. study whose sample was followed-up for 5 years.<sup>12</sup>

#### Interpersonal therapy

With the understanding that self-esteem and links of the bipolar patient are generally affected by the characteristics of the disease, this line of treatment seeks to enable the patient in the identification of their different emotional states, the possible relation with the context and interpersonal activities, An organized style of life is promoted, preventing relational conflicts and promoting functional social communications styles. This model is focused on the social situation in which stressants may emerge, with the purpose of identifying the problematic patterns of communications and to propose possible alternatives. The patient is encouraged to maintain self-registries, fill out notes on their mood and to pose different objectives assigning gradual steps to obtain them. Another relevant aspect is found in the importance granted to promoting ordered sleep schedules and biological rhythms, so that this approach is generally combined with chronobiological approaches for the BD as social rhythm therapy.<sup>11</sup>

The search in the literature found 2 studies<sup>11, 13</sup> that fulfilled the inclusion criteria, in which  $125^{11}$  and  $175^{13}$  bipolar patients participated for a duration of 2 years<sup>13</sup> and 2.5 years<sup>11</sup> per trial.

In the follow-up study at two years, 175 patients with BD-I in recovery from a recent acute episode were randomly assigned to a pharmacotherapeutic treatment and i) weekly sessions of IPSRT ii) intensive medical care having a weekly frequency. Those patients who received treatment with IPSRT showed greater periods of stability and improvements in the psychosocial functioning. This intervention would be especially effective for those patients who have recently suffered an acute episode of the disease.<sup>13</sup>

#### Cognitive-behavioral therapy

Originally designed for the treatment of unipolar depression, the objectives of cognitive-behavioral treatment for BD aims to modify the cognitive distortions on the disease, to monitor recurrences, severity and the course of the symptoms.<sup>9, 10, 14, 15</sup>

A total of 10 works were found.<sup>14-16, 20-24, 26, 27</sup> In these works, a total of 34,<sup>16, 20</sup> 42,<sup>14</sup> 52,<sup>24</sup> 68,<sup>26</sup> 103,<sup>15, 21, 27</sup> and 253<sup>22</sup> subjects participated in trials of 8 weeks,<sup>26</sup> 18,<sup>14, 22, 24</sup> 12<sup>15</sup> weeks and 30 months,<sup>27</sup> up to 2 years<sup>21</sup> and 3 years<sup>20</sup> duration.

Cognitive-behavioral therapy has been used in children and adolescents with BD. An example of this type of intervention is the Child- and Family-Focused Cognitive-Behavioral Therapy (CFF-CBT). CFF-CBT is a therapy designed to be used in combination with medication in pediatric BD.<sup>16,</sup> <sup>17</sup> The studies report that once the intervention program is concluded, it is possible to obtain a significant reduction in the severity of the symptoms, evaluated with the Clinical Global Impression Scales for Bipolar Disorder (CGI-BP) and a significantly higher functioning, evaluated with the Children's Global Assessment Scale (CGAS). However, double blind studies with a control group are still needed to confirm its efficacy.<sup>16-19</sup>

Feeny et al. conducted a pilot study in adolescents with BD. The results indicate that, according to the report of the parents, both the manic and the depressive symptoms substantially decreased after the treatment. This suggests that the adolescents who had already been shown to be stable in their mood state due to the pharmacotherapy can benefit from the cognitive-behavioral interventions.<sup>20</sup>

A study with adults that included a two-year follow-up made by Lam and team compared a sample of subjects with BD-I who received routine treatment and medications for 6 months with an experimental group of subjects with BD-I who received 12-18 sessions of cognitive-behavioral therapy and medication for 6 months. The subjects of the experimental group had shorter episodes and a better level of psychosocial functioning compared to the control group during the first year of follow-up. At two years of follow-up, significant differences were found between both groups in relation to the total amount of days of disease. However, significant differences were not found regarding the prophylactic effect in reference to new episodes.<sup>21</sup>

A later study, conducted by Scott et al. in 2006<sup>22</sup> included a sample of 253 patients with BD subjects who had had at least two previous episodes. It excluded subjects with comorbid disorder of borderline type personality, substance abuse or dependence or those participating simultaneous in another psychosocial treatment. This study compared the results obtained in a group that received 22 sessions of cognitive-behavior treatment and medication with another that only received pharmacological treatment and basic medical cares. With evaluations being performed every 8 weeks and after 18 months, the authors found that more than half of the sample had presented a new episode, without finding significant differences between the two groups. The post hoc analysis revealed that the patients from the experimental group who had a lower number of recurrences were those who at the onset of the study had less than <12 previous affective episodes. Therefore, if this approach is going to be applied, the patients should be euthymic<sup>9</sup> and not have a history of more than 12 previous affective episodes.22

At present, there is a growing number of studies that have validated the interventions of the BD cognitivebehavioral model, although with unequal results regarding the type of symptoms with which the best responses are obtained (manic or depressive pole) or the duration of the improvements.<sup>15, 23, 24</sup> In general, either different subapproaches of the model have been used or different specific objectives have been proposed, which minimizes the specificity of the current results.<sup>9, 25-27</sup>

## Family therapy

Considering that bipolar disease is a condition that not only affects the patient but also their settings in general, the magnitude of the impact perceived by the immediate social group and how the social groups relate with the patient must be considered.<sup>9, 28</sup>

In this case, the bibliographic search found 11 works<sup>28-38</sup> in which 30,<sup>36</sup> 46,<sup>30</sup> 53,<sup>32</sup> 58,<sup>28, 33</sup> 92,<sup>35, 37, 38</sup> 101,<sup>29, 31</sup> and 165<sup>34</sup> subjects with BD participated for a duration of 18,<sup>34</sup> 28,<sup>35, 38</sup> and 30 months<sup>30</sup> and 1<sup>29, 36</sup> and 2 years.<sup>28, 31- 33</sup>

One of the empirically validated family therapy models is the family focused therapy proposed by Miklowitz and team.<sup>29-32</sup> The purpose of their interventions consists in improving the family functioning through psychoeducation of the patient and his/her bonds regarding the nature of the symptoms, disease course and treatment. It is sought to have the patient and the patient's close family and friends develop skills and to acquire adequate knowledge to manage the disorder well. Furthermore, help is given to the family members to acquire communication and problem solving resources, seeking to prevent or decrease possible conflicts.<sup>9, 28-30</sup> One study in the year 2003 compared a total of 101 patients diagnosed of BD type I who had undergone a recent episode during a two-year follow-up. Of the patients, 33% 21 received 21 therapy sessions focused on the family and psychopharmacological treatment while the remaining 67% received two sessions of family education and the usual treatment for the management of the episode in addition to psychopharmaceuticals. The experimental group had a longer time duration between episodes and better pharmacological treatment compliance. In addition, better results were obtained in the prevention and approach to the depressive symptoms earlier than for those having manic type symptoms.<sup>9, 31</sup>

Research works have been carried out to validate this family intervention modality in adolescents with bipolarity, finding favorable results in regards to recovery from depressive symptoms in a two-year follow-up. However, no significant results were found regarding the decrease of the amount of total affective episodes.<sup>33</sup> Other studies have implemented different modalities of the a family approach such as that of multifamilial type or family integration and individual psychotherapy and have, in general, obtained favorable results.<sup>34-36</sup> However, in other cases, no significant differences were found for improvement between the control and experimental group when this intervention modality was applied.<sup>37, 38</sup>

#### **Psychoeducation**

Psychoeducation seeks to enable the patient regarding the characteristics of the disease and its management, promoting their active role in the treatment and in informed decision making. The psychoeducational interventions pursue the construction of an adequate therapeutic alliance focused on collaboration, information and trust. As the exposition of patients with BD to stress is considered to be an important predictive factor of recurrences and that the beliefs, attitudes and behaviors that the subject assumes regarding his/her disease has a prognostic value, the establishment of appropriate styles of life would significantly reduce the index of recurrences and increase the quality of life.<sup>10, 39-41</sup> The psychoeducational programs have been administered with favorable results in group,12 individual,42 or family and caregivers programs for the patients with BD.43-45

A total of 8 works were found.<sup>12, 39-45</sup> Of these, 45,<sup>44</sup> 50,<sup>40</sup> 100,<sup>42</sup> 113,<sup>43, 45</sup> 120<sup>12, 39</sup> and 165<sup>41</sup> subjects participated in trials having a duration of 18,<sup>41</sup> 10,<sup>42</sup> 15<sup>43</sup> and 12<sup>45</sup> months up to  $2^{39, 40}$  and 5 years.

One of the models that has received the best validation in recent years is that proposed by Colom and Vieta. These authors have proposed a psychoeducational program of group implementation that enables euthymic patients to understand and cope with the implications of the disease with theoretical and practical tools. They also provide strategies to cope with the possible stigmatization, to promote treatment compliance, capacity to detect prodromic signs and to promote the importance of assuming an orderly and healthy style of life.<sup>10, 39, 40</sup>

double-blind Α controlled study of group psychoeducation carried out by Colom et al. over a 6-month period for patients with BD type I, in remission, that included a prospective follow-up of at least two years found that this intervention is useful as co-adjuvant treatment to pharmacotherapy to prevent recurrences. In this research, the control group received the usual medical treatment (25 subjects) in medical controls at least once every four weeks while the experimental group (25 subjects) participated in a psychoeducation program of 20 weekly sessions of 90 minutes each. Their implementation was shown to be effective in the prevention of episodes of euphoria, mixed episodes and depression. According to this study, psychoeducation may not be sufficient to help some patients avoid hospitalization, but can facilitate early detection of an episode and thus decrease their severity. In comparison to the control group, the patients who received psychoeducation had higher levels of lithium at 2 years of follow-up. This could suggest an effect of the psychoeducation on pharmacotherapy compliance and in general clinical improvement.40

A subsequent study by the same authors used a larger sample (n = 120), finding that those subjects who participated in the psychoeducation program for 6 months (n = 60) had, in comparison to the control group (n = 60), a lower number of recurrences and total time of the disease at 5 years from the intervention.<sup>12</sup> The control group participated in weekly meetings (20 weeks) in groups of 8 to 12 persons, in which, although they received the basic cares necessary, no psychoeducation type intervention was administered. The subjects of the experimental group, on the other hand, participated in 21 weekly psychoeducation sessions and at 5 years of the follow-up, showed more time between each relapse (range = 9.953, P < 0.002), fewer recurrence (3.86 vs. 8.37, f= 23.6, P < 0.0001), fewer days of disease (154 vs. 586 days, f= 31.66, P = 0.0001) and less average days of hospitalization compared to the control group (45 vs. 30, F= 4.26. P = 0.047). This is one of the few current studies that considers the long-term maintenance of the clinical improvements obtained with the intervention.

Psychoeducation as a psychosocial intervention proposes going beyond that of providing information to the patient, seeking, on the contrary, to enable the subjects with BD to use active coping strategies in pursuit of clinical recovery and improvement in quality of life. Colom et al. suggest that the future studies on this subject should determine the specific content of the psychoeducation program that produces a more favorable response according to each population and should also specify the biological changes produced with this type of intervention. In the same way, it would also be necessary to specify the type of patients who do not particularly benefit with this model or who present adverse symptoms.<sup>9, 12</sup> In this respect, Colom<sup>10</sup> found that some patients in the group psychoeducation program manifested an increase in their levels of anxiety and obsessive thoughts.

With the understanding that the presence of psychiatric symptoms is not the only factor linked to dysfunctions and quality of life of the subject with bipolar disorder, it is also important for the patient to understand the more "organic" dimensions of the disease. Patients with bipolar disorder have a physical morbidity and mortality that are much greater than that of the general population. Therefore, it is necessary to promote practical recommendations regarding the procedures of detection, prevention and intervention in the most prevalent somatic diseases coexisting with the disorder. In this regards, the Spanish Consensus on Physical Health for the Bipolar Patient of the year 2008 specifies the usual comorbidities and emphasizes the importance for the prognosis of the patient that they incorporate habits that promote a healthy style of life.<sup>2</sup>

### Systematic care models

Theso-called *systematic care models* are multicomponent programs for the treatment of bipolar disorder that cover a combination of psychosocial interventions, especially those having a psychoeducation character, and simple treatment algorithms for chronic bipolar patients within "real" health contexts. Based on the models of treatments used to approach the chronic diseases, the interventions of this program promote, by means of psychoeducation, an active role of the patient in his/her treatment. An attempt is also made to permit the patient easy access to the medical services, to nursing in particular and to the health care professionals in general, in such a way that the patient has constant communication and is included within the team of professionals.<sup>46-52</sup>

Six works were found<sup>46-52</sup> during the review of the literature. In these works  $141,^{50}$  290,<sup>52</sup>  $306^{46,47,48}$  and  $441^{49,51}$  subjects participated in trials having a duration of 12 months<sup>50</sup> and 2<sup>49</sup> and 3 years.<sup>46-48, 51, 52</sup>

Controlled studies found that in follow-ups at two<sup>49</sup> (n= 441) and three years<sup>47</sup> (n= 306), the subjects from hospitals and mental health clinics (with high number of hospitalizations, suicide attempts and previous episodes) who had participated in the program, had a significant reduction in severity and frequency of the manic episodes<sup>47, 49</sup> and better levels of general functionality.<sup>47, 48</sup> The improvements in quality of life and functionality were shown to have better effect 2 to 3

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years after the initiation of the intervention.<sup>47</sup> However, no significant results were found between the application of the program and the reduction of the depressive symptoms.<sup>49</sup>

The fact that these programs have been designed for complex populations of subjects with BD, in massive contexts of health care and with the purpose of facilitating an accessible, rapid and practical distribution for their implementation would be favorable for the current health care contexts where the BD patients are enrolled.

# Psychosocial interventions and specific populations

Given that the patients with bipolar disorder may have different clinical types of the disease,<sup>53</sup> different morbidity and comorbidities of Axis I, II and III,<sup>2, 49, 54</sup> different grades of deterioration and year of disease, studies should be continued in greater depth to validate and improve the intervention programs designed for specific populations of subjects with BD.

Three works<sup>54-56</sup> fulfilled the inclusion requirements. In these, 37,<sup>55</sup>  $61^{54}$  and  $62^{55}$  patients participated for a trial duration of 20 weeks,<sup>55</sup>  $6^{54}$  months, and 2 years.<sup>55</sup>

A preliminary efficacy study conducted to determine the viability of using Interpersonal and Social Rhythm Therapy (IPSRT) as monotherapy for the acute treatment of type II BD in 17 non-medicated subjects concluded that it is viable to use only IPSRT to treat depression in this type of population. However, the authors suggest that the study size limits the capacity to detect the factors that could predict which patient have more or less likelihood of responding only to IPSRT. They add that the absence of a control group limits the external validity of these results,<sup>53</sup> new studies being necessary to corroborate their results.

Other lines of approach are also beginning to include complex populations of patients with BD within the samples of patients evaluated. One study in 2006 that used systematic care did not find significant differences between those subjects who had received the intervention and the control group in accordance with the type of diagnosis (type I or II) or comorbidity (presence or absence of substance abuse) of the participating subjects.<sup>49</sup> Other specific interventions for subjects with substance dependence or abuse found that the application of the comprehensive group modality, designed for BD and substance consumption would be more effective in decreasing the amount of total days of disease and use of substances compared to a control group that only received the common treatment and group therapy for the management of the addiction.<sup>54, 55</sup> An investigation in 2004 by Colom et al. found favorable results in a group with BD patients and comorbidity on Axis II when they in a group-implemented psychoeducational program.<sup>56</sup> As patients with BD and comorbid personality disorder have greater risk of manifesting self-harm behaviors, these results are encouraging, especially in regards to effective strategies for the prevention of suicide.

Finally, it is worth mentioning that other studies have taken into account the implementation of an integrated combination of the different models<sup>57</sup> as being psychoeducation type interventions plus cognitive behavioral therapy (n= 40 in a 12-month follow-up study), obtaining, in general, favorable results. New psychosocial type interventions<sup>58-60</sup> are also being validated. A total of 463,<sup>58</sup> 84<sup>59</sup> and 240<sup>60</sup> subjects have participated during a 3 year,<sup>58</sup> 12<sup>59</sup> and 18<sup>60</sup> month period, respectively, in these interventions. Although these do not respond to any of the classically implemented models, nonetheless, encouraging results have been reported.

In recent years, multicenter studies<sup>61, 62</sup> have also been initiated. In these studies, the results obtained by different models (familial, cognitive behavioral) applied to different populations of subjects with BD and control groups (n=  $152^{61}$ and n= 293,<sup>62</sup> in studies having 9<sup>61</sup> and  $12^{62}$  months duration) have been simultaneously compared. The so-called Systematic Treatment Enhancement Program for Bipolar Disorder (STEP-BD) is a program of these characteristics that has currently not reported significant differences in the results obtained when the different models of psychosocial intervention are applied. In any event, these would be more effective for the patients than that of only receiving reduced time basic medical cares<sup>61, 62</sup>

### CONCLUSIONS

The studies reviewed in this work make it possible to conclude that the psychosocial interventions for BD are an important therapeutic resource together with the baseline psychopharmacological approach. In accordance with the clinical characteristics of each patient, it would also be necessary to consider one type of model or another: cognitive-behavioral therapy,<sup>15, 21</sup> interpersonal rhythym<sup>11,13</sup> and some forms of group psychoeducation<sup>12</sup> would be especially effective with euthymic patients who have recovered from an acute or sub-syndromic state while family therapy,<sup>29</sup> and systemic care interventions<sup>46, 47</sup> have reported significant benefits in those moderately-to-severely ill patients. Equally, the work of Scott<sup>22</sup> is of interest. It stresses that the cognitive-behavioral type interventions would be more effective when the patient has had fewer than 12 previous affective episodes. On the other hand, the systematic care models47-52 have reported favorable results in chronic populations with an extensive history of affective episodes and high comorbidity with other important disorders or medical diseases. The latter model has also found favorable results in the prevention and reduction of the severity of manic episodes, on the contrary to family therapy,<sup>31</sup> which reports better results in the management of depressive symptoms. It should be kept in mind that the different models and results of their implementation may be useful for selecting the most adequate intervention for each subject with a diagnosis of BD.

The different models report favorable results regarding the reduction of the duration of the episodes, in the promotion of therapeutic compliance and in the promotion of an active attitude of the patient regarding the treatment, facilitating the clinical-functional recovery. In turn, they coincide in stating that implementing psychosocial intervention programs specifically designed for BD would entail levels of clinical improvement that are absent in the control groups. Thus, it is considered to be an essential component that the patient understands the type of his/her disease and may be accompanied in the development of a commitment and active role in pursuit of his/her recovery.

Different biological and psychosocial type factors are involved in the genesis of the affective episodes of the bipolar disorder.<sup>6,7,8,9,10</sup> Their role and interrelation have been recognized in the recurrences and can generally be identified prospectively 1) life stressant events, 2) social rhythm alterations and 3) difficulties for drug indication adherence. The psychosocial interventions, specific for the treatment of bipolar disorder (beyond a regular follow-up and support care) offer additional benefits in these three aspects, not only for the patient but also for the setting and health care professionals in general. In order to continue advancing in the approach to bipolar disorder, it is necessary to continue carrying out validation studies of the interventions proposed for its treatment. Although at present, there is a greater variety of empirically validated studies, there is still a scarcity of those that limit their design based on more specific variables, such as subtypes of the disorder, type of comorbidity, phases or disease duration. These definitions will make it possible to know and implement the most adequate intervention according to the clinical characteristics of each subject with BD in particular.

## LIMITATIONS

Although the development of this article implied carrying out an extensive review of the studies on interventions, emphasizing the psychosocial aspect in the approach to the bipolar disorder, the search for articles was not methodologically systematic. More in-depth reviews would be necessary. Furthermore, it could be useful to compare the intra-model results according to its group, individual, familial or other modality. Another relevant limitation of the present study is that in its review, it only includes the works published in a limited period of time that includes the last 10 years. In addition, and although it is the most extensive and up-dated database of the biomedical literature, the search for the publications to be reviewed, only Medline/Pubmed was used for the search. However, it is hoped that the reader has been provided an introductory outlook of interest.

#### DECLARATION OF CONFLICT OF INTERESTS

Dr. Vázquez was consultant and has received fees as exhibitor of Astra-Zeneca, GlaxoSmithKline, Roche, Lundbeck, Pfizer and Eli Lilly. Dr. Tamayo has been consultant and has received fees as speaker of Eli Lilly, Pfizer and Janssen. Dr. Álvarez and Lolich (University degree) have no conflict of interest to declare in relation to this article.

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