

Clinical Utility of the Predominant Polarity in Bipolar Disorder Patients

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Abstract

Introduction: Current classification of bipolar disorder (BD) in type I or type II may be of little use in routine clinical practice to provide information on relevance epidemiological and clinical variables. New complementary coders like the predominant polarity (PP), which is defined as a clear tendency in the patient to present relapses in the manic polarity predominance (MPP) or in the depressive polarity predominance (DPP) along the disease may be important to develop clinical and pharmacological strategies to prevent any kind of relapse.

Objectives: To define the concept of PP and the epidemiological and clinical variables associated with the PP in order to know the clinical implications of that specific diagnosis factor.

Methods: We realized a systematic review in the principal medical databases (until June 2016) including key words as "bipolar disorder", "polarity" and "predominant polarity".

Results: After apply the inclusion criteria we analysed 16 articles. The MPP was associated with manic onset of illness, history of substance abuse before the beginning of the disease and with a better response to atypical antipsychotics and mood stabilizers. Meanwhile the DPP is related with a depressive onset of the disease, a higher number of relapses, longer acute episodes, and a higher risk of suicide. Also, the delay until the correct diagnosis, the presence of mixed states and the comorbidity with anxiety disorders are more frequent in DPP that shows an increased use of quetiapine and lamotrigine.

Conclusion: PP may be useful in the clinical management of BD. Further studies on biological and clinical factors are needed, with a common definition and a unified methodology.

Keywords: Bipolar disorder; Manic; Anxiety disorders

Introduction

The current classifications of bipolar disorder (BD) have proved their usefulness in practice, although they provide limited information on certain socio-demographic, clinical and therapeutic variables [1]. For this reason, in the latest version of the DSM it is recommended to use some of the accepted additional coders (for example anxious distress or melancholic relapse characteristics), whose objective is to complement the diagnosis in a direct and simple way, providing data of interest in the approach to these patients [2].

Other coders were proposed to be the part of the DSM-5, although for various reasons they were finally not accepted. In this group there is the predominant polarity (PP), described by Angst in 1978, who observed while monitoring bipolar patients that some of them, which he called predominantly manic polarity (MPP), typically presented manic relapses; while others decompensated more towards the depressive pole (of predominantly depressive polarity, DPP); and that others did not show any kind of preference (he called them nuclear type patients) [3]. This classification was useful, since each group was associated with important clinical and prognostic variables. Subsequent authors have demonstrated the usefulness of PP, but the absence of common criteria for its use has contributed to the existence of some contradictory data in the bibliography, which may have

influenced the fact that it has not been included in the list of complementary coders [4].

In order to gather the most up-to-date information on PP, our research group carried out a systematic review of the most important databases. From the 907 articles that the initial search discovered only 16 that fulfilled the inclusion criteria were selected (this process appears in detail in the original article) [1].

Results

For a better understanding, we have divided the results into three sections:

Definition and prevalence of PP

The first conclusion that can be drawn from this review is that there is no consensus on defining the PP among the authors. In 11 of the 16 selected articles a quite restrictive criterion was used based on two thirds of the relapses [5-11] (also called the Barcelona Criteria), [5] according to which, for a patient to have a MPP at least two thirds of his relapses must have been of this type and likewise for the DPP. Other authors shifted the cut-off point to 50%, [12-14] while the rest only took relapse into account in absolute terms [15,16]. After analysing each of the criteria, the most restrictive definitions are more recommendable, since they are more stable over the time and the associations with clinical and therapeutic variables are more reliable.

Regarding the prevalence, between 42% and 71% of the patients of the selected sample could be classified according as PP, with a median of around 50%. MPP seems more likely in cases of type 1 BD [12,17] and its frequency of presentation is slightly lower than that of DPP, which in turn is also more frequent in type 2 BD [5,6]. The fact that it is impossible to detect PP in all the patients may be explained by the fact that it does not really exist in all patients, but it may also have been significantly influenced by the absence of common criteria among professionals to apply it.

Results replicated in the different studies

In this section we will describe those variables that have been related in a stable way with one or another polarity in the different selected studies.

The consumption of toxic substances prior to the onset of symptoms [5,16,18] the manic polarity of the first episode [13,17,18] and a better and faster response to treatment with atypical antipsychotics and mood stabilizers [19] have been significantly associated with MPP statistically.

On the other hand, a greater delay in the diagnosis, [6,17] more frequent and prolonged relapses over time [6,14,16,17] as well as the forms of onset with depressive symptomatology have been associated with DPP [6,13,17,18]. Regarding the symptoms, these patients have a higher risk of comorbidity with anxiety disorders [11,16] and suicidal behaviour [5,14,17,18] and are more likely forms of presentation with mixed and melancholic symptoms [5,18]. Finally, quetiapine and lamotrigine are used more frequently in the treatment of patients with depressive polarity [19].

All these associations show us that PP can be an important tool for the psycho-education of patients since through the knowledge of their own clinical symptoms the signs of an aggravation could be detected early and the appropriate measures taken in time.

Contradictory results

Some associations have not been replicated in all the articles, but show a certain tendency that deserves to be analysed in later studies. As previously noted, the lack of a common methodology among the authors has been able to influence these disparate results.

The MPP has been related to the male sex [18] and with higher academic levels in several jobs, while the DPP seems more frequent in women and in married people [17,18]. Certain characteristics that imply greater clinical severity, such as psychotic symptoms or frequent hospital admissions, have been observed to be characteristic of MPP, but some authors have pointed out that the long-term psychosocial performance of patients with DPP is worse compared to those of manic polarity [5,18].

Discussion

The PP is an easy-to-use parameter that can be very useful as a complementary encoder to the current BD classifications. According to the available data, up to 71% of bipolar patients present one of the two types of polarity, manic or depressive, which is directly related to numerous variables of interest in the follow-up of these patients. In successive studies, MPP manifests a statistically significant and replicated association with manic forms of onset, with the consumption of toxic substances before the onset of the disorder and with a good clinical response to atypical antipsychotics and mood

stabilizers. On the other hand, patients with DPP appear to be more serious, since their diagnosis is typically delayed, their relapses are more frequent and lasting, and they have greater comorbidity with anxiety disorders, substance abuse, mixed and melancholic symptoms; and in their case the use of quetiapine and lamotrigine is also more likely.

Taking into account its simplicity and potential utility in practice, PP could play a key role in the psycho-education of BD patients through a more individualized approach to this disorder. In our opinion, this would contribute to an earlier and more effective approach to the symptom characteristics of the relapses of a particular patient, which are individual and differentiated them from the rest of the patients. On the other hand, it is a tool that clinicians could adapt quickly because of it is easy to manage and it is able to provide a substantial amount of information.

Despite the wide variety of statistically significant associations, there are also other ones whose relationship has not been fully defined, although the available evidence points to a clear trend that deserves to be analysed in future studies. In this group there are highly relevant characteristics such as gender, academic level or psychotic symptomatology, as well as the number of hospitalizations or family history of mental illness. It is very likely that the lack of consensus on the definition of PP and the wide methodological variety of the analysed studies have significantly influenced the existence of these contradictory results. Future work should be based on restrictive PP definitions (such as the 2/3 criterion), since they are the most suitable for providing reliable and stable long-term data, as well as for having a follow-up and prospective design for their capacity to establish associations between the analysed variables.

Conclusion

PP can be an important complement to current BD classifications, contributing to a more individualized and direct approach to the patient's symptoms. It can be easily detected in a large number of bipolar patients, and both manic and depressive polarities have been associated with numerous clinical and therapeutic variables of interest. In the future, it is necessary to agree on its definition and criteria of use, as well as to unify the methodology among the authors, in order to clarify the presence of some contradictory data found in the available bibliography.

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