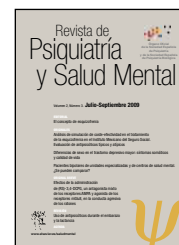


# Revista de Psiquiatría y Salud Mental

www.elsevier.es/ saludmental



## ORIGINAL

## Bipolar patients in specialised units and mental health centres: are they comparable?

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Received 12 February 2009; accepted 12 June 2009

### KEYWORDS

Bipolar disorder unit;  
Mental health center;  
Subsyndromal  
symptoms;  
Course

### Abstract

**Introduction:** Bipolar patients recruited for studies are usually picked from Bipolar Disorder Units, which only contain a fraction of the total population of patients with bipolar disorder. The purpose of this study was to determine whether the course of the illness is comparable in patients from a Community Mental Health Center (CMHC) and those from a Bipolar Disorder Unit (BDU).

**Methods:** This study was carried out at the La Fe Teaching Hospital BDU and two CMHC. Data were collected from the patients' clinical records and were completed by a face-to-face interview. When the latter was not possible, a telephone interview was carried out. Demographic, clinical and course-of-illness variables were gathered.

**Results:** There were no differences in demographic characteristics between the two patient groups. Differences were found in clinical data: BDU patients were younger at illness onset ( $p < 0.005$ ), were admitted more frequently ( $p < 0.05$ ), and stayed longer in the hospital ( $p < 0.005$ ).

**Conclusions:** Bipolar patients treated at a CMHC show clear differences compared with those from a BDU. Consequently, care should be exercised when generalizing the clinical course of bipolar patients using BDU samples. These patients are not representative of the total bipolar patient population, as their clinical course is more complicated.

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**PALABRAS CLAVE**

Unidad de trastorno  
bipolar;  
Centro de salud  
mental;  
Síntomas  
subsindrómicos;  
Curso

## **Pacientes bipolares de unidades especializadas y de centros de salud mental. ¿Se pueden comparar?**

**Resumen**

**Introducción:** Cuando los pacientes bipolares son reclutados para un estudio, normalmente proceden de unidades para el trastorno bipolar específico, con lo que únicamente contienen una fracción del total de la población de pacientes bipolares. El propósito de este estudio es comprobar si el curso de la enfermedad es comparable entre los pacientes atendidos en un centro de salud mental y los procedentes de una unidad específica.

**Métodos:** Este estudio se llevó a cabo en la Unidad de Bipolares del Hospital Universitario La Fe (UTB) y en dos centros de salud mental (CSM). Los datos se recogieron de las historias clínicas de los pacientes y se completaron mediante entrevista personal. Cuando esto no fue posible, se realizó una entrevista telefónica. Se recogieron variables demográficas, clínicas y relacionadas con el curso de la enfermedad.

**Resultados:** No aparecieron diferencias demográficas entre los dos grupos. Desde el punto de vista clínico, sí hubo diferencias; los pacientes de la UTB eran más jóvenes en el momento de la aparición de la enfermedad ( $p < 0,005$ ), habían sido hospitalizados con más frecuencia ( $p < 0,05$ ), y los ingresos fueron más prolongados ( $p < 0,005$ ).

**Conclusiones:** Los pacientes bipolares tratados en CSM muestran claras diferencias respecto a los tratados en UTB. Por esta razón, deberíamos ser cuidadosos a la hora de generalizar los resultados acerca de la evolución de los pacientes bipolares procedentes de muestras de las UTB, pues no son representativas de la totalidad de la población de bipolares, ya que su enfermedad podría progresar más tórpidamente.

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**Introduction**

In recent decades, bipolar disorder (BD) has come to be considered a serious disease tending to follow a slow course<sup>1,2</sup> and having high rates of syndromal recurrence and/or psychosocial deterioration.<sup>3</sup> This viewpoint clashes with the historical one, which considered manic-depressive disorder to be a benign one with a good prognosis.<sup>4</sup> While some authors associate neuropsychological deficits in these patients with decompensation periods and defend their reversibility,<sup>4,5</sup> others insist that they are present outside of the symptomatic phases and during periods of euthymia, despite clinical remission.<sup>6-8</sup> Most of the more recent studies coincide in that they point out a significant deterioration compared with premorbid function in bipolar patients at different levels, and this has been described in even the youngest patients.<sup>9</sup> One such project, a prospective study carried out over an average of 13 months in a sample of 152 bipolar patients, found that only 27% remained symptom-free; more than half (56%) suffered at least one recurrence and 12.8% perceived subsyndromal symptoms. This means that most patients (68.8%) suffered mood swings despite good compliance with pharmacological treatment and attending regular appointments with a professional. There was also significant disruption described for these patients' work lives considering that, although patients in some samples have a high educational level, only a third of them are capable of holding positions corresponding to their qualifications.<sup>10</sup> Perugi et al.<sup>11</sup> referred to a small, but significant, group of bipolar patients whose condition follows a chronic and deteriorating course, and other authors<sup>12</sup> describe a deteriorating process in the evolution of at least a tenth of bipolar and unipolar patients.

Prospective studies such as that by Judd et al.,<sup>13</sup> which followed up on patients during 10-12 years, find that the disease remains symptomatic in nearly half of the studied bipolar patients. That is, during periods thought to be euthymic, patients would continue to have subsyndromal symptoms, particularly mild depression symptoms. These symptoms are associated with four predictors: poor social function in the five years prior to the appearance of the disease, a longer total duration of the initial episode, a mixed or depressive initial episode and comorbidity with substance abuse. Subsyndromal manic symptoms are also relevant and imply a significant increase in the use of health services and public help services, and also suicidal behaviour.<sup>14</sup>

Similar conclusions can be found for type II BD, which is now considered to be more severe than what was previously believed,<sup>15,16</sup> it is now being compared with type I BD in terms of adverse psychosocial consequences. Indeed, the latest studies recommend directing efforts toward interventions intended to achieve syndromal and functional improvements during the first years following the first episode in order to maximize a favourable long-term prognosis and ensure higher remission rates and longer periods of euthymia.<sup>17,18</sup>

However, prospective studies on BD have usually been carried out with patient samples who attended programmes in specialised centres,<sup>13,18,19</sup> and they constitute only a fraction of all bipolar patients. For that reason, it is difficult to generalise about the subject, since one limitation we must consider is the greater severity of the condition in such patients.

The purpose of this study is to see if the course of the condition is similar among patients at a mental health centre (MHC) and those from a bipolar disorder unit (BDU).

## Material and methods

The study was carried out in La Fe University Hospital in Valencia, Spain. We included a sample of 38 patients from the hospital unit specialising in treating BD (29 with type I BD and 9 with type II BD) and 29 patients treated in two MHCs (18 with type I BD and 11 with type II BD) in the same geographic area; these MHCs provide assistance for all types of mental disorders.

Administrative procedures and medical criteria for monitoring in the specialised unit: a report written by the psychiatrist who normally works with the patient is required in order to avoid diagnostic or “autodiagnostic” errors. Once the report is evaluated by the head of the division, the patient is granted an initial appointment in which aspects such as clinical evolution, prior need for admission, family history, treatment noncompliance etc. are evaluated. If the patient does not meet BD diagnostic criteria (for example, having dysthymias or personality disorders, among others), patients are referred back to their centres of reference. Patients with a confirmed diagnosis and presenting factors such as slow evolution, poor awareness of the disease or noncompliance with treatment (that is, clinical characteristics that reflect greater severity of the condition and possible benefit from monitoring in a specialised unit, or from inclusion in psychoeducational groups for bipolar order) are admitted for observation.

With regard to the sample selection method, we included all consecutive patients who met the above criteria for observation in the unit. Given that this unit began working five years ago, the patient sample in the MHC focused on bipolar patients treated in the last five years in order to avoid differences between the samples. Data were collected from patient histories and completed through personal interviews. When this was not possible, telephone interviews were used. Demographic and clinical variables, and those referring to the course of the disease, were collected. All of the participants were asked for their verbal consent in order to collect data. The demographic variables that were considered were marital status, members of household, educational level and employment situation. The clinical variables that were collected were age, sex

and number of psychiatric treatments at the time of the interview.

In that moment, we also recorded whether or not the treatment included mood stabilisers (type and number), antipsychotics (distinguishing between classic and atypical) and antidepressants or benzodiazepines. Likewise, current or past consumption of toxic substances and the presence of psychiatric comorbidity were recorded. For variables regarding the course of the disease, we included age of onset for first psychiatric symptoms, first diagnosis made and age at which BD was diagnosed, first phase type, number of total phases, number of admissions for depressive and manic phases, history of suicide attempts and their nature, appearance of psychotic symptoms at any moment during the condition's evolution, and family history of psychiatric disorders specifying the relationship and diagnosis.

Statistical analysis was performed using SPSS software for Windows, version 12.5. The categorical variables were analysed using the  $\chi^2$  test and ordinal and quantitative variables were analysed with the Mann-Whitney test.

## Results

There were no significant differences in the percentage of type I and II bipolar patients between the two sample populations, referring to the patients assisted in the BDU and in the MHC ( $p=0.207$ ). From a demographic point of view, we found no differences with regard to sex, educational level or marital status, but age differences were present: patients in the BDU were younger ( $t=3.58$ ;  $p < 0.01$ ) and the employment situation was more likely to be one of unemployment or temporary disability (Fisher's exact test= $14.01$ ;  $p=0.022$ ).

From a clinical viewpoint, patients at the MHC and the BDU presented no differences for variables such as the prior number of phases of the disease, the number of medications they received or duration of evolution. In contrast, patients in the BDU did have an early age of onset ( $t=2.65$ ;  $p=0.01$ ), a higher number of admissions ( $t=2.66$ ;  $p=0.011$ ) and had spent more time in hospital ( $t=2.50$ ;  $p=0.017$ ). No significant differences were found for the rest of the variables that were analysed and described in the “Methods” section. These results are shown in table 1.

**Table 1** Results of clinical variables from patients attended in a MHC and a BDU and the differences between the two

	MHC	BDU	Mann-Whitney U	p
Age (years)	48.28 $\pm$ 12.65	37.58 $\pm$ 11.67	3.58	0.001
Age at onset (years)	30.45 $\pm$ 12.44	23.34 $\pm$ 9.5	2.65	0.010
Number of previous episodes	6.88 $\pm$ 4.99	7.36 $\pm$ 3.98	1.07	0.286
Duration of evolution	15.78 $\pm$ 11	13.7 $\pm$ 9.89	0.790	0.432
Number of psychiatric hospitalisations	0.34 $\pm$ 0.814	1.82 $\pm$ 3.27	2.66	0.011
Length of hospital stay	4.69 $\pm$ 11	33.87 $\pm$ 70.97	2.50	0.017
Total number of psychoactive drugs	172 $\pm$ 1.94	1.71 $\pm$ 2.01	0.28	0.978

MHC: mental health centre; BDU: bipolar disorder unit.

## Discussion

As stated previously, numerous follow-up studies have appeared in recent years, which pointed out the prevalence of subsyndromal symptoms in BD patients, and the high comorbidity rate in patients with this disease who experience persistent symptoms.<sup>19-21</sup> In contrast with more recent studies, some classic studies are more optimistic and describe normal premorbid function in bipolar patients, post-adolescent onset and low comorbidity.<sup>22</sup> According to a prospective study that evaluated patients two to four years after their first hospitalisation for mania, all but 2% of patients had experienced syndromal recovery, but 28% were still symptomatic and only 43% had reached functional recovery.<sup>23</sup> In this case, patients also met criteria for a more severe level, since all of them required admission during the first phase.

In our sample, the bipolar patients assisted in a MHC were clearly different from those receiving attention in a BDU. The latter were younger and their disease had a greater impact on their working capacity. From a clinical viewpoint, they had a younger age of onset and a higher number of admissions, and spent more time in hospital. We found no differences for sex, educational level or marital status.

According to our results, patients who were being monitored in a specialised unit had an earlier age of onset, and this factor may have prognostic implications. On this subject, although initial studies did not show any differences between early and late onset BDs, progressive perfection and improvement of clinical evaluations and the increase in sample size allowed us to pinpoint some differences.<sup>24</sup> The prognosis worsens according to a greater frequency of psychotic symptoms during the phases, particularly in women,<sup>25,26</sup> alcoholics and other addicts,<sup>27</sup> those with antisocial behaviour, and those with a higher number of suicide attempts.<sup>28</sup> Despite the delay in reaching the diagnosis, which ranges between eight<sup>29</sup> and ten years,<sup>30</sup> a considerable percentage of bipolar patients experience their first symptoms as adolescents. This population is the most likely to have had an incorrect initial diagnosis, since these cases are often diagnosed with schizophrenia<sup>31</sup> or schizoaffective disorder.<sup>32</sup> One of the most important consequences of this error is the delay in starting mood stabiliser treatment, which can be crucial for later clinical progress. However, information regarding BD course and prognosis when it appears in childhood is still rare. Long-term follow-up studies are scarce and most look for prognostic predictors. Predictors of recovery are comorbid attention deficit disorder<sup>33</sup> and cohabitation with an intact biological family,<sup>34</sup> while relapse predictors are mixed affective episodes<sup>35</sup> and little maternal affection.<sup>34</sup>

According to our results, patients monitored in the unit showed no differences for the number of total phases, but they did have a higher number of hospitalisations, which could lead us to believe that the phases were more serious if they required hospitalisations, and would have cognitive repercussions. This could be related to recent data that state that neuropsychological deterioration continues in these patients even during euthymic periods.<sup>7,36</sup> These results also coincide with data obtained regarding a longer mean hospital stay, that is, patients in the unit spend more

time in hospital, which indicates that phases are more clinically substantial, and could be due to the copresence of psychotic symptoms with the affective disorder; this would result in increased deterioration and its repercussions.

One of the problems for the samples used in recent studies is that they are difficult to generalise due to their different sources. For example, hospital samples exclude patients with type I BD who have not required admission, and those with fewer dysphoric episodes are less frequently included; this also occurs if the first episode is psychotic or depressive. This could partly explain the discrepancies in age of onset, the number of episodes and the prognosis.<sup>37</sup> However, screening studies that use rigorous methods find that a considerable proportion of type I bipolar patients, most of whom have mild manic episodes but unmistakable functional disorders at work or in the family, have not been hospitalised or diagnosed.<sup>37</sup>

Our results show that patients who attend a specialised BD unit are different, for some of the variables under study, from patients at the MHC and they present a more serious profile with more intense symptoms. This study does not intend to evaluate interepisode recovery, so we are unable to focus on that very important aspect of patient evolution. In either case, when studies are carried out in a BDU, we must be careful not to generalise and apply conclusions to all other bipolar patients. Patients from both groups seem to come from different populations and it is possible that the conclusions reached when studying a population from one type of centre would not apply to another.

Although our study has limits, such as its small sample size and retrospective collecting of some of the data, the results should make us consider being cautious when making generalisations about data for bipolar patient evolution based on samples selected from a BDU. These groups may not represent all bipolar patients, since they have a slower evolution.

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