Brief Report

Impact of an educational program on the management of bipolar disorder in primary care


Objective: Government agencies and industry have recently undertaken educational programs for the management of bipolar disorder in primary care, but their medical impact is not well known. Therefore, we conducted a survey among general practitioners to evaluate the impact of the Bipolact Educational Program on the diagnosis and treatment of bipolar disorder.

Methods: A total of 45 general practitioners attending the Bipolact Educational Program (trained group) were compared with a control group of 50 untrained general practitioners on their ability to: (i) diagnose bipolar I and II disorders and (ii) treat bipolar disorder patients appropriately.

Results: Trained physicians, but not untrained physicians, showed a significant improvement (p < 0.0001, chi-square test) in the ability to identify patients as having bipolar I (from 10.4% to 28.8%) and bipolar II disorder (from 20.1% to 45.8%). This trend resulted in a strong decrease in nonidentified bipolar disorder patients (from 64.6% to 19.5%). Trained physicians, but not the untrained group, greatly increased the number of prescriptions for mood stabilizers for bipolar disorder patients, from 25.6% to 43.2% (p = 0.0013, chi-square test). Finally, trained physicians reduced the number of antidepressant prescriptions for bipolar disorder patients (the control group also reduced the number of antidepressant prescriptions, suggesting some bias in the survey).

Conclusion: A well-designed education package on diagnosis and management of bipolar disorder greatly increased the likelihood of physicians correctly assigning a subtype, namely bipolar I or bipolar II disorder, to patients already perceived as having some form of bipolar illness, and to prescribing mood stabilizers instead of antidepressants to these patients.


Key words: bipolar disorder – hypomania – survey – unipolar depression

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In primary care, many bipolar depressed outpatients receive an incorrect diagnosis of unipolar major depression because they spend more time in the depressed phase than in the manic phase (1–4). This is particularly common with past hypomania (bipolar II disorder), where patients usually present for treatment of depression and not for hypomania (which is often a pleasant period of overfunctioning). Missing the diagnosis of bipolar depression can lead to treatment resistance, worsening symptoms and dysfunction, and increasing risk of hospitalization and suicide (1–11). More importantly, treatment of bipolar depression with antidepressants increases the risk of drug-induced mania (bipolar III disorder) and treatment-resistant rapid-cycling episodes (6, 7, 10, 12). Experts in the treatment of bipolar disorder thus recommend careful diagnosis and avoidance of antidepressant treatment except for a brief short-term treatment of severe acute bipolar depression in conjunction with mood stabilizers (12–15).

Psychosocial interventions have undergone a remarkable development, playing an important role in the care of individuals with bipolar disorder (16). Government agencies and industry have recently undertaken educational programs specifically designed for primary care physicians and the general public focusing on the treatment and management of bipolar disorder (1). Bipolact is one of these educational programs which was developed by a French Scientific Committee and proposed to general practitioners in France beginning in September of 2004 (17). Since there is an ongoing need for evaluating the efficacy of these programs among general practitioners, we conducted a survey to evaluate the impact of the Bipolact Educational Program on this group, focusing on the diagnosis and treatment of bipolar disorder.

Methods

Study design

A total of 45 general practitioners attending the Bipolact Educational Program (trained group) were compared with a control group of 50 untrained general practitioners on their ability to: (i) diagnose bipolar I and II disorders and (ii) alter treatment of bipolar disorder patients to mood stabilizers instead of antidepressants.

Participating physicians and patients

The 95 participating physicians were randomly selected from the ICOMED (Boulogne-Billancourt, France) database of 4,000 general practitioners. They were familiar with the medical care of psychiatric patients (particularly depressive patients) and were paid an honorarium for participation in the study. The participating physicians provided care for a total of 2,387 patients with mood disorders, who were at least 15 years of age. The survey period consisted of a consultation baseline week (5 working days) and a final week (5 working days) separated by a 2–3 month interval. In the trained group, the Bipolact Educational Program was presented during this 2–3 month interval.

Questionnaire

A questionnaire was distributed by a study monitor to the participating physicians. The questionnaire included items concerning general characteristics of both physicians and patients, and also included:

- Type of mood disorder: bipolar disorder or unipolar depression. Among those categorized as having bipolar disorder, the physicians were asked to determine if these patients were type I, type II (spontaneous hypomania), type III (antidepressant-associated hypomania), or non-identifiable (18).
- The specific psychotropic treatments given. These included: mood stabilizers, antidepressants, tranquilizers/anxiolytics, sedative/hypnotics, and neuroleptics.

Physicians were surveyed by the study monitor twice, first during the baseline week and then during the final week.

The Bipolact Educational Program

The Bipolact Educational Program is comprised of two interactive modules (slideshows) presented by a skilled local psychiatrist during dinner lectures to groups of 15–20 physicians during two distinct 1.5-hour sessions. The presentation includes one or more case reports.

Module 1 contained information about:

- Mood disorders and their evolution
- Bipolar depression (hypomania)
- Diagnostic aspects, particularly the differential diagnosis between past hypomania and unipolar depression
- Treatment, including side effects of antidepressants monotherapy in bipolar depression
- Methods of care and specialized follow-up
- Patients’ responsibility for treatment compliance
Module 1 was followed by a case presentation of recurrent depression.

Module 2 contained information about:
- Bipolar spectrum disorder
- Differential treatment of bipolar and unipolar depression
- Comorbidities of bipolar disorder with substance abuse and anxiety
- Treatment of comorbidities

Module 2 was followed by the presentation of six clinical case reports including different types of bipolar disorder and comorbidities, and unipolar depression.

Statistics

Statistical comparisons between the trained and control groups were performed using chi-square test for category variables, and Student’s t-test or non-parametric Mann–Whitney test for continuous variables. The same tests were used for comparisons between the two groups of patients in the trained group and in the control group. Statistical level of significance was accepted for p-values < 0.05.

Results

Participating physicians

Both groups of general practitioners were equivalent concerning age, gender, and professional aspects. A total of 72.5% were male and the mean age was 48.6 years. A total of 90.2% practiced within the public health system and worked in communities with a population of less than 100,000 inhabitants (75%). A total of 50% worked in private offices.

Patients

Table 1 summarizes the characteristics of the 2,387 patients included in the survey. Physicians in the trained group had a total of 547 and 501 patients at baseline and final week, respectively; whereas, the physicians in the control group had 680 and 659 patients at baseline and final week, respectively. The patient groups were equivalent with regards to age, gender, and diagnosis of the type of mood disorder, with some modest differences: (i) in the control group, patients assessed during the final week were slightly, but significantly younger than those assessed during the baseline week, and (ii) in the trained group, diagnosis of bipolar disorder was slightly, but significantly lower in patients assessed during the final week as compared with those assessed during the baseline week.

Table 2 shows the impact of the Bipolact Educational Program on the diagnosis of bipolar disorder subtypes I, II and III. Trained physicians showed a significant improvement (p < 0.0001, chi-square test) in the ability to identify patients as having bipolar I (from 10.4% to 28.8%) and bipolar II disorder (from 20.1% to 45.8%). As expected, the mirror image of this trend was a strong decrease in nonidentified bipolar disorder patients (from 64.6% to 19.5%). Conversely, no significant change in subtype diagnosis was found among the untrained physicians.

<table>
<thead>
<tr>
<th></th>
<th>Trained group</th>
<th>Control group</th>
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<tbody>
<tr>
<td></td>
<td>Baseline (n = 164)</td>
<td>Final (n = 118)</td>
</tr>
<tr>
<td>Bipolar I</td>
<td>17 (10.4)</td>
<td>34 (28.8)</td>
</tr>
<tr>
<td>Bipolar II</td>
<td>33 (20.1)</td>
<td>54 (45.8)</td>
</tr>
<tr>
<td>Bipolar III</td>
<td>8 (4.9)</td>
<td>7 (5.9)</td>
</tr>
<tr>
<td>Nonidentified</td>
<td>106 (64.6)</td>
<td>23 (19.5)</td>
</tr>
</tbody>
</table>

Values are presented as n (%).

*p < 0.0001, Final versus Baseline (chi-square test).

*p = 0.74, Final versus Baseline (chi-square test).
Table 3. Treatment of bipolar disorder

<table>
<thead>
<tr>
<th></th>
<th>Trained group</th>
<th>Control group</th>
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<tbody>
<tr>
<td></td>
<td>Baseline (n = 176)</td>
<td>Final (n = 125)</td>
</tr>
<tr>
<td>Mood stabilizers</td>
<td>45 (25.6)</td>
<td>54 (43.2)</td>
</tr>
<tr>
<td>Antidepressants</td>
<td>66 (37.5)</td>
<td>33 (26.4)</td>
</tr>
<tr>
<td>Tranquilizers/anxiolytics</td>
<td>74 (42.0)</td>
<td>54 (43.2)</td>
</tr>
<tr>
<td>Sedatives/hypnotics</td>
<td>36 (20.5)</td>
<td>27 (21.6)</td>
</tr>
<tr>
<td>Antipsychotics</td>
<td>30 (17.0)</td>
<td>13 (10.4)</td>
</tr>
</tbody>
</table>

Values are presented as n (%).

*Statistically significant with respect to baseline week (chi-square test).

Treatment of bipolar disorder

Table 3 shows the impact of the Bipolact Educational Program on the treatment of bipolar disorder with psychoactive drugs. Trained physicians, but not untrained ones, strongly increased the number of prescriptions for mood stabilizers, from 25.6% to 43.2% (p = 0.0013, chi-square test). Moreover, physicians from both groups significantly reduced the number of prescriptions for antidepressants. No significant changes were found in the number of prescriptions for tranquilizers/anxiolytics, sedative/hypnotics, or neuroleptics.

Discussion

The Bipolact Educational Program increased the likelihood of general practitioners to diagnose bipolar disorder subtypes I and II. The most significant impact was on therapy, by treating bipolar disorder patients with mood stabilizers instead of antidepressants. No changes were found in untrained physicians, with the surprising exception of a reduced number of prescriptions for antidepressants.

One methodological issue to consider is whether the survey accurately reflects the impact of an educational program. The population studied was heterogeneous, i.e., baseline and final patients were not the same patients. In the control group, final patients were slightly, but significantly younger than baseline patients. More importantly, our survey was not a randomized, blind study and the study monitor could introduce a bias by involuntarily revealing diagnostic and/or therapeutic aspects of bipolar disorder. This may explain the surprising result of a reduced number of prescriptions for antidepressants by untrained physicians.

Our results require confirmation with well-designed clinical trials. Nevertheless, the data is straightforward and was obtained in a large proportion of patients being attended by a representative sample of general practitioners. The survey clearly indicates that educational programs may have a profound impact on the management of bipolar disorder in primary care (see 19, 20).

The treatment of bipolar disorder can be complex and specialist involvement is often needed, however, the general practitioner plays a critical role in the early identification and ongoing management of care for bipolar disorder patients. One reason is their accessibility and established relationship with their patients which can help with disclosure and discussion of difficult areas. Additionally, their familiarity with the patients' history can assist in noticing clues that the illness is present as well as recognizing the early warning signs of relapse.

In conclusion, educational programs can provide the general practitioner with the most current up-to-date knowledge on management strategies used for bipolar disorder. They may assist general practitioners in correctly diagnosing bipolar disorder and they may help to reduce relapse rates, improve quality of life, and reduce the burden associated with this condition. These promising results clearly indicate that educational programs can have a profound short-term impact on the management of bipolar disorder in primary care. Well-designed, long-term clinical trials are needed to further investigate the impact of educational programs on the management of bipolar depression in primary care.

References