General medical comorbidities in Brazilian outpatients with bipolar disorder type I

Comorbidades médicas em pacientes ambulatoriais com transtorno do humor bipolar tipo I

Camila Luzia Roganti Leite Moreira1, Elisa Brietzke1, Beny Lafer1

1 Programa de Transtorno Bipolar (PRÔMAN), Instituto de Psiquiatria, Universidade de São Paulo (USP), Brasil.

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Abstract

Background: Bipolar disorder (BD) has been associated with high rates of general medical comorbidities (GMC) and medical risk factors. There have been scarce reports about this prevalence in Brazilian subjects with BD. Objective: Describe the prevalence of GMC in a sample of BD type I patients. Methods: Clinical records of 195 patients with BD type I were reviewed for identification of GMC. Patients with and without GMC were compared using the Mann-Whitney nonparametric test and the chi-Square test. Results: Sixty-three percent of patients had at least one medical comorbidity. The most prevalent conditions were: migraine (31.8%), hypothyroidism (24.1%), hypertension (11.3%), traumatic brain injuries (10.3%), asthma (9.7%), epilepsy (8.2%), diabetes (5.1%), stroke (2.1%) and hyperthyroidism (1%). Age and duration of illness were positively associated with the presence of GMC (p < 0.001). Discussion: In our study, in accordance with previous reports, the majority of patients presented at least one general medical disorder. The principal limitation of this study is the fact that diagnosis of GMC was made based on self-report. There are scarce studies addressing GMC in the Brazilian population with BD and this report can contribute to improve diagnostic vigilance, assessment, treatment planning and decrease the burden associated with BD.


Keywords: Bipolar disorder, general medical comorbidity, migraine.

Resumo

Contexto: O transtorno do humor bipolar (THB) está associado a altas taxas de comorbidades médicas gerais (CMGs) e fatores de risco para problemas médicos, porém há escassos relatos sobre a prevalência dessas condições em brasileiros com THB. Objetivo: Descrever a prevalência de CMGs em uma amostra de pacientes com THB tipo I. Métodos: Dados clínicos de 195 pacientes com THB tipo I foram revisados para identificação de CMGs. Pacientes com e sem CMGs foram comparados usando o teste não paramétrico Mann-Whitney e o teste qui-quadrado. Resultados: Sessenta e três por cento dos pacientes relataram pelo menos uma comorbidade médica. As condições mais prevalentes foram: enxaqueca (31,8%), hipotireoidismo (24,1%), hipertensão (11,3%), traumatismo craniano (10,3%), asma (9,7%), epilepsy (8,2%), diabetes (5,1%), acidente vascular cerebral (2,1%) e hipertireoidismo (1%). Idade e duração da doença foram positivamente associadas à presença de CMGs (p < 0.001). Conclusão: Em concordância com relatos prévios, a maioria dos pacientes apresentou pelo menos uma doença médica. A principal limitação deste estudo reside no fato de o diagnóstico de CMGs ter sido baseado no autorrelato. Há escassos estudos visando à identificação de comorbidades médicas na população brasileira com THB e este estudo pode contribuir para melhor vigilância diagnóstica, avaliação, tratamento e diminuição da sobrecarga associada ao THB.


Palavras-chave: Transtorno bipolar, comorbidades médicas, enxaqueca.

Introduction

Bipolar disorder (BD) is a recurrent and chronic mental illness with lifetime prevalence rates estimated to be 3%-6% in the general population1. The disorder is characterized by mood episodes alternating with euthymic periods3, and it is associated with functional decline4, higher mortality rates and significant health care costs5. Comorbidities, high risk of suicide, social and professional impairment and low adherence to treatment increase the burden and cost of illness and worsen the prognosis6.

Presence of one or more additional psychiatric disorders is the rule rather than the exception for BD. Data from the Stanley Foundation Bipolar Network indicate that 65% of patients with BD also have at least one comorbid lifetime axis I disorder and almost a quarter of these patients have three or more diagnoses7. In addition to their psychiatric illness, bipolar patients experience certain general medical comorbidities (GMC) at a higher rate than the general public. Compared with the general population, BD patients have a prevalence of diabetes mellitus approximately three times higher (9.9% versus 3.4%)1, a prevalence of migraine more than two times higher (24.8% versus 10.3%)8, and the mortality ratio of BD patients for cardiovascular disease is 3.09. In the United States and Canada the lifetime prevalence of at least one medical disease varies from 7.2% to 64.3%8,9,12.

Some of this excess morbidity has been associated with adverse effects of medications used to treat BD and also with lifestyle patterns, as is the case for obesity, diabetes, and hypothyroidism10,11,14. However, in most cases, the etiology of the comorbidity is not fully understood, as it is unclear whether a medical disorder is truly comorbid, is a consequence of treatment, or a combination of both15,16.

Medical risk factors and GMC affect the course and the severity of BD as well as its treatment12,16,17, and their impact is significant due to reasons including quality of life, delivery of psychiatry and medical services, mortality10 and disability11.

Individuals suffering from BD may be particularly at risk for obesity, a strong predictor of major medical problems including hypertension, cardiovascular disease, and diabetes mellitus, and...
the prevalence of this condition has been estimated between 8.3%-49\%
13,16,17,19-23. Obese bipolar patients experience a greater number of
delayed and manic episodes, more severe and difficult-to-
treat index affective episode16, and are more likely to report a lifetime
history of suicide attempts67.

A cross-sectional study found that having a chronic medical
disease was associated with less successful employment outcomes,
greater dependency on others for assistance, more mental health
hospitalizations, more mental health consultations, and more use of
psychotropic medications in patients with BD\kn. Additionally, another
research showed that GMC was associated with a worse quality of
life especially in its physical domain9.

Although several studies have shown a high prevalence of GMC
in BD, there have been scarce reports about the prevalence of these
conditions in Brazilian subjects with BD. The aim of the present
study is to evaluate the prevalence of GMC in a sample of Brazilian
outpatients with BD.

Methods

The study was carried out at the Bipolar Disorder Research Program
at the Institute of Psychiatry of the University of São Paulo Medical
School. It was approved by the Institute's ethics committee and writ-
ten informed consent was obtained from all subjects participating
in the study. One hundred and ninety five outpatients with bipolar
disorder type I (age ≥ 18 years old) were evaluated. All subjects were
diagnosed according to the DSM-IV criteria using the Structured
Clinical Interview for DSM-IV (SCID-P). Sociodemographic and
clinical variables were reviewed and GMC was evaluated by a self-
report questionnaire. This questionnaire assessed epilepsy, history of
traumatic brain injuries, migraine, asthma, diabetes, hypothyroidism,
hyperthyroidism, hypertension, and stroke and was administered
during the patient's baseline evaluation. According to the answers
the sample was divided in two groups: subjects who had at least one
GMC and subjects who did not.

The statistical analysis was performed using the Statistical Pack-
age for the Social Sciences, version 14 (SPSS Inc., Chicago, IL, USA).
The variables age; number of manic, depressive, mixed and total
episodes; number of hospitalizations; number of suicide attempts
and duration of illness were compared between the groups using
Mann-Whitney nonparametric test. We also compared the variables
gender, marital status and ethnicity using chi-square test. The level
of statistical significance was set at alpha = 0.05.

Results

The sociodemographic and clinical characteristics of the study
sample are shown in table 1. Based on the overall sample the mean
age was 39.2 years old (SD = 10.9), more than half were female
(69.7%) and 42.6% were married. The largest ethnic group was
Caucasian (75.4%), followed by Afro-American (22.5%), Asian
(1.5%) and others (0.5%). The median number of total episodes
was 7 (IR=9) and the mean duration of illness was 16.4 years (SD
= 10.7). Nearly sixty-nine percent of the subjects had at least one
GMC and the most prevalent conditions were: migraine (31.8%),
hypothyroidism (24.1%), hypertension (11.3%), history of traumatic
brain injuries (10.3%), asthma (9.7%), epilepsy (8.2%), diabetes
(5.1%), stroke (2.1%), hyperthyroidism (1.0%) (Table 2). Twenty
three percent of the sample had two or more GMC and 4.1% had 3
or more GMC. Age and duration of illness were positively associ-
ated with the presence of GMC (p < 0.001). No relationship was found
between the presence of GMC and gender, marital status, ethnicity,
number of episodes (manic, depressive, mixed and total), number
of hospitalizations and number of suicide attempts. In order to cor-
correct for possible bias in the retrospective assessment of number
of episodes, we divided the sample according to the median of total
episodes and did not find any difference between the two groups
on the presence of GMC.

Discussion

Our findings are similar to prior studies in other populations point-
ing to an alarmingly higher prevalence of GMC among patients
with BD when compared to the general population. In accordance
with previous reports, the majority of subjects studied presented at
least one concomitant medical disorder. The duration of illness was
positively associated with the presence of GMC (p < 0.001) and it is
in conformance with the findings of Soreca et al.24, which described
that medical burden was related to it.

Surprisingly, in our study, almost 32% of BD outpatients had
migraine. We found in the literature a well-established association
between migraine and depression, but among the BD population
it has been indicated that BD II may co-exist with migraine more
often than BD II\kn. It has been reported by other groups that these
cosoccurring diseases are associated with greater dysfunction, an
increased risk of suicidal behaviour and comorbid anxiety disorders25,26.

As migraine is associated with the female gender and we have a
higher percentage of women in the sample, it is possible that migraine
prevalence may be, in fact, an artifact of the unequal distribution
of gender. Notwithstanding is known that bipolar women are more
likely to suffer from migraine than men\kn.\kn. In addition, the use of a
self-report instrument to determine the presence of migraine might
overestimate the rate of migraine occurrence.

<table>
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<th>Variables</th>
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<td>General medical comorbidity</td>
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<td>Hypothyroidism</td>
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<td>Hyperthyroidism</td>
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Table 2. Prevalence of GMC in subjects with BD (n = 195)

* Underestimated number (some subjects reported a number of episodes as “too numerous
to count”). IR: interquartile range.
The second most prevalent condition was hypothyroidism (24.1%), and it may be related to the disease itself or to the medications used by these patients. A recent study indicated that lithium, carbamazepine, and valproate might increase the risk of hypothyroidism, particularly if used together. In our sample, 72.3% of the patients had been using at least one of these three medications during the last year, which could potentially explain the high rate of this illness.

Excess cardiovascular mortality in BD has been documented for several years and hypertension, an important risk factor, is among the most common medical conditions and is a major contributor to increased treatment costs in BD. In the present study, 11.3% of BD I subjects reported being diagnosed with arterial hypertension, although previous estimates for hypertension prevalence in BD patients were generally from 15 to 39%. Despite its limitations, there are scarce studies addressing GMC in the Brazilian population with BD and this report can contribute to improve diagnostic vigilance and helps clinicians tailor treatment strategies.

Our findings suggest the need for future studies addressing GMC and BD comorbidities and the necessity to optimize care and achieve the best possible treatment outcomes by integrating psychiatric and general medical care. Perhaps most importantly, preventive strategies are needed to reduce the excessive prevalence and impact of general medical disorder among people with BD.

In conclusion, Brazilian outpatients with BD type I have significant rates of GMC and medical risk factors. This report contributes to the knowledge in the field, and our findings support the need for future studies addressing these co-occurring diseases. Additionally, integrated care and the development of diverse therapeutic options, such as group therapy, diagnostic vigilance and comprehensive treatment are required and could be effective strategies.

Referências
