

# Demographical profile and clinical features of patients with bipolar disorder in an outpatient setting in Singapore

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## ABSTRACT

**Introduction:** Bipolar disorder, or manic depressive psychosis, is a psychiatric disorder characterised by extreme changes in mood, thinking, energy and behaviour. Western studies on this condition show a delay in diagnosis and treatment. The aim of this study is to examine the demographical profile and clinical features of this group of patients in Singapore to see if there is a similar delay.

**Methods:** Data of patients diagnosed with this condition and treated in two separate outpatient practices in the private sector from January 1999 to October 2003 were retrieved from case files and analysed.

**Results:** Of the 121 patients with bipolar disorder treated, there were 45 percent male and 55 percent female patients, and most of them were in the 20-39 year age group. Chinese formed the largest ethnic group while Malays were under-represented. 58 percent were employed, and 48 percent were married. While the age of onset of illness ranged mainly from age 10 to 29 years, the age when they first sought treatment was from 20 to 39 years. A duration of illness of more than two years was found in 79 percent of these patients. In terms of diagnostic categories, 17 percent were bipolar I, 76 percent were bipolar II and 7 percent of the bipolar disorders, not otherwise specified. The first episode presented was depression in 75 percent and bipolar disorder was the initial diagnosis in only 34 percent of the cases. A delay in the correct diagnosis for more than two years accounted for 34 percent of the cases. Only 17 percent had a family history of bipolar disorder. 28 percent had a history of antidepressant-induced manic episodes and 17 percent had a previous episode of mixed state. Psychotic symptoms were absent in 75 percent, and 65 percent had never been hospitalised for their condition. Nine

percent had made a past suicide attempt and 39 percent had a comorbid diagnosis. 46 percent were treated with a combination of mood stabilisers, neuroleptics and antidepressants and 16 percent had electroconvulsive therapy. Only 34 percent were in full remission of their illness.

**Conclusion:** There was a preponderance towards the younger age groups for the age of onset, and the type of first episode was typically depression. There was a significant delay in diagnosis and treatment of patients with bipolar disorder. These features were strikingly similar to Western studies. Bipolar II was the diagnostic category seen more than bipolar I in the outpatient setting. Polypharmacy was the norm and a large group of patients did not achieve full remission.

**Keywords:** bipolar depression, bipolar disorder, depression, manic depressive psychosis, psychosis

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## INTRODUCTION

Mood changes seen in bipolar disorder are more than mood swings, in terms of severity and disruptiveness, and can alternate between the “poles” of mania and depression. These changes can last for days, weeks or months. It is estimated to affect about 1% of the population.<sup>(1)</sup> Bipolar I refers to the condition with a current or previous manic episode, while bipolar II with one previous hypomanic episode.<sup>(2)</sup> The symptoms are not always recognised as part of the disorder. A National Depressive and Manic-Depressive Association (NDMDA) study in the USA in 2001 showed that 70% of the patients had at least one misdiagnosis.<sup>(3)</sup> Undiagnosed patients suffer more personal, social and work-related problems and the risk of suicide. While it was previously believed that bipolar disorder is a more benign condition when compared to schizophrenia, there is evidence that the remission rates are low and mood symptoms persist between episodes.<sup>(4)</sup>

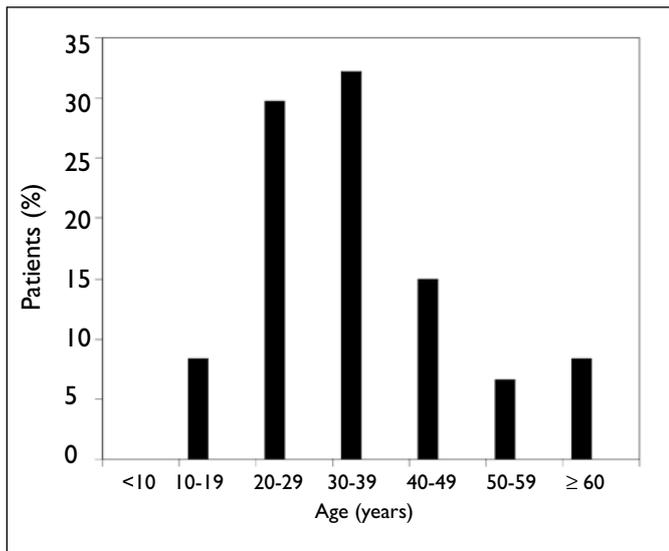
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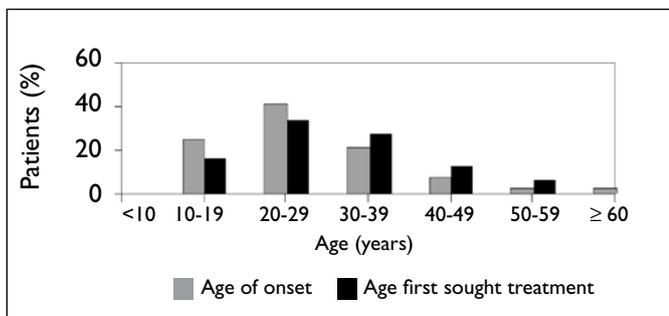
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**Fig. 1** Bar chart shows the distribution of patients with bipolar disorders according to age groups.



**Fig. 2** Bar chart shows the gap between age of onset and age treatment was first sought.

The aim of this paper is to look at the demographical profile and clinical features of patients with bipolar disorder in an outpatient setting in Singapore; a city-state with a multiethnic and multicultural population of 4.5 million, comprising three main groups: Chinese (75%), Malays (14%), Indians (9%) and others.

## METHODS

This is a retrospective study in which data on the patients with bipolar disorder, seen by two psychiatrists (the authors) in separate private outpatient practices from Jan 1999 to Oct 2003, were collected. The demographical profile and clinical features of these patients were defined. Clinical diagnoses were made using the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR).<sup>(2)</sup> Care was taken to ensure confidentiality as well as anonymity of extracted and analysed data.

## RESULTS

There were a total of 121 patients with bipolar disorder treated by the two psychiatrists during the study period. The study group comprised 45% male and 55% female

patients, and the majority were in the age groups of 20–29 (29.8%) and 30–39 (32.2%) years (Fig. 1). Chinese formed 71%, Indians 8% and Malays only 2% of patients. There was a significant number (19%) of non-local patients, mostly Caucasians, in this group of private patients. 58% were employed, of which 18% were professionals, 14% in managerial positions, 20% skilled workers and 6% unskilled workers, 15% homemakers and 26% unemployed. 48% were married and 44% were never married. Those divorced or separated from their spouses formed only 7% of the total. While the age of onset of illness was 10–19 years in 25%, and 20–29 years in 41% of the patients, the age at which they first sought treatment was a decade later, i.e. 20–39 years in 62% of patients (Fig. 2). 79% had a duration of illness of more than two years, and up to 26% had suffered the illness for more than ten years (Table I).

In terms of diagnostic categories, 17% of patients were bipolar I, 76% were bipolar II and 7% were classified under bipolar disorder, not otherwise specified (NOS). The first episode experienced was depression in 75% of the subjects, and mania or hypomania in only 17%. Bipolar disorder was the initial diagnosis in 34%. Unipolar depression was initially diagnosed in 45%, schizophrenia in 9%, anxiety disorder in 8% and schizoaffective disorder in 1%. A delay in the correct diagnosis of 2–5 years occurred in 18% of the cases, and 16% of the patients experienced a delay of more than five years (Table II). Only 17% had a family history of bipolar disorder. However, 33% had a family history of depression (unipolar) and 17% with family history of substance use disorder.

28% had a history of antidepressant-induced manic episode. The type of antidepressant that had triggered the manic switch ranged from tricyclics to selective serotonin reuptake inhibitors. 17% had a previous episode of mixed state. Psychotic symptoms were absent in 75% of patients throughout all episodes, and 65% had never been hospitalised for their condition. 9% had made a past suicide attempt. A total of 39% patients had a comorbid diagnosis—these included medical disorders (24%), substance use disorder (12%), anxiety disorder (3%) and personality disorder (2%).

With regard to treatment, monotherapy was used in 54% of patients (46% with mood stabiliser, 4% with neuroleptics and 4% with antidepressants). The rest (46%) were treated with a combination of these medications. 16% had received electroconvulsive therapy (ECT) as part of their previous treatment. Only 34% were in full remission of their illness. Up to 21% had residual symptoms, mainly depression, and the rest were in relapse states.

## DISCUSSION

While the profile of patients with bipolar disorder has

**Table I. Duration of illness.**

No. of years	No. of patients (%)
< 2	26 (21.5)
2–5	44 (36.4)
6–9	19 (15.7)
≥ 10	32 (26.4)

**Table II. Length of delay in diagnosis.**

No. of years	No. of patients (%)
< 2	71 (58.7)
2–5	22 (18.2)
6–9	10 (8.3)
≥10	10 (8.3)
Unknown	8 (6.6)

been reported internationally, there has not been many descriptions of this group of patients in Asian countries. This study looks at a specific subgroup, i.e. patients from two individual outpatient private practices, and thus cannot in any way be said to be characteristic of bipolar patients in Singapore. Only descriptive data is presented, as the number of patients is too small for tests of significance to be performed. Another major limitation is that it is a retrospective study and no clinical diagnostic tool was used. The ratio of male to female patients was approximately 1:1 in our group of patients. This ratio is typical for bipolar disorder, in contrast to the ratio of 1:2 for unipolar depression.<sup>(1)</sup> The ethnic composition, however, is not representative of the general population, as these patients were treated in private psychiatric practices. The gross under-representation of Malays seen here could be that this ethnic group prefers to be treated for psychological problems by traditional healers instead.

Although the NDMDA study reported significant functional difficulties in patients with bipolar disorder,<sup>(3)</sup> we found that our patients were high functioning, with half of them being employed, and many were professionals, managers or skilled workers. Half of them were also married, and of those who were single, most were living with their families. The presence of social support could explain the lack of deterioration in social and occupational functioning. The time of onset of illness for bipolar disorder patients was mostly in their late teens and early adulthood. There was a trend of these patients seeking treatment almost a decade after onset of the first episode of illness. This was also found in the NDMDA study.<sup>(3)</sup> Coupled with the delay of more than two years for a third of the cases before their psychiatrists reached a correct diagnosis, this delay implied that a significant period of time would have lapsed before they received adequate treatment for their condition.

Incorrect initial diagnoses were common, despite both

psychiatrists having a special interest in mood disorders. There are various reasons for this. Firstly, three-quarters of the patients were bipolar II. Patients in a current episode of hypomania usually do not seek help, so it is usually elicited in the history of illness, which depended on the memory of patients or relatives and may not be accurate. Secondly, patients often presented with depression without a prior episode of mood elevation. Therefore, a diagnosis of unipolar depression was made in many cases. Occasionally, the bipolarity in their condition was revealed only when mania or hypomania developed with the use of antidepressants.<sup>(5)</sup> Patients who had psychotic symptoms were sometimes misdiagnosed as schizophrenic until their mood symptoms became more prominent. Using the family history as a diagnostic clue is inadequate, as only 17% had relatives with bipolar disorder. Nevertheless, a family history of any mood disorder and substance use disorder can still point towards the possibility of a diagnosis of bipolar disorder.

The duration of illness was more than two years in the majority of patients, and a quarter of them suffered from bipolar disorder for more than ten years. This underscores the fact that bipolar disorder is a chronic relapsing psychiatric condition. Only a third achieved full remission, contrary to the belief that bipolar patients are symptom-free between episodes.<sup>(4)</sup> Residual symptoms are usually depressive and related to problems in coping, so the role of support groups and psychotherapy cannot be overemphasised.<sup>(6,7)</sup> The use of antidepressants in treatment of depressive episodes, especially unrecognised bipolar depression, can unmask bipolar disorder.<sup>(5)</sup> Tricyclics are often thought to be the chief culprit, but this study shows that any of the different groups of antidepressants can trigger a bipolar episode. Another complication of antidepressant treatment without concomitant use of a mood stabiliser is the manifestation of mixed states.<sup>(8)</sup> As the patients were mostly bipolar II cases, psychotic symptoms were less common and they could be treated without hospitalisation unless they suffered from a severe episode of depression. The proportion of patients (9%) who had made a previous suicide attempt was low compared to other studies, which reported rates of 25%–50%. The risk of suicide in bipolar disorder is estimated to be as high as 7%–20%.<sup>(9)</sup>

Comorbidity is common and need to be adequately treated. A quarter of patients had medical conditions, including 4% with endocrine disorders. Substance use disorders are relatively high in bipolar disorder, and here we found 12% with this comorbid psychiatric disorder.<sup>(10)</sup> Substance abuse and personality disorders are associated with poorer prognoses. Comorbid anxiety disorders are also common in bipolar disorder and pharmacological treatment may be challenging.<sup>(11)</sup> Monotherapy is the

advocated treatment, but polypharmacy is usually indicated in severe types of bipolar disorder.<sup>(12)</sup> A combination of antidepressants, mood stabilisers and neuroleptics are prescribed. Whether this prescribing pattern is common, and whether the high percentage of patients with residual symptoms or relapse states is usual, could be answered by doing a prospective study, one which is more representative of psychiatrists in the whole of Singapore. It is noted that a small number of the patients studied were on antidepressants alone; while effective, the addition of a mood stabiliser lessens the risk of lapsing into mania.

The results show the difficulty in diagnosing bipolar disorder in clinical practice, which leads to under-recognition, misdiagnosis and delay in diagnosis. This is not unexpected due to the nature of the disorder. Thus it is important to be cognisant of this condition when a patient, especially in the younger age group, presents with a first episode of depression. This avoids complications that may arise with the use of antidepressants, particularly treatment-emergent mania or hypomania, in vulnerable patients.

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