Canadian Network for Bipolar Disorder (CAN-BD): Preliminary Report on Data from the First 139 Patients

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INTRODUCTION

The Canadian Network for Bipolar Disorder (CAN-BD) began collecting prospective data about a year ago tracking clinical outcomes, treatment patterns, quality of life and resource utilization of bipolar patients treated at 14 centres across Canada. The purpose of this program is to gather the effectiveness of various treatment interventions on symptomatic and functional outcome in patients with bipolar disorder. We present here the preliminary data collected as of May 2003.

METHOD

Patients diagnosed with bipolar I/II disorder who met criteria for a mood episode and required a change in treatment within 3 months prior to enrollment were eligible. At baseline, data collected included demographics, clinical/medical history, psychiatric medications, life events, symptom rating scales such as the HAM-D 21, MADRS, YMRS, CGI, CGI-I, GAF, and side effect scales. Patients were managed under conditions of routine clinical practice and all behavioural scales were administered at least every 3 months, and YMRS and MADRS at each clinical visit. Data was collected primarily using a computer database designed for psychiatric disorders; some variables were collected using paper CRFs and monthly patient diaries.

RESULTS

As of May 2003, 173 patients had been enrolled across Canada. Information on 139 patients with complete data is presented. Demographic information for the sample is presented in Table 1; clinical characteristics of the patients with bipolar disorder are presented in Table 2.

Figure 1. Behavioural scale scores at scheduled visits for patients with a depressive index episode

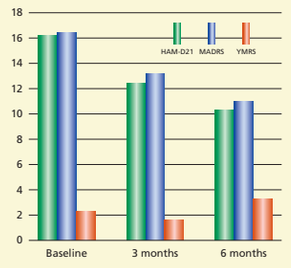
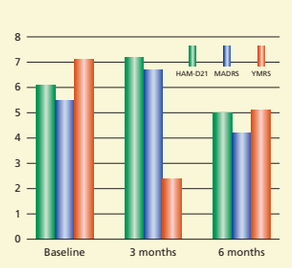


Figure 2. Behavioural scale scores at scheduled visits for patients with a manic index episode



Of patients currently enrolled in HOPE.BD, 62% (N = 86) are female, the mean age of the population being 45 ± 13 years. The majority (62%, N = 86) of those enrolled have a diagnosis of bipolar I disorder, and 56% (N = 77) had most recently experienced a depressive episode at the baseline study visit. Nearly half of the sample (51%, N = 71) suffer from a comorbid anxiety disorder, 41% (N = 57) have a history of substance or alcohol abuse, and 39% (N = 54) have a history of suicidality. Approximately half (51%, N = 71) of the sample has a household income of less than $40,000 per year.

Table 3 shows a variety of additional clinical characteristics separated by diagnosis (I or II). Patients with bipolar II disorder showed a significantly earlier onset of depressive symptoms ($p < 0.05$, mean age 17 vs. 22 years) and had also experienced significantly more hypomanic ($p < 0.05$) and depressive episodes ($p < 0.05$) in the 2 years prior to study entry. It is of note that patients with bipolar II disorder were diagnosed at a significantly later age than BD I patients (40 vs. 36 years, $p < 0.05$). In addition, while there was approximately a 14-year delay between the age of first depressive symptoms (22 ± 13 years) and age of BD diagnosis (36 ± 13 years) for patients with bipolar I disorder, this delay was markedly longer (approximately 23 years) for those patients diagnosed with bipolar II disorder. Mean age of first depressive symptoms for patients was bipolar II disorder was 17 ± 10 years, with diagnosis not occurring until 40 ± 11 years.

HAM-D 21, YMRS, and MADRS scales were administered at all scheduled visits; data are presented here for baseline, 3, and 6-month visits (see Table 4). Patients with bipolar II disorder tended to show numerically higher depression severity scores. Analyses by ANOVA comparing bipolar I and II patients indicated that the latter possessed significantly higher scores on both the HamD-21 and MADRS ($p < 0.005$), but not YMRS, at baseline.

Table 1. Demographic characteristics of patients enrolled in HOPE.BD

DEMOGRAPHIC	N	%
Gender		
Female	86	62
Male	53	38
Age (mean ± SD)	45.4 ± 12.7	
Marital Status		
Married	38	27
Unmarried	41	29
Divorced	28	20
Other	32	24
Children		
Have one or more child	76	55
No children	63	45
Living Arrangement		
Alone	45	32
With Partner	59	42
Other	35	26
Employment status		
Employed Full-time	39	28
Employed Part-time	17	12
Unemployed	33	24
Other	50	36
Highest Level of Education		
College/University graduated	44	32
College/University attended	52	37
High-School Graduated	29	21
Other	14	10
Household Income (per year)		
< $40,000	71	51
$40,000 - $69,999	34	25
$70,000 - $99,999	17	12
Other	17	12

Table 2. Clinical characteristics of bipolar disorder

CLINICAL CHARACTERISTIC	N	%
Comorbid Anxiety Disorder		
Yes	71	51
No	66	48
Missing	2	1
Comorbid Substance Abuse		
Yes	57	41
No	80	58
Missing	2	1
History of Suicidality		
Yes	54	39
No	85	61
Diagnosis		
BD I	86	62
BD II	49	35
Missing	4	3
Pattern of Episodes		
Rapid Cycling	10	7
Seasonal	2	1
None specified/missing	127	92
Most Recent Episode at Enrollment		
Depressed	77	56
Hypo/manic	35	25
Mixed	6	4
Unspecified/Missing	21	15

Table 3. Comparison of patients with bipolar I and bipolar II disorders

CLINICAL CHARACTERISTIC	All Subjects (MEAN ± SD)	Bipolar I (MEAN ± SD)	Bipolar II (MEAN ± SD)	p[1] VALUE
Age of BD diagnosis	37.4 ± 12.5	35.7 ± 13.1	40.2 ± 11.4	< 0.05
Age of first mood stabilizer	35.6 ± 12.8	35.0 ± 12.4	37.6 ± 12.8	NS
Age of first psychiatric admission	25.9 ± 18.3	29.8 ± 16.6	18.4 ± 20.0	< 0.05
Age of first depressive symptoms	20.1 ± 11.9	22.2 ± 12.6	17.2 ± 9.8	< 0.05
Age of first hypo/manic symptoms	23.0 ± 14.0	24.1 ± 14.4	21.7 ± 12.7	NS
Age of first depressive episode (DSM-IV criteria)	25.4 ± 12.7	25.4 ± 12.8	26.3 ± 12.4	NS
Age of first hypo/manic episode (DSM-IV criteria)	29.4 ± 13.8	29.8 ± 12.9	28.9 ± 15.8	NS
Hospital admissions within the past two years for BD	0.8 ± 1.2	1.0 ± 1.3	0.4 ± 1.0	< 0.05
Depressive episodes in 2 years prior to enrolment	3.2 ± 6.5	1.8 ± 2.6	5.4 ± 9.5	< 0.05
Manic episodes in 2 years prior to enrolment	0.5 ± 1.0	0.8 ± 1.2	0	N/A
Hypomanic episodes in 2 years prior to enrolment	3.3 ± 7.7	1.7 ± 5.4	5.7 ± 9.9	< 0.05

Table 4. Behavioural scale scores at scheduled study visits

SCALE		N	Scale Total (Mean ± SD)
HAM-D 21	Baseline	142	12 ± 8
	3-month visit	101	11 ± 8
	6-month visit	57	8 ± 7
MADRS	Baseline	138	12 ± 10
	3-month visit	98	11 ± 10
	6-month visit	57	8 ± 8
YMRS	Baseline	140	4 ± 5
	3-month visit	100	2 ± 2
	6-month visit	57	3 ± 5

CONCLUSION

Patients with bipolar II disorder experience a longer course of illness, more depressive and hypomanic episodes, and greater severity of depressive symptoms. Considering that this population is also being diagnosed at a significantly later age than those patients with bipolar I disorder, these findings suggest that patients suffering from bipolar II disorder are being under-diagnosed and under-treated.