

Health Resource Utilization Patterns in Bipolar Disorders

Mark Frye MD¹, Joseph R. Calabrese MD², Robert MA Hirschfeld MD³, Michael Reed PhD⁴

¹University of California at Los Angeles, Los Angeles, CA; ²Case Western Reserve University, Cleveland, OH; ³University of Texas Medical Branch, Galveston, TX; ⁴Vedanta Associates Inc., Chapel Hill, NC

ABSTRACT

Objective: To evaluate consultation, diagnostic, and treatment patterns associated with bipolar disorders (BPD) in the U.S.

Methods: 3059 subjects identified from a large prevalence study of BPD were surveyed and matched to scores on the Mood Disorders Questionnaire (MDQ) and 2000 U.S. Census data. Health resource utilization data, including medical consultation, diagnostic patterns, and medication and alternative remedy use were collected.

Results: Survey response rate was 80% (1167 MDQ+, 1283 MDQ-). Although significantly more subjects who screened positive for BPD had consulted a healthcare provider for their symptoms compared with MDQ- subjects (54% vs 26%, $p < 0.001$), 46% had never consulted a provider. Among MDQ+ subjects, 18% had received a diagnosis of BPD from a healthcare provider, 41% were diagnosed with another disorder, and 41% had no psychiatric. Subjects who screened positive and received a diagnosis of BPD used the following medications alone or in combination: antidepressants (52%), mood stabilizers (32%), typical and/or atypical antipsychotics (15%).

Conclusions: Large proportions of subjects who screened positive for BPD had not consulted healthcare providers for their bipolar symptoms and many had not received treatment for possible BPD, regardless of consultation. Use of screening instruments and appropriate diagnostic and treatment strategies for BPD may improve access to psychiatric care.

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INTRODUCTION

Bipolar disorders encompass a range of symptoms that include mania, hypomania, mixed states, and prolonged depression. These symptoms can significantly affect a patient's ability to work and maintain positive social, leisure, and family interactions. Effective treatment is dependent upon timely identification and diagnosis of the disorder and access to appropriate medical care.

We surveyed subjects and their families from a large prevalence study to examine the health care utilization patterns of subjects with Bipolar I and II Disorders in the general US population.

METHODS

3059 subjects from a large epidemiology study of Bipolar I and II Disorders (The Prevalence Study), matched to scores on the Mood Disorders Questionnaire (MDQ) (0 - 13) and 2000 US Census data, were surveyed.

The survey included:

- Recall of Symptom Onset
- Healthcare Consulting Behaviors
- Medication and Alternative Remedy Use
- Medical and Social Service Utilization

The MDQ is a validated self-report instrument that screens for a lifetime history of Bipolar I and II Disorders. Validation of the MDQ in psychiatric outpatients indicated 0.73 sensitivity and 0.90 specificity against a SCID research interview. A **positive MDQ screen** was defined as ≥ 7 symptoms, co-occurrence of two or more symptoms, and moderate or severe symptom-related impairment.

Post weighting on age, gender, household income, household size, and geographic region was used to adjust the sample to match US demography. Weighted lifetime prevalence rates were calculated to correct biases in the returns toward older, female respondents. Chi-square tests were used to compare differences between MDQ positive and MDQ negative subjects. T-Tests were used to compare group means.

RESULTS

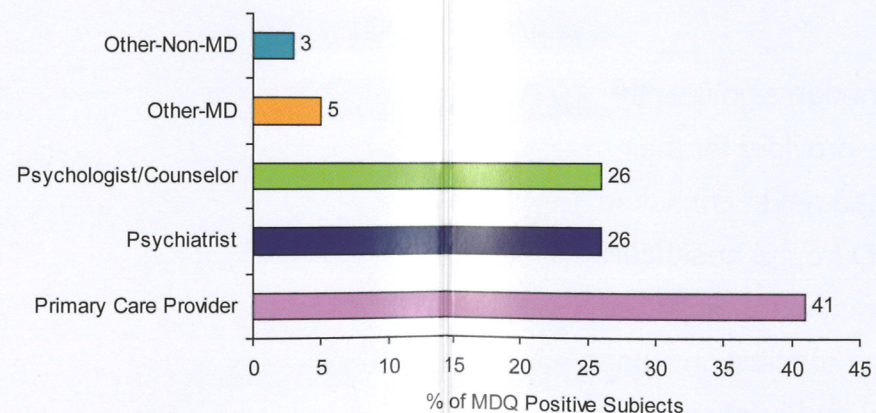
Sample

- 2540 adults returned completed surveys (80% response)
- 1167 MDQ positive, 1283 MDQ negative
- 52% were Female
- Mean Age = 45.2 years
- Median Income = \$48,500

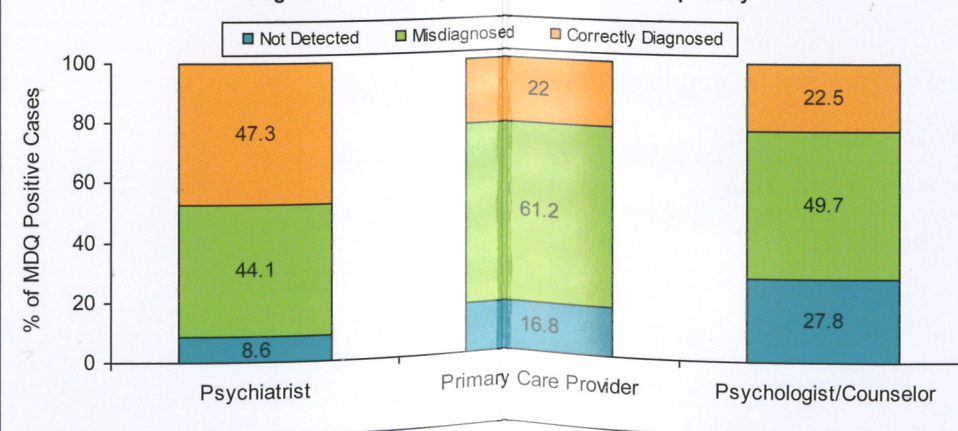
Diagnostic Patterns Among MDQ Positive Cases

| Category | Percentage |
|--|------------|
| Correctly Detected (17.7%) | |
| Bipolar + Depression + Substance Abuse | 34.6% |
| No Co-Morbid Substance Abuse | 65.4% |
| Misdiagnosed (41.6%) | |
| Depression | 63.2% |
| Depression + Substance Abuse | 17.8% |
| Substance Abuse | 19.0% |
| Not Diagnosed (40.7%) | |

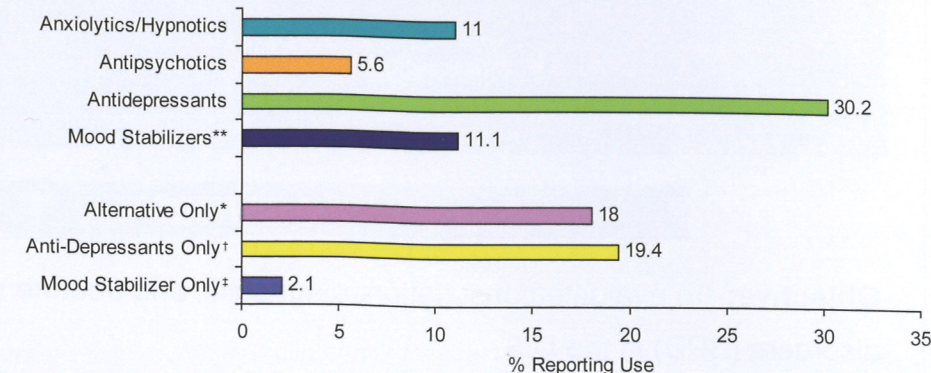
Consulting Patterns Among MDQ Positive Subjects



Diagnosis and Detection Patterns by Medical Specialty



Medication and Alternative Remedy Use



*Herbal Remedies, vitamins, non-prescription tx
**Lithium or Anticonvulsant drugs

†Without anti-psychotic or mood stabilizer
‡With anti-depressant or anti-psychotic

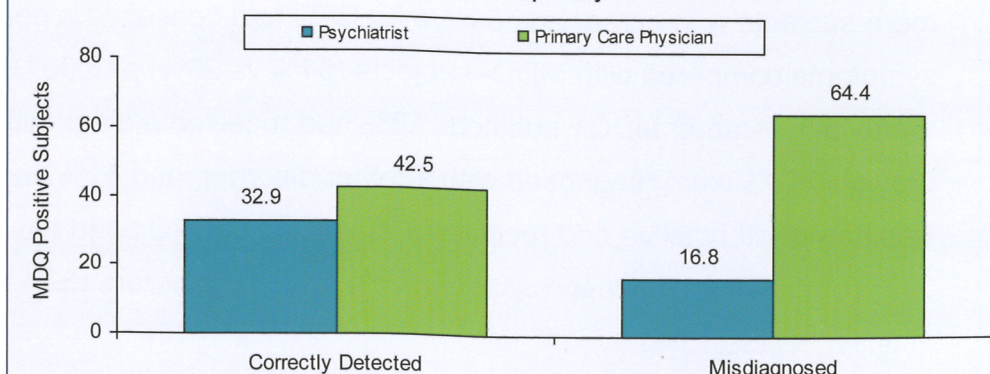
Medication and Alternative Remedy Use

| | Psychiatrist | Primary Care Provider |
|-------------------|--------------|-----------------------|
| Mood Stabilizers* | 53.7% | 22.8% |
| Antidepressants** | 23.9% | 53.5% |

*Total mood stabilizer regardless of other Rx's

**Anti-depressant only without mood stabilizer or anti-psychotics

Antidepressant Use Without Mood Stabilizers or Antipsychotics by Medical Specialty



CONCLUSIONS

- Large proportions of MDQ positive subjects never sought medical consultation for their bipolar symptoms.
- The rate of misdiagnosis of bipolar symptoms was high among primary care providers and psychiatrists.
- Alternative remedies and antidepressants were used frequently in MDQ positive subjects. Use of mood stabilizers was low.
- Large proportions of US subjects who screened MDQ positive for Bipolar I & II Disorder have not received appropriate health care consultation or treatment.

CONTACT INFORMATION

Mark A Frye, MD
University of California Los Angeles
UCLA Bipolar Disorder Research Program
300 UCLA Medical Plaza, Suite 1544
Los Angeles, CA 90095