

# Health Resource Utilization in Bipolar Depression Compared with Unipolar Depression

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## ABSTRACT

**Objective:** To examine the patterns of health resource utilization in bipolar depression (BP+) compared with unipolar depression (UP+).

**Methods:** A self-administered survey was completed by a sample of subjects who had previously participated in a general population survey. Subjects who screened positive for bipolar disorder (MDQ+) or reported a diagnosis of bipolar disorder and depression were considered BP+ (n=395). The UP+ (n=794) group reported a diagnosis of depression, were MDQ-, and did not report a diagnosis of bipolar disorder. The healthy control group (n=1612) consisted of those reporting no psychiatric conditions. Results were adjusted for demographic differences among groups.

**Results:** Severity of depression was significantly (p<0.01) worse in BP+ than UP+. Compared with UP+ subjects, BP+ subjects consulted a healthcare provider earlier (age 25 versus 34, p<0.0001) and were more likely to report a psychiatrist or psychologist consult, psychiatric hospital admission, primary care visit, ER/urgent care use, and social service use (p<0.01 for all). BP+ respondents were also more likely to report drug or alcohol abuse (p<0.01) and other co-morbid psychiatric conditions (anxiety, panic, eating disorder, all p<0.01).

**Conclusions:** BP+ is associated with more severe depression, medical comorbidities, and emergency/urgent care use than UP+.

## INTRODUCTION

Bipolar depression differs from unipolar depression in physiological correlates, clinical manifestations, and response to treatment. These differences might be expected to result in different patterns of health resource use by patients with bipolar depression compared with unipolar depression, a possibility that has not been explored to date in epidemiologic studies.

Information on health resource utilization in bipolar and unipolar depression is necessary for developing and implementing effective intervention strategies and targeting those most in need of medical care.

## OBJECTIVE

This US population-based study was conducted in 2002 to assess patterns of health resource utilization associated with bipolar depression compared with unipolar depression.

## METHODS

- A self-administered survey was mailed in March/April 2002 to a sample (n=4810) of subjects who had previously participated in a population-based epidemiologic survey. Evaluable surveys were returned by 3191 respondents (66% response).
- The survey comprised the Mood Disorder Questionnaire (MDQ), the Center for Epidemiologic Studies Depression Scale, the Sheehan Disability Scale, the Social Adjustment Scale-Self-Report, and other questions regarding consultation patterns and mood symptoms.
- Respondents to the survey were categorized into one of three subgroups including bipolar depression-positive respondents, unipolar depression-positive respondents, and control respondents.
  - Bipolar depression-positive respondents (BD+) scored as being MDQ-positive for bipolar disorder or reported a physician diagnosis of bipolar disorder and depression.
  - Unipolar depression-positive respondents (UD+) were MDQ-negative for bipolar disorder, did not report a physician diagnosis of bipolar disorder, and reported a physician diagnosis of depression.
  - Controls were MDQ-negative and not diagnosed with bipolar disorder, depression, or other psychiatric conditions.
- Differences between subgroups were compared by using 2-tailed chi-square tests, analysis of variance (ANOVA), and odds ratios and 95% confidence intervals as appropriate. Because the subgroups differed in the demographic characteristics of age, sex, race, and household income, all analyses were controlled for these variables.

## RESULTS

### DATA FROM 2801 RESPONDENTS WERE ANALYZED.

|                         | BD+<br>(n=395) | UD+<br>(n=794) | Control<br>(n=1612) |
|-------------------------|----------------|----------------|---------------------|
| % Male*                 | 40             | 30             | 51                  |
| <b>Ethnicity*</b>       |                |                |                     |
| White                   | 91             | 90             | 87                  |
| Black                   | 4              | 5              | 7                   |
| Other/Unknown           | 5              | 5              | 6                   |
| <b>Years of Age,* %</b> |                |                |                     |
| 18 to 24                | 15             | 10             | 14                  |
| 25 to 34                | 30             | 22             | 18                  |
| 35 to 44                | 27             | 25             | 24                  |
| 45 to 54                | 19             | 21             | 19                  |
| 55 to 64                | 7              | 12             | 12                  |
| 65 or Older             | 2              | 10             | 15                  |
| <b>Region, %</b>        |                |                |                     |
| New England             | 5              | 6              | 5                   |
| Middle Atlantic         | 13             | 14             | 14                  |
| East North Central      | 16             | 16             | 16                  |
| West North Central      | 7              | 5              | 7                   |
| South Atlantic          | 17             | 20             | 19                  |
| East South Central      | 9              | 6              | 6                   |
| West South Central      | 13             | 12             | 11                  |
| Mountain                | 7              | 7              | 7                   |
| Pacific                 | 14             | 15             | 16                  |

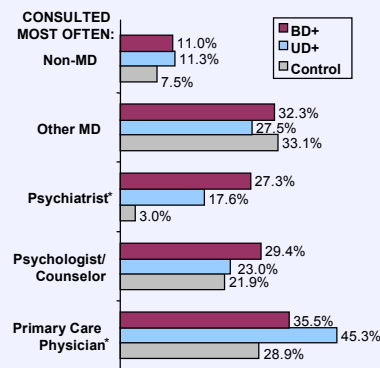
\*p<0.05 among groups

### FOR BD+ VERSUS UD+ RESPONDENTS, FIRST CONSULT FOR DEPRESSIVE SYMPTOMS WAS EARLIER AND LAST CONSULT WAS MORE RECENT.

|                              | BD+<br>(n=395) | UD+<br>(n=794) | Control<br>(n=1612) |
|------------------------------|----------------|----------------|---------------------|
| % Ever Consulted             | 80             | 78             | 10                  |
| Mean Age of First Consult    | 25.4*          | 32.8           | 34.1                |
| Mean Days Since Last Consult | 137.0*         | 205.1†         | 582.1               |

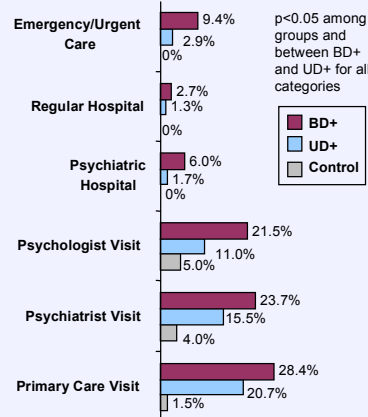
\*p<0.05 BD+ versus UD+ and control †p<0.05 UD+ versus control

### BD+ and UD+ RESPONDENTS MOST OFTEN CONSULTED PRIMARY CARE PHYSICIANS FOR DEPRESSIVE SYMPTOMS.



\*p<0.05 among groups

### MORE BD+ THAN UD+ RESPONDENTS HAD OFFICE AND EMERGENCY CARE VISITS AND HOSPITALIZATIONS IN THE PAST 12 MONTHS.



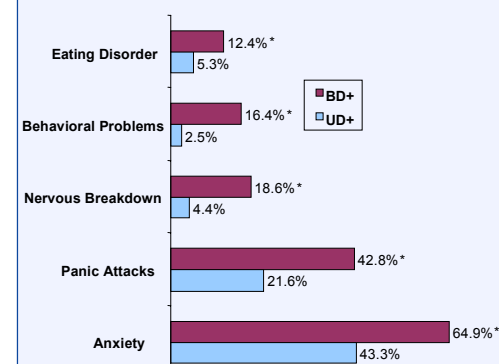
p<0.05 among groups and between BD+ and UD+ for all categories

### BD+ RESPONDENTS USED ALCOHOL- AND DRUG-RELATED SOCIAL SERVICES MORE OFTEN THAN UD+ RESPONDENTS IN THE PAST 12 MONTHS.

|  | BD+<br>(n=395) | UD+<br>(n=794) | Control<br>(n=1612) |
|--|----------------|----------------|---------------------|
| % Using Alcohol, Drug Treatment, or Detox Facility, Past 12 Months | 3.9            | 0.3            | 0.0                 |
| % Using All Other Social Services                                  | 4.7            | 0.1            | 0.0                 |

p<0.001 BD+ versus UD+ and control for all social services

### MORE BD+ THAN UD+ RESPONDENTS REPORTED PSYCHIATRIC COMORBIDITIES.



\*p<0.001 versus UD+

## CONCLUSIONS

- Bipolar depression compared with unipolar depression is associated with more frequent office and emergency care visits, hospitalizations, and use of social services as well as a higher incidence of psychiatric comorbidities such as anxiety, panic attacks, and eating disorders.
- These findings underscore the importance of improving recognition and management of bipolar depression.

## CONTACT INFORMATION

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