Utilization of Psychosocial Treatments by Patients Diagnosed with Bipolar Disorder and Substance Dependence

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We investigated psychosocial treatment interventions, mood symptoms, and substance use among 24 patients with bipolar disorder and substance dependence. Patients were assessed for 6 months following hospital discharge. Psychotherapy and Alcoholics Anonymous (AA) attendance decreased over time. Moreover, the focus of patients' psychotherapy changed over time, with decreasing emphasis on the patients' specific disorders. Mood symptoms and substance use did not change significantly over time, although there was a trend toward more frequent drug use over time. These findings point to infrequent utilization over time of psychosocial treatments focusing specifically on bipolar and substance use disorder. (Am J Addict 2000;9:314-320)

Bipolar and substance use disorders frequently coexist. In a literature review on the subject, Brady and Lydiard estimated that alcohol or drug problems occur in 21% to 58% of patients with bipolar disorder. More recently, Keck and colleagues found that of 106 bipolar patients who were followed for 12 months after hospitalization for either a manic or a mixed mood episode, 55% met criteria for a substance use disorder. Comorbidity between these two disorders is associated with a worse prognosis than with either diagnosis alone, including slower recovery time and more psychiatric hospitalizations.

Received July 26, 1999; revised October 29, 1999; accepted December 13, 1999.
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Despite the high prevalence rate and negative clinical consequences associated with the comorbidity of bipolar and substance use disorders, to our knowledge only one study to date has examined psychosocial interventions among persons diagnosed with bipolar and substance use disorders. O'Sullivan et al. found that abstinent patients reported more frequent attendance at AA meetings than did non-abstinent patients. In addition to attendance at self-help groups, psychotherapy interventions are considered to be an important component of effective treatment for both bipolar and substance use disorders. Although several authors have advocated increased utilization of a broad range of psychosocial interventions for persons with bipolar and substance use disorders, it is unknown to what extent patients make use of these treatments.

The main goal of this study was to examine the naturally occurring course of psychosocial treatment utilization in a sample of this dually diagnosed population; since all patients had to be receiving pharmacotherapy with a mood stabilizer to enter the study, we focused on psychosocial treatment in this report. Data were collected monthly over a six-month post-hospitalization period from patients who served as a comparison group in a study aiming to develop and pilot-test a new, manualized group psychotherapy for patients with coexisting bipolar and substance use disorders. The patients in the current study received “treatment as usual,” i.e., the treatment that they would ordinarily receive, as recommended to them by their treating clinicians. They were evaluated monthly to assess their mood, substance use, overall functioning, and treatment utilization (see below for details of the assessment battery). Indeed, one of the goals of the larger study, and the purpose of this report, was to help define what “treatment as usual” is for this population. In this context, we also examined their mood symptoms and their alcohol and drug use monthly during the six-month assessment period. By highlighting naturally occurring psychosocial treatment patterns and their concurrent symptomatology, we aim to understand better the course of this combination of disorders.

**METHOD**

**Subjects**

Subjects were recruited from an inpatient setting at McLean Hospital by reviewing admission notes and approaching all patients with admitting diagnoses of current bipolar disorder and substance use disorder. Patients were told that we were interested in better understanding the course of bipolar and substance use disorders and therefore wished to see them monthly for the next six months to follow their progress. All patients signed a written informed consent form after having the study explained to them, and they were paid $20 or $50 for each assessment, depending on its length. Patients who agreed to participate were administered the Structured Clinical Interview (SCID) for DSM-IV after detoxification to confirm the diagnoses of current bipolar disorder and substance dependence. Other inclusion criteria included (a) substance use within 30 days before admission, (b) ongoing pharmacotherapy with a mood stabilizer, (c) consent for us to communicate with their pharmacotherapist, and (d) ability and willingness to give written informed consent.

**Assessment and Procedure**

Substance use and mood symptoms were rated by a trained research assistant using the Addiction Severity Index (ASI), fifth edition, the 17-item Hamilton
Depression Rating Scale, and the Young Mania Rating Scale. The research assistant also administered the following structured interviews to inquire about utilization of treatment: the Treatment Services Review, which provides information about treatment sought for medical, psychosocial, and substance use problems, and the Treatment Summary, created and used by our group to inquire about the types of past and current treatment interventions sought, as well as the main focus of these interventions (e.g., bipolar disorder, substance use, both, or other). All measures were completed during the initial intake while the person was hospitalized, and then monthly for 6 months following hospital discharge.

RESULTS

Sociodemographic and Diagnostic Characteristics

Twenty-four patients (13 men, 11 women) who served as the comparison group for the experimental group therapy were included in this study. The mean age of the sample was 33.0 years (SD = 6.4). Patients were primarily white (n = 20; 83.3%), single or divorced (n = 19; 79.2%), and unemployed (n = 16; 66.6%). A majority of the patients (n = 17; 70.8%) were diagnosed with both drug and alcohol dependence; 4 patients (16.7%) were diagnosed solely with drug dependence, and 3 patients (12.5%) were only alcohol dependent. Most patients (n = 18; 75.0%) were diagnosed with bipolar I disorder; 3 patients (12.5%) had bipolar II disorder, and 3 patients (12.5%) had bipolar disorder not otherwise specified.

Treatment Utilization

Treatment utilization patterns during the six-month post-hospitalization period are shown in Figure 1. The most common behavioral treatment received was individual psychotherapy; the number of patients who participated in individual psychotherapy ranged from 17 (70.8%) in Month

![Figure 1: Treatment use over 6-month period.](image-url)
1 to 9 (52.9%) in Month 6 (McNemar test, ns). For those attending individual psychotherapy, frequency of attendance decreased from a mean of 5.3 ± 2.6 days in Month 1 to 3.9 ± 2.1 days in Month 6 (t = −2.66, 20 df, p = .02). Table 1 shows the main focus of psychotherapy, as reported by the patients. Whereas in Month 1, nearly half of the patients reported that treatment focused on both bipolar and substance use disorders, this was significantly less common by Month 6. At that time, nearly half of the patients reported that treatment focused mainly on other topics (Exact McNemar test, p = .03).

Only one patient (4.2%) ever participated in group therapy, and 3 patients (12.5%) participated in either family or couples therapy during the six-month period. Twelve patients (50.0%) attended a day treatment program during Month 1, though no patients were attending day treatment during Month 6 (McNemar test, p = .01). Six patients (25.0%) visited an alcohol or drug counselor or participated in some form of residential treatment during the study period. Sixteen patients (66.7%) attended AA meetings during the first month; attendance decreased to 41.2% (n = 7) in Month 6 (McNemar test, p = .03). For those attending AA, frequency of attendance decreased from a mean of 11.2 ± 11.5 days in Month 1 to 5.3 ± 8.2 days in Month 6 (t = −2.49, 16 df, p = .02). Attendance at Cocaine Anonymous (CA) or Narcotics Anonymous (NA) dropped from 9 patients (38.0%) in Month 1 to 3 patients (17.6%) in Month 6, but this change was not statistically significant (McNemar test, ns).

Mood Symptoms and Substance Use

Mood symptoms, ASI alcohol and drug composite scores ranging from 0 (no substance use problem) to 1 (most severe substance use problem), and number of days of alcohol and drug use were compared between Month 1 and Month 6. Differences in degrees of freedom reflect missing data. Patients’ mean substance use composite scores on the ASI at Month 1 (mean alcohol composite = 0.15 ± 0.16; mean drug composite = 0.08 ± 0.09) were not significantly different from scores obtained at Month 6 (mean alcohol composite = 0.16 ± 0.23; mean drug composite = 0.10 ± 0.23). Similarly, no differences were noted between mean Hamilton Depression Rating Scale scores at Month 1 (16.7 ± 9.9) and at Month 6 (15.7 ± 9.0), nor between mean Young

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**TABLE 1. Primary Focus of Individual Psychotherapy in Month 1 and Month 6**

<table>
<thead>
<tr>
<th>Primary Psychotherapy Focus</th>
<th>Frequency</th>
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<th>Frequency</th>
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<tbody>
<tr>
<td></td>
<td>Month 1 (n = 17)*</td>
<td></td>
<td>Month 6 (n = 9)*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Bipolar disorder only</td>
<td>3</td>
<td>17.6</td>
<td>3</td>
<td>33.3</td>
</tr>
<tr>
<td>Substance use disorder only</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>11.1</td>
</tr>
<tr>
<td>Both bipolar and substance use disorders</td>
<td>8</td>
<td>47.1</td>
<td>4</td>
<td>44.4</td>
</tr>
<tr>
<td>Other†</td>
<td>6</td>
<td>35.3</td>
<td></td>
<td></td>
</tr>
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* n specifies number of people engaged in individual psychotherapy.
† Exact McNemar test, p = .03.
‡ The "other" category includes treatment focusing on family, school, work, and personality disorders.
Mania Rating Scale scores at Month 1 (8.0 ± 9.5) and at Month 6 (5.4 ± 4.6). Figure 2 shows the mean number of days of alcohol and drug use over the six-month period. Although the mean number of days of substance use increased over time, differences between Months 1 and 6 were not statistically significant for alcohol use (t = 0.68, 16 df, ns). There was a trend, however, showing an increase in drug use from Month 1 to Month 6 (t = 2.03, 17 df, p = .06).

**FIGURE 2.** Substance use over 6-month period.

**DISCUSSION**

The goal of our study was to examine prospectively patterns of psychosocial treatment utilization by patients who have recently been hospitalized with comorbid bipolar disorder and substance dependence. The results indicate that the most commonly used treatments were individual psychotherapy and AA. Other treatments, such as family or group therapy, substance abuse counseling, and attendance at CA/NA, were much less frequently used.

These findings may be considered in light of suggestions that psychosocial interventions are thought to enhance bipolar patients' overall functioning. Although rigorous clinical trials of the effectiveness of these interventions are lacking, preliminary studies conducted with bipolar patients (with the substance use status unstated) suggest that interventions such as group and family therapy and psychoeducation regarding bipolar disorder may effectively reduce functional morbidity. Moreover, some authors have recommended that informing bipolar patients of risks associated with substance use ought to be an important component of treatment. Although we cannot ascertain the degree to which psychoeducation concerning bipolar and substance use disorders was part of the treatment received by our sample, patients in our study reported that individual psychotherapy focusing on both bipolar disorder and substance use occurred less often over time. We found also that most patients never made use of other psychosocial treatment modalities, such as family or group psychotherapy. Hence, it
appears that these patients underutilized currently recommended treatments.

In addition to reductions in formal professional treatment, we found that AA attendance decreased over time. The association between AA attendance and substance use among bipolar patients was investigated by O'Sullivan and colleagues, who interviewed bipolar patients with alcohol dependence at 3, 12, and 20 months following discharge from a psychiatric hospital. The percentage of bipolar patients reporting abstinence from alcohol decreased steadily from 75% at 3 months to 50% at 12 months and 42% at 20 months. Abstinent patients reported more frequent attendance at AA meetings and more frequent contact with their general practitioners than did the group that had relapsed. It is thus possible that, as with other populations of patients with substance use disorders, AA attendance may facilitate decreased substance use among patients diagnosed with bipolar and substance use disorders.

There were no statistically significant differences in mood symptoms or substance use between Month 1 and Month 6. However, it is noteworthy that number of days of alcohol and drug use increased over time, suggesting a clinically relevant concern. It is possible that this difference would have reached statistical significance with a larger number of patients. Similarly, even though the ASI alcohol and drug composite were at relatively low severity levels at Month 1 and at Month 6, the standard deviations of these scores were greater at Month 6 than at Month 1. This suggests that alcohol and drug problems worsened for some patients but became less severe for others.

Study limitations may affect the generalizability of our findings. First, this was a small sample composed of patients with fairly homogeneous sociodemographic characteristics who were hospitalized at a single treatment center and who agreed to participate in monthly assessments. The small sample prevents us from conducting analyses investigating any causal links between treatment use, self-help attendance, mood symptoms, and substance use. Moreover, it is unclear if these findings can be generalized to a larger population. Our results are also based solely on patients' retrospective self-reports. Without research data from the treating psychotherapists, we are uncertain to what degree the reported changes in psychotherapy and self-help group attendance were reflective of patients' formal treatment plans. Moreover, self-reports may be associated with biased reporting of substance use. However, it is important to note that in other research conducted by our group with this population, self-reports concerning substance use were highly valid when compared to data obtained from urine screens.

The advocacy by some authors for specialized treatments for patients with bipolar disorder and substance use disorder does not appear to be matched by patients' perceptions of their treatment experiences over time. Given the generally poor prognosis associated with this combination of disorders, the development of dually focused psychosocial treatments for this population may help improve their outcomes. Our group is currently in the process of testing the efficacy of a specialized group therapy for patients with comorbid bipolar and substance use disorders. Future studies may focus on the effectiveness of such interventions and on other factors (e.g., characteristics of patients, clinicians, and systemic issues, such as access to adequate health insurance) that affect treatment utilization by patients diagnosed with these disorders.

This study was supported by grants DA09400 (Dr. Weiss), DA00326 (Dr. Weiss), DA00407 (Dr. Greenfield), DA08631 (Dr. Najavits) and DA00400 (Dr. Najavits) from the National Institute
on Drug Abuse, Bethesda, Md.; grant AA12181 from the National Institute on Alcoholism and Alcohol Abuse, Bethesda, Md.; and a grant from the Dr. Ralph and Marian C. Falk Medical Research Trust, Chicago, Ill. (Dr. Weiss).

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