Eight-month functional outcome from mania following a first psychiatric hospitalization

Stephen M. Strakowski*, Jamie R. Williams, David E. Fleck, Melissa P. Delbello

Bipolar and Psychotic Disorders Research Program, Department of Psychiatry, University of Cincinnati College of Medicine, Cincinnati, OH 45267-0559, USA

Abstract

The aim of this study was to identify how different areas of function (role performance, interpersonal relationships, sexual activity and recreational enjoyment) differentially recover from a manic episode during the 8 months following a first psychiatric hospitalization. Fifty patients with bipolar disorder, 16–45 years of age, who met the criteria for a current manic episode were recruited during their first psychiatric hospitalization. Forty-two (84%) of these participated in follow-up. Patients were evaluated using structured and semi-structured clinical instruments and the four areas of functional outcome were assessed with the LIFE interview. Recovery of the four areas of function were compared using survival and correlational analyses. Logistic regression identified factors associated with functional outcome. The four aspects of function were not significantly intercorrelated at baseline or during follow-up. Moreover, the survival curves for the different areas of function significantly differed. Specifically, patients demonstrated better recovery of sexual activity and worse recovery of recreational enjoyment than the other areas of function. Different clinical and demographic variables predicted recovery of the different areas of function. In conclusion, following a first manic episode, recovery of psychosocial function can be divided into separate components, i.e., role function, interpersonal relationships, sexual activity and recreational enjoyment, that appear to be relatively independent. Further clarification of recovery of these different areas of function may lead to better integrated treatments that maximize functional improvement early in the course of bipolar disorder. © 2000 Elsevier Science Ltd. All rights reserved.

Keywords: Bipolar disorder; Functional recovery; Psychosocial outcome; First-episode

1. Introduction

Most prior outcome studies of bipolar disorder have concentrated primarily or exclusively on symptom improvement, with much less attention to recovery of psychosocial function, so that this aspect of recovery is not well described (Gitlin and Hammen, 1999). Moreover, those studies that have examined functional recovery primarily focused on global measures of function, rather than examining specific, discrete areas of psychosocial activity. For example, Dion et al. (1988) studied 67 bipolar patients 6 months after hospitalization for mania and found that, although 80% of patients exhibited significant symptom resolution, 51% were either unemployed or working below their premorbid level. However, only ratings of occupation and residence were obtained as assessments of functional recovery. In a separate study in 75 patients with bipolar disorder using the same limited ratings, Tohen et al. (1990a) found that poor occupational status after hospital discharge was associated with the number of previous affective episodes, alcoholism, male gender and psychotic features during the index episode. Strakowski et al. (1998) used the nine-item Premorbid Adjustment Scale (Cannon-Spoor et al., 1982) to assess functional recovery of 83 first-episode bipolar patients following hospitalization for psychotic mania. They

---

* Corresponding author. Tel.: +1-513-558-4489; fax: +1-513-558-3399.

E-mail address: strakosm@email.uc.edu (S.M. Strakowski).

only reported results of a summary functional rating, rather than an analysis of individual items. Nonetheless, they found that functional recovery was associated with premorbid employment status and a global rating of premorbid function. Keck et al. (1998), in a similarly designed study of 134 multiple-episode bipolar patients, observed that functional recovery was associated with higher social class.

In contrast to these studies of global or limited measures of psychosocial function, Coryell et al. (1993) studied several specific areas of function in 148 bipolar patients using the Longitudinal Interval Follow-up Evaluation (LIFE; Keller et al., 1987) for 5 years of follow-up as part of the Mental Health Collaborative Program on the Psychobiology of Depression. They found that bipolar patients were more likely than healthy subjects to exhibit persistent impairment in occupational and educational achievement, interpersonal relationships, recreational enjoyment, and sexual activity. However, they did not specifically report recovery of these areas of function per se. Gitlin et al. (1995) studied psychosocial outcome in 82 patients followed for 2–6.5 years. They found that symptom level was the best predictor of occupational adjustment, social functioning and family interactions. Although the patients in this study were well-educated, they, nonetheless, exhibited persistent psychosocial impairment longitudinally. However, both of these latter studies included primarily multiple-episode subjects which may obscure associations of some premorbid factors with functional recovery due to the presence of illness chronicity. Prospectively studying first-episode patients may be more likely to identify premorbid factors that predict the course of illness (Tohen et al., 1990b; Strakowski et al., 1998).

With these considerations in mind, we examined recovery of the four major areas of function identified in the LIFE (role performance, interpersonal relationships, recreational enjoyment, and sexual activity) during the 8 months following a first psychiatric hospitalization in 50 manic bipolar patients. Specifically, we studied whether these areas of function were independent by examining intercorrelations among the four components, by comparing differences in the courses of recovery, and by evaluating associations with clinical and demographic predictors.

2. Methods

2.1. Subjects

Patients were recruited as part of the University of Cincinnati First-Episode Mania Study. The aims of this ongoing project are to examine predictors of long-term outcome following an acute manic episode in patients with bipolar disorder at the time of their first psychiatric hospitalization. Inclusion criteria include: (1) meets DSM-IV criteria for bipolar disorder, manic or mixed; (2) age 16–45 years; (3) no prior psychiatric hospitalizations; (4) less than 1 month of prior psychotropic medication of any kind; (5) English speaking; (6) lives within 50 miles of the Cincinnati metropolitan region; and (7) provision of written informed consent (including parental consent for patients less than 18 years old) after all study procedures have been fully explained and understood. Patients are excluded if psychiatric symptoms: (1) are entirely secondary to acute medical illness as determined by medical examination; (2) result entirely from acute intoxication or withdrawal from drugs or alcohol as determined by symptom resolution within the expected period of acute intoxication or withdrawal, as described previously (Strakowski et al., 1998); or (3) mental retardation (i.e., IQ < 70). This study has been reviewed and approved by the University of Cincinnati Institutional Review Board.

Recruitment for this study began on 6/1/96 and is ongoing. This paper reports functional outcome findings for the first 50 subjects eligible for at least 4 months of follow-up after hospital discharge; i.e., patients hospitalized between 6/1/96 and 9/30/98. During this time, a total of 101 patients were identified for potential study inclusion, of whom 57 (56%) appeared to meet inclusion criteria. Fifty (88%) of these provided written informed consent and 42 (84%) of these completed at least 4 months of follow-up and are the subjects of this report. The eight subjects who did not complete follow-up did not significantly differ from the remaining subjects in any of the clinical or demographic variables assessed.

2.2. Index clinical assessment

The diagnosis of DSM-IV bipolar disorder, manic or mixed was established by psychiatrists or PhD psychologists using the Structured Clinical Interview for DSM-IV, Patient version (SCID-P; First et al., 1995). These investigators are experienced with this instrument and demonstrate good interrater reliability (kappa > 0.90; Strakowski et al., 1998; Keck et al., 1998). Psychiatric symptoms were assessed by the investigators using the Young Mania rating scale (YMRS; Young et al., 1978), the 17-item Hamilton Depression Rating Scale (HDRS; Hamilton, 1960), and the Scale for the Assessment of Positive Symptoms (SAPS; Andreasen, 1984). Patients were rated for the worst period of the current episode, which typically occurred at the time of hospital admission, and good interrater reliability for these measures was achieved (intraclass correlation coefficient, ICC, > 0.70 for most individual symptoms and all total scores). Substance