ELSEVIER

Journal of Affective Disorders 109 (2008) 57–63

Journal of Affective Disorders

www.elsevier.com/locate/jad

Research report

Family history of suicidal behavior and early traumatic experiences: Additive effect on suicidality and course of bipolar illness?

Juan J. Carballo [a,b], Jill Harkavy-Friedman [a], Ainsley K. Burke [a], Leo Sher [a], Enrique Baca-Garcia [a], Gregory M. Sullivan [a], Michael F. Grunebaum [a], Ramin V. Parsey [a], J. John Mann [a], Maria A. Oquendo [a,*]

[a] *Department of Psychiatry, Columbia University and New York State Psychiatric Institute, New York, NY, United States*
[b] *Department of Psychiatry, Clinica Universitaria de Navarra, University of Navarra, Pamplona, Spain*

Received 30 June 2007; received in revised form 9 December 2007; accepted 13 December 2007
Available online 24 January 2008

Abstract

Background: Bipolar disorder (BD) is associated with a high prevalence of suicide attempt and completion. Family history of suicidal behavior and personal history of childhood abuse are reported risk factors for suicide among BD subjects.
Methods: BD individuals with family history of suicidal behavior and personal history of childhood abuse (BD-BOTH), BD individuals with family history of suicidal behavior or personal history of childhood abuse (BD-ONE), and BD individuals with neither of these two risk factors (BD-NONE) were compared with regard to demographic variables and clinical measures.
Results: Almost 70% of the sample had a history of a previous suicide attempt. There were significantly higher rates of previous suicide attempts in the BD-BOTH and BD-ONE relative to the BD-NONE group. BD-BOTH were significantly younger at the time of their first suicide attempt and had higher number of suicide attempts compared with BD-NONE. BD-BOTH were significantly younger at the time of their first episode of mood disorder and first psychiatric hospitalization and had significantly higher rates of substance use and borderline personality disorders compared to BD-NONE.
Limitations: Retrospective study. Use of semi-structured interview for the assessment of risk factors.
Conclusions: BD individuals with a familial liability for suicidal behavior and exposed to physical and/or sexual abuse during childhood are at a greater risk to have a more impaired course of bipolar illness and greater suicidality compared to those subjects with either only one or none of these risk factors. Prospective studies are needed to confirm these findings.

Keywords: Child abuse; Suicide; Family history; Bipolar disorder; Trauma

1. Introduction

Bipolar disorder (BD) is associated with high prevalence of suicide attempt and completion (Chen and Dilsaver, 1996; Goodwin and Jamison, 1990; Jamison, 2000; Tsai et al., 1999; Galfalvy et al., 2006) and suicide accounts for as much as 19% of deaths in BD patients

* Corresponding author. New York State Psychiatric Institute, 1051 Riverside Drive, Unit 42, NY, NY 10032, United States.
E-mail address: mao4@columbia.edu (M.A. Oquendo).

0165-0327/$ - see front matter © 2008 Elsevier B.V. All rights reserved.
doi:10.1016/j.jad.2007.12.225

(Goodwin and Jamison, 1990). Many retrospective studies and a handful prospective studies have identified major suicide risk factors in BD. Family history of suicidal behavior (Galfalvy et al., 2006; Hawton et al., 2005; Slama et al., 2004), personal history of childhood abuse (Garno et al., 2005; Leverich et al., 2002, 2003) and comorbid anxiety disorders (Dilsaver et al., 2006; Simon et al., 2007a, b) are important examples of these risk factors, although not all data are consistent (Nakagawa et al., 2008).

Adoption, twin and family studies show that suicidal behavior runs in families (Brent and Mann, 2005; Goodwin and Jamison, 2007; Brent et al., 2002, 2003). In general, relatives of suicide completers are at high risk for both attempted and completed suicide (Brent et al., 2002) and this has also been found in BD (Tsai et al., 2002, 1999). Earlier age of onset of affective disorders, aggressive/impulsive traits, and a history of childhood abuse in probands with affective disorders are associated with risk for suicidal behavior in offspring (Mann et al., 2005). Whether this is the case specifically for BD individuals has not yet been studied.

Nearly half of adult patients with BD report a history of severe physical, sexual or combined childhood abuse (Brown et al., 2005; Garno et al., 2005; Goldberg and Garno, 2005; Leverich et al., 2002, 2003; Leverich and Post, 2006). BD patients with a history of childhood abuse were shown to have earlier age of onset of bipolar illness, greater Axis I, II, and III comorbidities, and, remarkably, increased rates of suicide attempts (Brown et al., 2005; Garno et al., 2005;Goldberg and Garno, 2005; Leverich et al., 2002, 2003).

Given that liability to suicidal behavior seems to run in families as a trait transmitted independently of psychiatric disorders (Brent and Mann, 2005) and childhood abuse is associated with higher rates of suicide attempts in BD individuals (Post and Leverich, 2006), it would be important to determine if having a family history of suicidal behavior and/or having experienced personal history of childhood abuse would increase risk for suicidal behavior for those with BD. To the best of our knowledge, no study to date has evaluated the effect of concomitant family history of suicidal behavior and childhood abuse on suicidality and course of illness among bipolar subjects. We hypothesized an additive effect for family history of suicidal behavior and childhood abuse among BD individuals.

2. Methods

2.1. Participants

Participants in this study included 168 BD patients who participated in a mood disorder research program at two university hospitals, one in Pittsburgh (13.1% of the sample) and one in New York at New York State Psychiatric Institute (NYSPI; 86.9% of the sample). Bipolar patients were in a depressive or mixed episode at the time of study in order to equate the groups with respect to clinical state. Subjects had a physical examination and routine laboratory screening tests, including urine and blood toxicological screenings to rule out neurological or medical illness.

2.2. Instruments

DSM-III-R Axis I and Axis II disorders were diagnosed using the Structured Clinical Interview (SCID) (Spitzer et al., 1990). Measures of lifetime aggression (Brown and Goodwin, 1986), impulsivity (Barratt, 1965), and hostility (Buss and Durkee, 1957) were used. We also measured current hopelessness (Beck et al., 1974), reasons for living (Linehan et al., 1983), and life stressors (Oquendo et al., 2003). A history of childhood physical or sexual abuse before the age of 15, and a family history of suicidal behavior (only first-degree relatives were included) were rated as present or absent based on self-report during the interview. Family history of substance use disorders and affective disorders was also rated as present or absent based on the Family History RDC Inventory (Andreasen et al., 1977).

A suicide attempt was defined as a self-destructive act that was committed with at least some intent to end one's life. This definition has proven useful in previously published cross-sectional studies (Dilsaver et al., 2005, 2006). A lifetime history of all suicide attempts, including number of attempts and the method and degree of medical damage for each attempt, was recorded on the Columbia Suicide History Form (Oquendo et al., 2003). Current suicidal ideation (Beck et al., 1979), degree of medical damage caused by each suicide attempt (Beck et al., 1975), and suicide intent (Beck et al., 1974) were measured. Inter-rater agreement and intra-class coefficients were good to excellent (≥ 0.70).

2.3. Procedures

Bipolar patients were recruited from emergency rooms, depression research clinics and referrals for outpatient treatment. The study was approved by the Institutional Review Board at each site and written informed consent was obtained from all participants prior to beginning the study. Clinical assessments were conducted by masters or PhD-level psychologists.