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Lifetime rhythmicity and mania as correlates of suicidal ideation and attempts in mood disorders

Matteo Balestrieri[a,*], Paola Rucci[b,c,d,e], Alfredo Sbrana[b,c,d], Laura Ravani[b,c,d], Antonella Benvenuti[b,c,d], Chiara Gonnelli[b,c,d], Liliana Dell'Osso[b,c,d], Giovanni B. Cassano[b,c,d]

[a]*InterUniversity Center for Behavioural Neurosciences, DPMSC, University of Udine, Udine, Italy*
[b]*Department of Psychiatry, University of Pisa, Pisa, Italy*
[c]*Department of Neurobiology, University of Pisa, Pisa, Italy*
[d]*Department of Pharmacology and Biotechnology, University of Pisa, Pisa, Italy*
[e]*Department of Psychiatry, University of Pittsburgh, School of Medicine, Pittsburgh, PA*

Abstract

Background: The aim of this study is to establish to what degree variation in lifetime experience of rhythmicity and manic-hypomanic features correlates with suicidality in individuals with mood disorders and other major psychiatric diagnoses and in a comparison group of controls.

Method: Suicidal ideation and attempts were investigated in a clinical sample, including 77 patients with schizophrenia, 60 with borderline personality disorder, 61 with bipolar disorder, 88 with unipolar depression, and 57 with panic disorder, and in a comparison group of 102 controls.

Using information derived from the diagnostic interview and a self-report assessment of mood spectrum symptoms, subjects were assigned to 3 categories according to the maximum level of suicidality achieved in the lifetime (none, ideation/plans, and suicide attempts). The association of categorical and continuous variables with suicidality levels was investigated using multinomial logistic regression models.

Results: Suicidal ideation and plans were more common in unipolar depression (50%) and bipolar disorder (42.4%) than in borderline personality disorder (30%), whereas the reverse was true for suicidal attempts. In each of the study groups, the number and the type of mood spectrum items endorsed, including depressive and manic-hypomanic items and rhythmicity and vegetative symptoms, were associated with increased levels of suicidality.

Conclusions: Our results suggest that the assessment of lifetime rhythmicity and manic-hypomanic features may be clinically useful to identify potential suicide attempters in high-risk groups.

1. Introduction

Suicide has been associated with many risk factors, each documented by a large amount of evidence. However, most studies on suicide are usually restricted to one domain of possible risk factors, at a social, psychiatric, or psychologic level, resulting in a narrow view of a phenomenon that is in fact multifactorial.

In recent years, comprehensive models have been formulated, which include a number of factors predisposing, protecting from, or precipitating suicide.

The stress-diathesis model of suicide holds that the actual stress, that is, the factors temporarily and directly related to self-harm behavior, is equal or even less critical than the diathesis, that is, the vulnerability factors, in the genesis of suicide. The onset of a psychiatric disorder is a well-known stress-related factor. Research studies usually explore suicidality within one single diagnostic group, such as major depression [1], schizophrenia (SCHI) [2,3], cluster B personality disorder [4], bipolar disorder (BD) [5-8], panic disorder (PD) [9,10], posttraumatic stress disorder [11], and alcoholism [12]. As observed by Mann et al [13], such approach fails to determine whether risk factors are specific to a single diagnosis or allow generalizations across diagnostic boundaries.

Among diathesis-related factors, a number of studies have highlighted the role of psychopathologic traits such as anger

* Corresponding author. Clinica Psichiatrica Policlinico Universitario, Via Colugna 50-33100 Udine, Italy. Tel.: +39 432 559627; fax: +39 432 545526.
E-mail address: matteo.balestrieri@uniud.it (M. Balestrieri).

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[14], impulsivity [14-16], aggression [17,18], hopelessness [15,19,20], and rhythmicity [21-25]. Such studies in general fail to complement their data with information on psychiatric disorders (the stressor). Furthermore, the stress-diathesis model can be integrated with the model of suicidal process [26]. According to this model, suicidal ideation precedes planning, which may result in an attempt leading to death. In retrospective studies, an in-depth investigation of patients attempting or completing suicide attempters or completers can demonstrate a gradually increasing seriousness in suicidal behavior, from weariness of life to death wishes, suicidal thoughts, suicide attempts, and suicide [27]. Unfortunately, most studies focus their investigation only on suicidal attempters, with the consequence that evidence on suicidal ideation is scanty, and it is usually restricted to analyses that explore depressive symptoms. A close investigation of the entire suicide process is, on the contrary, not common [26].

In recent years, a structured interview was developed, which explores the lifetime spectrum of mood disorders (Structured Clinical Interview for Mood Spectrum) [28], conceptualized as 3 broad components exploring signs, symptoms, behaviors, and functioning: the rhythmicity and vegetative symptoms, the manic-hypomanic component, and the depressive component. Each component is obtained by counting up the items endorsed. The mood spectrum underlies a dimensional approach to psychopathology implying that the endorsement of an increasing number of lifetime depressive, manic, or rhythmicity features is indicative of higher severity. The experience of mood spectrum features is assumed to shape the personality of the individual and his/her ability to adjust to life circumstances and may establish a vulnerability to full-fledged *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*, disorders. The manic-hypomanic component proved to be associated with suicidality in unipolar as well as bipolar patients [29]. Using the self-report version of the interview (Mood Spectrum–Self-Report [MOODS-SR]), in the present article, we extended our investigation of the impact of mood spectrum (the diathesis) on suicidal ideation and attempts across different psychiatric diagnoses (stressors) and in a control group to establish the relevance of this dimensional approach to the evaluation of suicidal risk. Anger/overreactivity [30] was also analyzed as a correlate of suicidality.

The aims of this article are, first, to compare the lifetime prevalence of suicidal ideation and attempts across psychiatric diagnoses and a comparison group of controls and, second, to establish to what degree variation in mood spectrum symptoms, such as rhythmicity and manic-hypomanic components, and in anger/overreactivity symptoms correlates with increasing levels of suicidality.

2. Methods

The data in this report were collected between January and December 2002 at 11 Italian departments of psychiatry located at 9 sites: Pisa, Bari, Cagliari, Florence, Milan, Sassari, Siena, Turin, and Udine. A consecutive sample of outpatients and inpatients presenting for treatment at the 11 departments of psychiatry was invited to participate in the study. Eligible patients included new and continuing patients between 18 and 60 years old with a diagnosis of SCHI, borderline personality disorder (BPD), BD, unipolar depression (UD), PD, and a comparison group of controls. Exclusion criteria were severe medical illness, neurologic diseases, substance abuse in the month preceding the index assessment, and inability to participate because of the severity of psychiatric symptoms. A comparison sample was recruited among patients attending medical departments and among university students. The ethics committee of the Azienda Ospedaliera Universitaria Pisana approved all recruitment and assessment procedures. Eligible subjects provided written informed consent after receiving a complete description of the study and having an opportunity to ask question. Refusals to participate in the study did not exceed 5% of subjects in each site.

2.1. Assessment

The diagnostic interview included the Structured Clinical Interview for *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (SCID), Axis I disorders [31], and Gunderson's Diagnostic Interview for Borderlines [32].

The severity of psychotic symptoms was rated by using the Brief Psychiatric Rating Scale [33]. These assessments were conducted by psychiatrists and residents in psychiatry who were trained at the Department of Psychiatry of the University of Pisa and certified in the use of the study instruments when they reached an excellent interrater reliability (>0.90) with the trainer (CG).

The MOODS-SR [34] was also administered. This self-report instrument, derived from the corresponding structured interview [28], explores features associated with mood disorders. It focuses on the presence of manic and depressive symptoms, traits and lifestyles that may characterize the "temperamental" affective dysregulations that make up both fully syndromal and subthreshold mood disturbances. The latter include either isolated or clustered symptoms and traits throughout individual's lifetime. The MOODS-SR consists of 161 items coded as present or absent for 1 or more periods of at least 3 to 5 days through the subject's lifetime. For some questions exploring temperamental features or the occurrence of specific events, the duration is not specified because it would not be applicable.

Items are organized into 3 manic-hypomanic and 3 depressive domains exploring mood, energy, and cognition, plus a domain that explores disturbances in rhythmicity (ie, changes in mood, energy, and physical well-being according to the weather, the season, and the phase of menstrual cycle) and in vegetative functions, including sleep, appetite, and sexual function. The sum of the scores on the 3 *manic-hypomanic* domains constitutes the manic-hypomanic component and that of the 3 depressive domains the *depressive*