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Research report

Characterization of patients with mood disorders for their prevalent temperament and level of hopelessness

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ABSTRACT

Background: Mood disorders (MD) are disabling conditions throughout the world associated with significant psychosocial impairment. Affective temperaments, as well as hopelessness, may play a significant role in the pathophysiology of MD. The present study was designed to characterize patients with MD for their prevalent affective temperament and level of hopelessness.
Methods: Five hundred fifty-nine (253 men and 306 women) consecutive adult inpatients were assessed using the Temperament Evaluation of Memphis, Pisa, Paris and San Diego-Autoquestionnaire version (TEMPS-A), the Gotland Scale for Male Depression (GSMD), the Beck Hopelessness Scale (BHS) and the Mini International Neuropsychiatric Interview (MINI).
Results: Higher cyclothymia and irritable temperaments were found in bipolar disorder-I (BD-I) patients compared to those with other Axis I diagnoses. Major depressive disorder (MDD) patients had lower hyperthymia than BD-I and BD-II patients and higher anxiety than patients with other Axis I diagnoses. Severe "male" depression was more common in BD-II patients compared to BD-I and MDD patients. BD-I patients and those with other axis I diagnoses reported lower BHS ≥ 9 scores than those with BD-II and MDD.
Limitations: The study had the limitations of all naturalistic designs, that is, potentially relevant variables were not addressed. Furthermore, the cross-sectional nature of the study did not allow conclusions about causation, and the use of self-report measures could be potentially biased by social desirability.
Conclusion: MDD patients were more likely to have higher anxious temperament, higher hopelessness and lower hyperthymic temperament scores, while BD-I patients more often had cyclothymic and irritable temperaments than patients with other Axis I diagnoses. The implications of the present results were discussed.

1. Introduction

Although affective disorders, including the unipolar and bipolar types of major depression, represent an increasing disease burden worldwide, we still lack sufficient knowledge concerning the background factors which, in turn, means that we lack sufficiently adequate and efficacious treatment (Goodwin and Jamison, 2007). As a result, these disorders are projected to be among those disorders associated with the highest disease burden in the future (Murray and Lopez, 2013). One major reason for the lack of more effective available treatments is our incomplete knowledge

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about the pathological processes differentiating the subtypes of major affective disorders, processes which could influence the effectiveness of different biopsychosocial interventions, and which would also provide important hints for early detection and early intervention procedures.

As a result of genetic, clinical, biological and treatment-related differences, the separation of unipolar depression from bipolar disorder, as well as the subdivision of bipolar disorder further into bipolar disorder type I (BD-I, involving episodes of major depression and mania) and type II (BD-II, involving episodes of major depression and hypomania) subtypes, has been accepted for many years (Benazzi, 2007; Coryell, 1996; Goodwin and Jamison, 2007). One important difference between these illnesses concerns "premorbid personality." Previous studies have demonstrated that there is a continuum between cyclothmic disorder (having for at least 2 years, the presence of numerous periods with hypomanic symptoms and numerous periods with depressive symptoms that do not meet criteria for a Major Depressive Episode), BD-II and BD-I (Akiskal et al., 1977; Depue et al., 1981; Klein et al., 1985) and between subsyndromal depression (that is a depressive state having two or more symptoms of depression of the same quality as in major depression, excluding depressed mood and anhedonia), minor depression (a mood disorder that does not meet full criteria for major depressive disorder but in which at least two depressive symptoms are present for two weeks) dysthymia (that is a kind of chronic depression, which persists for at least 2 years and it is less acute and severe than major depressive disorder) and unipolar major depression (which involves a pervasive and persistent low mood that is accompanied by low self-esteem and by a loss of interest or pleasure in normally enjoyable activities, and does not have episodes of mania or hypomania) (Akiskal et al., 1978; Judd and Akiskal, 2000; Lewinsohn et al., 2003), indicating that patients presenting with milder forms of mood disorders have a very high risk for developing more severe manifestations later.

Affective temperaments, defined as subaffective and subclinical manifestations of affective disorders when present in a dominant form (Akiskal et al., 2005), are considered to be traits involving characteristic mental processes related to emotional reactivity which, although evolutionally adaptive both in their normal manifestation as well as in the extreme (Akiskal and Akiskal, 2007), may contribute to high risk states with respect to the development of affective illness (Rihmer et al., 2010). Furthermore, besides increasing proneness, they also have an important pathoplastic role influencing the manifestation, symptoms, course, response to therapy and other related outcomes of affective disorders (Rihmer et al., 2010), making them key players and planning and defining long-term treatment and management of these highly debilitating conditions.

The premorbid personality, or more precisely premorbid affective temperament, has traditionally been believed to be extroverted, active, sociable and hyperthymic in BD and introverted, depressive and anxious in unipolar depression (Goodwin and Jamison, 2007). However, the relationship between affective temperament-types and different clinical manifestations of major mood disorders is quite complex. More specifically the hyperthymic temperament and, to lesser extent the cyclothymic temperament, is characteristic of BD-I (Chiaroni et al., 2005; Mendlowicz et al., 2005), while the depressive temperament prevails in unipolar major depressive disorder (MDD) (Cassano et al., 1992). However, among BD-I patients with predominant depressive polarity, the characteristic temperament-type is the depressive type but, among those with higher frequency of manic episodes, the hyperthymic temperament is more common (Henry et al., 1999). In contrast to this, the cyclothymic temperament is highly sensitive (88%) in identifying BD-II (Hantouche et al., 1998) and has high predictive power for bipolar, particularly for BD-II, transformation in patients with MDD (Kochman et al., 2005). In addition, rapid shifts in mood and energy (alternating ups and downs),
a core feature of the cyclothymic temperament, can also be detected in a subgroup of "unipolar" depressives, but almost exclusively among those with a positive family history of BD (Hantouche and Akiskal, 2006).

In psychiatry and, in particular, in the field of affective disorders, the cross-sectional clinical picture is insufficient for making a precise clinical diagnosis and to choose optimal treatment. Considering affective temperaments in patients with mood disorders can help to make precise clinical diagnoses and can predict the long-term course and prognosis of the illness.

Although there is ongoing research on the association of affective temperaments and affective illness, this research is generally limited with respect to its methodology and the number of subjects involved, and there are very few studies investigating the contribution of affective temperaments along with other important variables playing a role in the development, course and outcome of affective disorders such as hopelessness and male type depression, although assessing the complex pattern of these factors could provide a powerful means of more specifically targeting the screening, treatment and prevention of more negative outcomes of these illnesses such as suicide, which is highly associated with affective disorders (Pompili et al., 2012b; Rihmer et al., 2010).

One important feature of affective disorders is that they are associated with an extremely high risk of suicide, as the majority of those committing suicide are suffering from some type of affective disorders, Furthermore, the risk of suicide is not evenly distributed between the different types of affective illness, and a substantial proportion of affective disorder patients never exhibit any type of suicidal behavior. It is, therefore, crucial to predict which patients are at a high risk of this highly unfavorable outcome. Affective temperaments are well-known to be involved in increased (Girardi et al., 2011; Kochman et al., 2005; Pompili et al., 2009b; Pompili et al., 2009c; Pompili et al., 2012a) or even decreased (Vazquez et al., 2010) suicide risk, and the role of hopelessness as an independent and strong predictor of suicidal behavior has been widely investigated (Beck et al., 1990; Beck and Steer, 1989). It has been reported that irrespective of gender, male type depression shows a strong association with suicidal behavior (Innamorati et al., 2011; Rutz et al., 1995; Walinder and Rutz, 2001). It is, therefore, important to understand the pattern of these characteristics associated with different subtypes of depression.

Since Akiskal (1995) postulates that temperamental dysregulation is the fundamental pathology involved in mood disorders, and since its presence in individuals reflects an increased predisposition for developing an affective disorder, the aim of the present study was to characterize mood disorders for their prevalent affective temperament and level of hopelessness. We use statistical models to compare mood disorder patients with other Axis-I psychiatric diagnoses. In this study we also involved the "male depression" construct which points to the fact that depression in men often seems to be masked by atypical symptoms like irritability, anger attacks, aggression, stress, anxiety, and fatigue. As we reported in the dedicated section below this construct is valid for females as well, and for investigating symptoms of depression not included in shared classification systems. The study addressed two major issues: (1) to what extent do patients suffering from mood disorders differ in their prevalent temperament; and (2) to what extent do mood disorder patients differ in their level of hopelessness, a proxy for both for quality of life and suicide risk. We hypothesize that patients suffering from unipolar major depression differ in prevalent temperaments as compared with bipolar