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Borderline personality features in depressed or anxious patients

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ABSTRACT

Anxiety and depression frequently co-occur with borderline personality disorder. Relatively little research examined the presence of borderline personality features and its main domains (affective instability, identity problems, negative relationships and self-harm) in individuals with remitted and current anxiety and depression. Participants with current ($n=597$) or remitted ($n=1115$) anxiety and/or depression and healthy controls ($n=431$) were selected from the Netherlands Study of Depression and Anxiety. Assessments included the Personality Assessment Inventory – Borderline Features Scale and several clinical characteristics of anxiety and depression.

Borderline personality features were more common in depression than in anxiety. Current comorbid anxiety and depression was associated with most borderline personality features. Anxiety and depression status explained 29.7% of the variance in borderline personality features and 3.8% (self-harm) to 31% (identity problems) of the variance in the four domains. A large part of the variance was shared between anxiety and depression but both disorders also explained a significant amount of unique variance. The severity of anxiety and depression and the level of daily dysfunctioning was positively associated with borderline personality features. Individuals with a longer duration of anxiety and depression showed more affective instability and identity problems. These findings suggest that patients with anxiety and depression may benefit from an assessment of personality pathology as it may have implications for psychological and pharmacological treatment.

1. Introduction

Depressive and anxiety disorders are among the most prevalent psychiatric disorders with life time prevalence rates around 20% (Kessler et al., 2005; De Graaf et al., 2012). Comorbidity with Borderline Personality Disorder (BPD) is high ranging from 13 to 14% for depressive disorders (Friborg et al., 2014) and from 6 to 10% for anxiety disorders, excluding Post-Traumatic Stress Disorder (Friborg et al., 2013). The other way around, rates of lifetime depressive and anxiety disorders in BPD patients both go up to around 85% (Gunderson et al., 2008; Silverman et al., 2012; Tomko et al., 2014). BPD is characterized by instability in several domains including affective functioning, relationships, identity and cognition. BPD patients often engage in problematic behavior such as substance abuse, binge eating, suicide attempts and other self-harm behavior, making it a highly disturbing disorder (American Psychiatric Association, 2000; Skodol et al., 2002).

Patients with comorbid major depressive disorder and BPD are more actively suicidal (Soloff et al., 2000; Soloff and Chiappetta, 2012; Amore et al., 2014), have earlier age of onset of their depression and are more often chronically depressed (Joyce et al., 2003; Amore et al., 2014). A large recent meta-analyses revealed that BPD patients with an additional comorbid depressive disorder were more severely depressed than patients with a depressive disorder only (Kohling et al., 2015). Studies into the clinical presentation of patients with anxiety disorders and comorbid BPD are scarce. The comorbidity with personality disorders in general is associated with higher levels of anxiety, lower levels of general functioning and stronger associations with suicide attempts (Ozkan and Altindag, 2005; Nepon et al., 2010). For BPD specific, Ozkan and Altindag (2005) showed that BPD predicted suicide attempts and an earlier age of onset of the anxiety disorder in panic disorder patients. Skodol et al. (1995) showed that patients with comorbid anxiety disorder and BPD had lower levels of functioning than patients with anxiety disorders alone.

Knowledge of borderline personality features in patients with

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anxiety and depression is thus of great clinical relevance. We will add to the available literature in several ways. First, most available studies on the comorbidity of depression and anxiety and BPD used a categorical classification of the disorders. Often however, borderline personality features are apparent at subthreshold level where they may already have a significant unfavorable impact on the presentation of psychiatric disorders. The present study therefore uses a dimensional measure of borderline personality features to study the association with depression and anxiety. In addition, we will take into account that BPD is a very heterogeneous disorder. We will study whether associations between anxiety and depression and borderline personality features are consistent across four main domains of BPD: affective instability, identity problems, negative relationships and self-harm.

A total of 50–70% of the patients with anxiety or depression are exposed to both disorders (De Graaf et al., 2003; Penninx, 2015). Although this comorbidity is substantial, most studies on the comorbidity with BPD focus on one of the two disorders. The present study focuses on both disorders. This way, the unique and common association with borderline personality features and its main domains can be determined. The presence of borderline personality features will be compared between healthy controls and subjects with remitted, current and comorbid anxiety and depression. Finally, in addition to clinical diagnoses, the strength of the relationship between specific clinical characteristics of depression and anxiety and borderline personality features will be examined.

2. Materials and methods

2.1. Sample

Data were drawn from the Netherlands Study of Depression and Anxiety (NESDA). NESDA is an ongoing cohort study designed to investigate the course and consequences of depressive and anxiety disorders. A total of 2981 participants with a current or past anxiety or depressive disorder and healthy controls were recruited from the community, primary care and secondary mental health care. Participants were all aged between 18 and 65 years at the baseline assessment in 2004–2007. During the baseline interview the presence of a depressive (major depressive disorder, dysthymia) and/or anxiety (social phobia, generalized anxiety disorder, panic disorder and agoraphobia) disorder was determined using the DSM-IV based Composite International Diagnostic Interview (CIDI, version 2.1). The CIDI is used worldwide and WHO field research has found high interrater reliability (Wittchen et al., 1991), high test-retest reliability (Wacker et al., 2006) and high validity for depressive and anxiety disorders (Wittchen et al., 1989; Wittchen, 1994). Control subjects had no lifetime diagnoses of the above described anxiety or depressive disorders. In order to enhance representativity only two exclusion criteria existed: 1) not being fluent in Dutch, and 2) a primary clinical diagnosis of other psychiatric conditions (such as psychotic disorder, obsessive compulsive disorder, bipolar disorder or severe addiction disorder) that would largely affect the course trajectory. A detailed description of the NESDA study design and sampling method can be found elsewhere (Penninx et al., 2008). Face-to-face follow up assessments took place two, four and six years after the baseline assessment. In addition to the interview assessment, participants filled out a questionnaire measuring a range of clinical characteristics. For the current study, the 6-year follow up assessment was used since both the CIDI psychiatric interview determining anxiety and depressive disorders and the Personality Assessment Inventory– Borderline Features Scale (PAI-BOR) was included at this time. A total of 2256 (75.7%) participants took part in the 6-year follow up study. Only participants for whom CIDI interview and PAI-BOR questionnaire data were available were included in the analyses (N=2143). Consequently, the total sample consisted of 431 healthy controls, 1115 participants with a remitted anxiety and/or depressive disorder (164 with remitted anxiety, 324 with remitted depression and 627 with remitted anxiety and depression) and 597 participants with a current (6-month) anxiety and/or depressive disorder (220 with current anxiety, 183 with current depression and 194 with current anxiety and depression).

2.2. Measures

2.2.1. Severity of anxiety and depressive symptoms

The severity of depressive symptoms was measured with the 30-item Inventory of Depressive Symptomatology (IDS; Rush et al., 1996), each with four answering options coded 0–3, and good reliability (α=0.86). The IDS assesses all DSM-IV criterion symptom domains for major depressive disorder, plus commonly associated symptoms (e.g. anxiety, irritability) and symptoms relevant to melancholic and atypical features. The questionnaire uses a 7-day timeframe for assessing symptom severity. The IDS scale score (0–84 score) is computed by summing the responses of 28 of the 30 items, either appetite increase or decrease, and weight increase or decrease but not both, are used to calculate the total score.

The severity of anxiety symptoms was measured with the Beck Anxiety Inventory (BAI; Beck et al., 1988), consisting of 21 items (0–63 score; α=0.92) designed to measure the severity of mainly arousal-related symptoms of anxiety. The respondents were asked to rate how much they have been bothered by each symptom over the past week on a 4-point scale, ranging from 0 (not at all) to 3 (severely, I could barely stand it). The Fear Questionnaire (FQ; Marks and Mathews, 1979), a 15-item questionnaire (0–120 score; α=0.89) using a nine-point scale from '0: would not avoid it' to '8: always avoid it', was used to assess the level of avoidance. The abbreviated 11-item (11–55 score) Penn State Worry Questionnaire (PSWQ; Meyer et al., 1990) was included to assess pathological worry. Each statement was rated on a scale of 1 ('not at all typical of me') to 5 ('very typical of me').

2.2.2. Duration of anxiety and depressive symptoms

Duration of anxiety and depressive symptoms was calculated using life chart interview (LCI) data as the percentage of time between the last and the current assessment with anxiety and/or depressive symptoms of at least mild severity. More specifically, duration of symptoms was calculated as (number of affected months/total number of follow-up months)*100%, and ranged from 0% (no symptoms during follow-up years) to 100% (symptoms during entire follow-up period). This way the LCI gives a cumulative indication of the duration of the symptoms. The method behind the LCI was described in detail by Lyketsos et al. (1994) and the methodology has shown high validity and reliability (Warshaw et al., 1994).

2.2.3. Daily functioning

The 36-item (0–100 score) World Health Organization Disability Assessment Schedule II (WHODAS II; World Health Organization, 2000) was used to measure the level of functioning and disability. The respondents are asked to rate how much difficulty they had in several domains of functioning in the past 30 days on a 5-point scale, ranging from 1 (none) to 5 (extreme, cannot do). The scoring of WHODAS II is based on averaging responses and then transforming scores into a standard scale.

2.2.4. Age of onset

Age of depression and anxiety disorder onset was derived from the CIDI interview.

2.2.5. Borderline personality features

Borderline personality features were assessed by the 24-item Personality Assessment Inventory – Borderline Features Scale (PAI-BOR; Morey, 1991). The PAI-BOR consists of four subscales each with six items reflecting features of psychopathology that are clinically associated with BPD. Items can be rated on a four-point scale ranging from 0 (false) to 3 (very true). Affective instability (BOR-A; α=0.74) refers to a propensity to alternate rapidly between negative affects, especially in response to stimuli from the environment. Identity problems (BOR-I; α=0.71) reflect difficulties in maintaining a constant representation of self-identity, including sudden changes in ambitions and life goals. Negative relationships (BOR-N; α=0.63) refer to a tendency to become involved in intense and unstable relationships. Self-harm (BOR-S; α=0.68) reflects the tendency to act impulsively often resulting in self-damaging behavior. In addition, a total sum score can be computed (BOR-TOT; α=0.87).

According to the PAI-BOR manual (Morey, 1991) a T-score on the BOR-TOT of 59 or below reflects an average score. Scores ranging from 60T to 69T are elevated scores and individuals with a score of 70T or above show significant BPD features. Scores in this range only suggest a BPD diagnosis if there are elevations on most of the PAI-BOR subscales because individual features are also common to other disorders. Scores at 92T or above are typically associated with personality functioning within the BPD range. A DSM IV BPD diagnosis is highly likely if an individual has significant BPD features and above average scores on most subscales (Morey, 1991).

2.3. Statistical analyses

Data were analyzed using SPSS 20.0 (IBM Corp., 2011). Differences in sociodemographics, clinical characteristics, borderline personality features and daily functioning across the seven groups [healthy controls (1), remitted anxiety (2) and remitted depressive (3) disorder, comorbid anxiety and depressive disorder (4), current anxiety (5) and current depressive (6) disorder and current comorbid anxiety and depressive disorder (7)] were examined using analyses of variance (ANOVA) for continuous variables and chi-square statistics for the dichotomous variable (sex). Individuals were not included in multiple groups. Individuals in the groups with a current diagnosis may or may not have had a remitted diagnosis, but a current diagnosis was always used first when classifying persons in groups.