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The impact of comorbid depression on recovery from personality disorders and improvements in psychosocial functioning: Results from a randomized controlled trial

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ABSTRACT

Depressive disorders often co-occur with personality disorders. The extent to which depressive disorders influence treatment outcome in personality disorders remains unclear. The aim of this study was to determine the impact of co-morbid depression on recovery from personality disorders and improvements in psychosocial functioning. This study drew data from a randomized-controlled trial in which patients ($N = 320$) with cluster-c (92%), paranoid, histrionic and/or narcissistic personality disorders received schema-therapy, treatment-as-usual, or clarification-oriented psychotherapy. Recovery from personality disorders at three-year follow-up and improvements in psychosocial functioning over a course of three years was predicted by the diagnostic status of depressive disorders at baseline using mixed model regression analyses. Based on the number of axis-I and axis-II disorders, personality disorder severity and global symptomatic distress and functioning a baseline severity index was computed and included in subsequent analyses to test the specificity of baseline depression in predicting outcomes. Patients with co-occurring depression reported higher baseline severity compared to patients without co-occurring depression. Depression at baseline was associated with lower recovery rates at three-year follow-up ($p = 0.01$) but this effect disappeared after controlling for baseline severity. Patients with depression at baseline reported higher psychosocial impairments throughout treatment ($p < 0.001$). Depression at baseline did not moderate treatment effects except for one psychosocial outcome measure. In conclusion, depression is associated with lower recovery rates from personality disorders but this effect disappears when general severity is taken into account. Patients with primarily cluster-c personality disorders and co-occurring depression might benefit from additional depression treatment in terms of improved psychosocial functioning.

Introduction

Personality disorders and depressive disorders often co-occur. Results from the Collaborative Longitudinal Personality Disorders Study (CLPS; Gunderson et al., 2000) suggest that about 60% of patients with a personality disorder also have a current depressive disorder (Skodol et al., 1999). This high comorbidity can have important treatment implications. Depressive disorders among patients with personality disorders might interfere with recovery from personality disorders and psychosocial adjustments during treatment. Most previous research on the association between depressive and personality disorders has focused on the impact of personality disorders on recovery of depression (e.g. Newton-Howes, Tyrer, & Johnson, 2006; Newton-Howes et al., 2014) rather than on the impact of comorbid depression on recovery of personality disorders.

Three previous studies drew data from a naturalistic cohort study, the CLPS (Gunderson et al., 2000), to study the relation between depression and personality disorder outcomes. Shea et al.

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found that remission from depression was related to higher chances of remission from borderline personality disorder at two-year follow-up (Shea et al., 2004). Hellerstein et al. (2010) found that personality disorder patients with comorbid dysthymic disorder had a higher chance to still meet criteria of a personality disorder and had worse psychosocial functioning at a two-year follow up assessment. Finally, Gunderson et al. (2004) found no evidence that the presence of major depressive disorder was associated with remission of borderline personality disorder at three-year follow-up. Another prospective longitudinal study found that borderline personality disorder patients who did not meet criteria for a mood disorder had higher chances to reach remission during one of the follow-up assessments at 2, 4, or 6-years (Zanarini, Frankenburg, Hennen, Reich, & Silk, 2004).

In these naturalistic cohort studies it remains unclear how depression is related to treatment outcome for personality disorders as the potential influence of depression on treatment allocation is not controlled for. The types and adequacy of received treatments remains unclear and patient cohort studies are potentially confounded by indication: personality disorder patients with comorbid depression participating in a cohort study might receive qualitatively and quantitatively different treatments than patients without comorbid depression. The effects of depression on outcome in personality disorders should therefore be studied in randomized controlled trials (RCT) where patients are randomized to treatment conditions regardless of depression comorbidity. Therefore, the aim of this study was to determine the impact of comorbid depression on recovery from personality disorders and improvements in psychosocial functioning in patients with personality disorders participating in an RCT (Bamelis, Evers, & Arntz, 2012). To the best of our knowledge, the current study is the first to determine the impact of comorbid depression on outcome in the treatment of personality disorders in an RCT. We hypothesized that the presence of a diagnosis of a current DSM-IV depressive disorder at baseline would predict lower recovery levels and less improvement in psychosocial functioning at 3-year follow-up.

Methods

The present study is based on data from a multi-centre randomized controlled trial on the (cost-)effectiveness of schema therapy for personality disorders. A more detailed description of the design, methods, and interventions of this study is available elsewhere (Bamelis et al., 2012). In this study 323 patients with a primary diagnosis of a DSM-IV cluster-c (92%), histrionic, narcissistic or paranoid personality disorder were randomized to a 50 session protocol of schema therapy (n = 147; Arntz, 2012), treatment-as-usual (n = 135), or clarification-oriented psychotherapy (n = 41; Sachse, 2001). The reason for the exclusion of other personality disorders was that they were assumed to require lengthier and highly specialized treatment protocols. Inclusion criteria for participation in the study were a diagnosis of at least one DSM-IV personality disorder, as assessed with the Structured Clinical interview for DSM-IV Axis II personality disorders (SCID-II) (First, Spitzer, Gibbon, & Williams, 1994); age between 18 and 65 years. Patients were excluded if they met full or sub-threshold criteria of antisocial, schizotypal, schizoid or borderline personality disorder; had a present or lifetime diagnosis of psychosis or bipolar disorder; had an IQ below 80; had acute suicide risk or reported substance abuse that required detoxification. Of the 323 patients who were randomized, 2 moved away during the randomization period and one withdrew consent so that the final analyses sample is based on 320 patients. Table 1 provides an overview of basic demographic characteristics of the sample and the specific personality disorder diagnoses.

Table 1
Demographic and clinical characteristics of patients with co-occurring depression and patients without co-occurring depression at baseline.

	Depression (n = 141)	No depression (n = 179)	t-test (p-value)	$\chi 2$ (p-value)
Gender, n (%)			–	0.650
Female	82 (58.2)	99 (55.3)		
Male	59 (41.8%)	80 (44.7)		
Age (years), M (SD)	37.62 (9.36)	38.27 (9.82)	0.545	–
Personality disorder diagnosis, n (%)				
Avoidant	99 (70.2)	107 (59.8)	–	0.06
Obsessive-compulsive	51 (36.2)	71 (39.7)	–	0.523
Depressive	52 (36.9)	41 (22.9)	–	0.006
Dependent	25 (17.7)	25 (14)	–	0.357
Paranoid	6 (4.3)	4 (2.2)	–	0.302
Narcissistic	8 (5.7)	9 (5)	–	0.798
Passive-aggressive	6 (4.3)	4 (2.2)	–	0.302
Histrionic	0	2 (1.1)	–	0.208

Measures

The primary outcome measure in the current study was recovery from personality disorders, as assessed by blinded independent interviewers with the SCID-II interview at three-year follow-up. Recovery was defined as not meeting diagnostic criteria of any personality disorder. The inter-rater reliability for the SCID-II in the current study was good (Intraclass correlation coefficient = 0.84; based on 42 double-rated interviews; Bamelis, Evers, Spinhoven, & Arntz, 2014). Reliability data for the SCID-I mood disorder diagnoses are not available from the present study, but raters from our research group who received the same training attained fair to excellent inter-rater reliability for major depressive disorder (kappa 0.66) and dysthymia (kappa 0.81) in a different sample (Lobbestael, Leurgans, & Arntz, 2011). If SCID-II assessments were missing (35.9% missing at follow-up) the personality disorder diagnoses from the last available Assessment of DSM-IV Personality Disorders Questionnaire (ADP-IV; Schotte & Doncker, 1996) were used instead. The ADP-IV is a self-report questionnaire that was assessed at every intermediate and follow-up assessment. Participants indicated along a 7-point Likert scale whether a DSM-IV personality disorder criteria applies to them (1 = not at all; 7 = completely) and the degree of distress they experience from that criteria. These assessments form the ADP-IV traits and ADP-IV distress scales. Adequate psychometric properties have been reported for the ADP-IV (Schotte, De Doncker, Vankerckhoven, Vertommen, & Cosyns, 1998; Schotte et al., 2004).

Assessor based secondary outcomes were global functioning as assessed by the Global Assessment of Functioning Scale (GAF; American Psychiatric Association, 2005) and psychosocial functioning as assessed by the Social and Occupational Functioning Scale (SOFAS; American Psychiatric Association, 2005). Independent assessors rated participants every 6 months on the scales after a semi-structured interview designed to elicit information necessary for the rating. Self-reported psychosocial functioning was assessed using the Work and Social Adjustments Scale (WSAS; Mundt, Marks, Shear, & Greist, 2002).

Axis-I mood disorders at baseline were assessed by research assistants using the Structured Clinical Interview for DSM-IV Axis-I disorders (First, Spitzer, Gibbon, & Williams, 1997). A more detailed description of the instruments used in the study and their psychometric properties is available elsewhere (Bamelis et al., 2012).

Interventions

Schema therapy (ST) is an integrative psychotherapy combining experiential, cognitive-behavioural, psychodynamic and interpersonal techniques (Young, Klosko, & Weishaar, 2003). In the current