European Psychiatry 33 (2016) 37–44

Contents lists available at ScienceDirect

European Psychiatry

journal homepage: http://www.europsy-journal.com

Original article

Self-reported symptoms of schizotypal and borderline personality disorder in patients with mood disorders

I. Baryshnikov [a,1], J. Suvisaari [a,b], K. Aaltonen [a,c,1], M. Koivisto [a], P. Näätänen [a], B. Karpov [a], T. Melartin [f,2], J. Oksanen [b], K. Suominen [d,e,3], M. Heikkinen [a], T. Paunio [a], G. Joffe [a], E. Isometsä [a,c,*]

[a] Department of Psychiatry, University of Helsinki and Helsinki University Hospital, P.O. Box 22, (Välskärinkatu 12 A), 00014 Helsinki, Finland
[b] Department of Social Services and Health Care, Helsinki, Finland
[c] National Institute for Health and Welfare, Mental Health Unit, Mannerheimintie 166, 00271 Helsinki, Finland
[d] City of Helsinki, Social Services and Healthcare, Helsinki, Finland
[e] Aurora Hospital, P.O. Box 6800, 00099 Helsinki, Finland
[f] Department of Psychiatry, University of Helsinki and Helsinki University Hospital, P.O. Box 590, 00029 Helsinki, Finland

ARTICLE INFO

Article history:
Received 27 November 2015
Received in revised form 21 December 2015
Accepted 23 December 2015
Available online 6 February 2016

Keywords:
Borderline Personality Disorder
Schizotypal Personality Disorder
McLean Screening Instrument
Schizotypal Personality Questionnaire Brief

ABSTRACT

Background: Distinguishing between symptoms of schizotypal (SPD) and borderline personality disorders (BPD) is often difficult due to their partial overlap and frequent co-occurrence. We investigated correlations in self-reported symptoms of SPD and BPD in questionnaires at the levels of both total scores and individual items, examining overlapping dimensions.
Methods: Two questionnaires, the McLean Screening Instrument (MSI) for BPD and the Schizotypal Personality Questionnaire Brief (SPQ-B) for SPD, were filled in by patients with mood disorders ($n = 282$) from specialized psychiatric care in a study of the Helsinki University Psychiatric Consortium. Correlation coefficients between total scores and individual items of the MSI and SPQ-B were estimated. Multivariate regression analysis (MRA) was conducted to examine the relationships between SPQ-B and MSI.
Results: The Spearman's correlation between total scores of the MSI and SPQ-B was strong (rho = 0.616, $P < 0.005$). Items of MSI reflecting disrupted relatedness and affective dysregulation correlated moderately (r_φ varied between 0.2 and 0.4, $P < 0.005$) with items of SPQ. Items of MSI reflecting behavioural dysregulation correlated only weakly with items of SPQ. In MRA, depressive symptoms, sex and MSI were significant predictors of SPQ-B score, whereas symptoms of anxiety, age and SPQ-B were significant predictors of MSI score.
Conclusions: Items reflecting cognitive-perceptual distortions and affective symptoms of BPD appear to overlap with disorganized and cognitive-perceptual symptoms of SPD. Symptoms of depression may aggravate self-reported features of SPQ-B, and symptoms of anxiety features of MSI. Symptoms of behavioural dysregulation of BPD and interpersonal deficits of SPQ appear to be non-overlapping.

1. Introduction

The relationship between borderline personality disorder (BPD) and schizotypal personality disorder (SPD) is complicated and has been a subject of debates for years [1–3]. In the Diagnostic and Statistical Manual of Mental Disorder III-R (DSM-III-R), the broad construct "borderline disorders" was separated into BPD and SPD [4]. Genetic, neurobiological and phenomenological associations of SPD with schizophrenia-related psychopathology [5] and BPD with affective disorders underlined this distinction [2,6,7]. Nevertheless, numerous studies indicate that the disorders frequently co-occur and both are often co-morbid with affective disorders [8–12].

The essential features of SPD are reduced capacity for close relationships, cognitive or perceptual distortions and eccentricities of behaviour [13,14]. In contrast, patients with BPD suffer from instability of interpersonal relationships, self-image, and affects, and marked impulsivity [14]. However, despite apparently distinct features, differential diagnosis between BPD and SPD is often

* Corresponding author. Department of Psychiatry, University of Helsinki, P.O. Box 22, (Välskärinkatu 12 A), 0014 Helsinki, Finland. Tel.: +358 9 4711; fax: +358 9 47163735.
E-mail address: erkki.isometsa@hus.fi (E. Isometsä).
[1] Tel.: +358 9 4711.
[2] Tel.: +358 9 4711; fax: +358 9 47163735.
[3] Tel.: +358 40 7718354.

http://dx.doi.org/10.1016/j.eurpsy.2015.12.006
0924-9338/

difficult due to commonly acknowledged partial phenomenological overlap of their symptoms and frequent co-occurrence of their dimensions [10,14–18]. The features of BPD and SPD are recognized to often co-exist also at a subclinical level in general populations [13,15,19]. Moreover, high co-occurrence of traits of both personality disorders have also been reported in mood disorder patients [20–22].

Many studies indicate significant negative effects of co-morbid personality disorder on course and emotional and social functioning of patients with mood disorders [22–24]. However, a factor potentially complicating measurement of personality traits is the influence of current depressive, anxiety and other such symptoms [25–28]; depressive symptoms, in particular, are known to often aggravate measures of neuroticism. This probably renders the reliability of self-reported features of personality disorders by patients with mood and anxiety disorders somewhat uncertain. Nonetheless, it is clinically important to recognize features of BPD and SPD in patients with mood disorders, and it is essential to distinguish them in patients with mood disorders because of noticeable differences in their management [29–31].

Overall, numerous studies have underlined the importance of detecting traits of SPD [32] and BPD [33]. Clinically relevant personality traits are usually evaluated by clinical interviewing [33], but use of self-reported scales may improve their recognition [34]. The McLean Screening Instrument (MSI) is a useful and valid screening tool created to detect dimensions of BPD [35,36]. MSI is based on self-reported symptoms, derived from DSM-IV diagnostic criteria of BPD. The Schizotypal Personality Questionnaire Brief (SPQ-B) is a useful instrument constructed to assess features of SPD, derived from DSM-III-R diagnostic criteria of BPD [37]. To our knowledge, this is the first study to examine the relationships of these questionnaires.

In our study, we aimed to investigate the relationships of self-reported features of SPD and BPD in patients with mood disorders. We hypothesized, that partial overlap of BPD and SPD constructs may be observed also on the level of self-reported traits of BPD and SPD. These characteristic overlapping and non-overlapping items could help clinicians to distinguish disorders clinically. Therefore, we examined correlations of total scores of MSI and SPQ-B, and factors that probably influence the prevalence of observed features of BPD and SPD. To pinpoint overlapping and non-overlapping symptoms of SPD and BPD, we conducted correlation analysis at the level of both scale dimensions and separate items.

2. Methods

The Helsinki University Psychiatric Consortium (HUPC) study design, setting and patient sampling processes are presented in more detail elsewhere [38], but are briefly outlined below.

2.1. The Helsinki University Psychiatric Consortium (HUPC)

This investigation is a part of the HUPC study, a collaborative research project between the Faculty of Medicine of the University of Helsinki; the Department of Mental Health and Substance Abuse Services of the National Institute for Health and Welfare; the Department of Social Services and Health Care, City of Helsinki; and the Department of Psychiatry, University of Helsinki and Helsinki University Hospital. The study protocol was approved by the Ethics Committee of Helsinki University Central Hospital.

2.2. Setting

The study was conducted in 10 community mental health centres, three psychiatric inpatient units and one day-hospital offering specialized secondary public mental health services in the metropolitan area of Helsinki between 12.1.2011 and 20.12.2012.

2.3. Sampling

Inclusion criteria were patients' age of over 18 years and provision of informed consent. Patients with mental retardation, neurodegenerative disorders and insufficient Finnish language skills were excluded. Stratified patient sampling selection was performed by identifying all patients within a certain day or week in a unit or by randomly drawing eligible patients from patient lists. Patients treated for psychotic disorders, neuropsychiatric disorders, anxiety disorders, eating disorders, BPD, or substance use disorders as lifetime principal diagnosis were excluded from this study. Of the 902 eligible patients with mood, neurotic or personality disorders, 372 refused to participate and 216 were lost for other reasons.

2.4. Clinical diagnoses

The validity of the clinical diagnoses assigned by the attending physicians was critically evaluated by the authors (IB, KA, MK, BK) by re-examining all available information from patient records. Authors KA, IB and BK were residents of psychiatry trained in diagnostic evaluations; in any unclear cases, the senior psychiatrists (MK, EI, GJ, MH) were consulted. The validated clinical diagnoses were based on the ICD-10-DCR [39]. Lifetime principal diagnosis was assigned. Although there is no division of BD into types I (BD-I) and II (BD-II) in the ICD-10, we subtyped patients into these categories according to the DSM-IV [40]. This distinction is established clinical practice in Finland and included in the national BD treatment guidelines.

2.5. Description of patients

Altogether 282 patients participated in the study. Their mean age was 42.2 ± 13.1 years, and 209 (74.1%) were female. All patients were allocated into groups according to the lifetime clinical principal diagnosis (Table 1). Patients comprised those with depressive episode (F32-F33; unipolar depression [MDD] [$n = 183$; mean age 41.4 ± 13.3 years]), bipolar disorder (BD) (F31; $n = 99$, mean age

Table 1
Characteristics of SPQ-B and MSI responders (n = 282).

	BD		MDD		Total	
	n	%	*n*	%	*n*	%
Number	99	35	183	65	282	100
Age (mean ± SD)	43.7 ± 12.7		41.4 ± 13.3		42.3 ± 13	
Sex (male)	36	36.3	42	22.9	78	27.7
Marital status						
Married	20	20.2	39	21.3	59	21
Cohabitation	17	17.2	29	15.8	46	16.3
Unmarried	32	32.2	75	41	107	38.2
Divorced	29	29.3	35	19.1	64	22.7
Widowed	1	1	3	1.7	4	1.4
Work status						
Retired due to mental disorder	37	37.4	23	12.5	60	21.2
Unemployed	10	10	18	9.8	28	9.9
Sick leave	22	22.2	64	35	86	30.5
Retired for another reason	1	1	8	4.4	9	3.2
Student	7	7.1	24	13.1	31	10.9
Employed	20	20.2	30	16.4	50	17.7
Unemployed for another reason	2	2.2	14	7.7	16	5.7

BD: Bipolar Disorder; MDD: Major Depressive Disorder; BPD: Borderline Personality Disorder; SPQ-B: Schizotypal Personality Questionnaire-Brief; MSI: McLean Screening Instrument.